Oracle® Fusion Middleware

User's Guide for Oracle Business Intelligence Enterprise Edition

12*c* (12.2.1)

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Explains how to use Oracle Business Intelligence Enterprise Edition to organize and present data for making critical and timely business decisions.

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Oracle Fusion Middleware User's Guide for Oracle Business Intelligence Enterprise Edition, 12*c* (12.2.1)

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Preface

The Oracle Business Intelligence Foundation Suite is a complete, open, and integrated solution for all enterprise business intelligence needs, including reporting, ad hoc queries, OLAP, dashboards, scorecards, and what-if analysis. The Oracle Business Intelligence Foundation Suite includes Oracle Business Intelligence Enterprise Edition.

Oracle Business Intelligence Enterprise Edition (Oracle BI EE) is a comprehensive set of enterprise business intelligence tools and infrastructure, including a scalable and efficient query and analysis server, an ad-hoc query and analysis tool, interactive dashboards, proactive intelligence and alerts, and an enterprise reporting engine.

This guide contains information about using Oracle BI EE to organize and present data for making critical and timely business decisions.

Audience

This document is intended for anyone who plans to organize and present data for making critical and timely business decisions using Oracle Business Intelligence, such as a middle tier administrator, report specialist, departmental reporter, or information consumer. (This guide refers to report specialists and departmental reporters collectively as content designers, and to information consumers as end users.)

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at
http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit
http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or visit
http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.

Related Documentation and Other Resources

See the Oracle Business Intelligence documentation library for a list of related Oracle Business Intelligence documents.

In addition:

- Go to the Oracle Learning Library for Oracle Business Intelligence-related online training resources.

- Go to the Product Information Center support note (Article ID 1267009.1) on My Oracle Support at https://support.oracle.com.

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
`monospace`	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

New Features for Oracle Business Intelligence Users

This preface describes new features in Oracle Business Intelligence Enterprise Edition 12*c* (12.2.1).

This preface contains the following topics:

- "New Features for Oracle BI EE 12c (12.2.1)"

New Features for Oracle BI EE 12*c* (12.2.1)

New features in Oracle BI EE 12*c* (12.2.1) include:

- "Enhancements to Graphs"
- "Enhancements to Views"
- "Enhancements to Analyses"
- "Enhancement to Scorecards"
- "Enhancements to Dashboards"
- "Enhancement to KPIs"

Enhancements to Graphs

In this release graphs have been enhanced as follows:

- Ability to sort graph views by using a context menu (right-click). A new sort dialog is displayed when you right-click in a graph view in the "Analysis editor: Results tab" or on a dashboard page. You can right-click legend, data marker, and group-level (X axis) items to display a menu of interactions that includes options such as **Sort** and **Drill** (see "Right-Click Interactions in Views" for additional information).

Enhancements to Views

This release includes enhancements to various view types that can assist a content designer in creating more effective analyses faster, including those in the following list:

- A new view type named heat matrix. Heat matrices are two-dimensional representations of data in which values are characterized by a gradient of colors. A simple heat matrix view provides an immediate visual summary of information that is well suited for analyzing large amounts of data and identifying outliers. See "Editing Heat Matrix Views" for additional information.

- Ability to sort graph, heat matrix, pivot table, table, treemap, and trellis views by using a context menu (right-click). A new sort dialog is displayed when you right-click in a data view in the "Analysis editor: Results tab" or on a dashboard page (see "Right-Click Interactions in Views" for additional information).

Enhancements to Analyses

This release provides, for analyses, the ability to:

- Specify whether to multiply data by a 100 to display it as a percentage when setting the properties of a column. See the **Scale for % (x 100)** component in "Column Properties dialog: Data Format tab."

- Add data from an uploaded external source to an analysis. Adding external data is sometimes referred to as "mash-up." See Chapter 3, "Adding External Data to Analyses."

Enhancement to Scorecards

In this release, you can style and customize KPI Watchlists and every watchlist that appears in a scorecard. You can set custom styles for each watchlist and rename and change the order and visibility of the watchlist columns. See "Customizing Watchlists."

Enhancements to Dashboards

In this release, you can set advanced page properties to specify incoming navigation parameters you want to set on the current dashboard page. This enables you to control how parameters associated with the navigation actions are applied. See "Setting Advanced Page Properties."

Enhancement to KPIs

This release includes the addition of a KPI contribution wheel diagram. A KPI contribution wheel diagram enables you to explore a specific KPI along one of its dimensions, and to visually convey the relative importance and performance for the various dimension members. You can create and save a KPI contribution wheel diagram for a KPI. You can view a KPI contribution wheel within any KPI watchlist or scorecard view that contains a KPI node. You can also add the KPI contribution wheel diagram to a dashboard.

You can view a KPI contribution wheel on a mobile device.

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Introducing Oracle Business Intelligence Enterprise Edition

This chapter describes how to get started with Oracle Business Intelligence Enterprise Edition and explains how to sign in, sign out, and navigate Oracle BI EE. It also describes the Home page, the global header, how to act for others, how to set preferences, and how Oracle BI EE interacts with other products.

This chapter includes the following sections:

- Introduction to Oracle BI Enterprise Edition
- Where Do I Store and Manage Oracle BI EE Objects?
- Signing In to Oracle BI Enterprise Edition
- Signing Out of Oracle BI Enterprise Edition
- Navigating Oracle BI Enterprise Edition
- What Is the Oracle BI EE Home Page?
- What Is the Oracle BI EE Global Header?
- Where Can I Get Help or More Information?
- About Privileges and Permissions
- About Acting for Other Users
- Acting for Other Users
- Setting Preferences
- How Does Oracle BI EE Interact with Other Products?
- Topics of Interest in Other Guides
- System Requirements and Certification

Introduction to Oracle BI Enterprise Edition

Oracle BI Enterprise Edition (sometimes referred to as Oracle Business Intelligence) provides a full range of business intelligence capabilities that allow you to:

- Collect up-to-date data from your organization
- Present the data in easy-to-understand formats (such as tables and graphs)
- Deliver data in a timely fashion to the employees in your organization

These capabilities enable your organization to make better decisions, take informed actions, and implement more-efficient business processes.

Figure 1–1 shows a portion of an example dashboard that presents organizational data in easy-to-understand formats (tiles, tables, graphs, and so on).

Figure 1–1 Example of a Dashboard
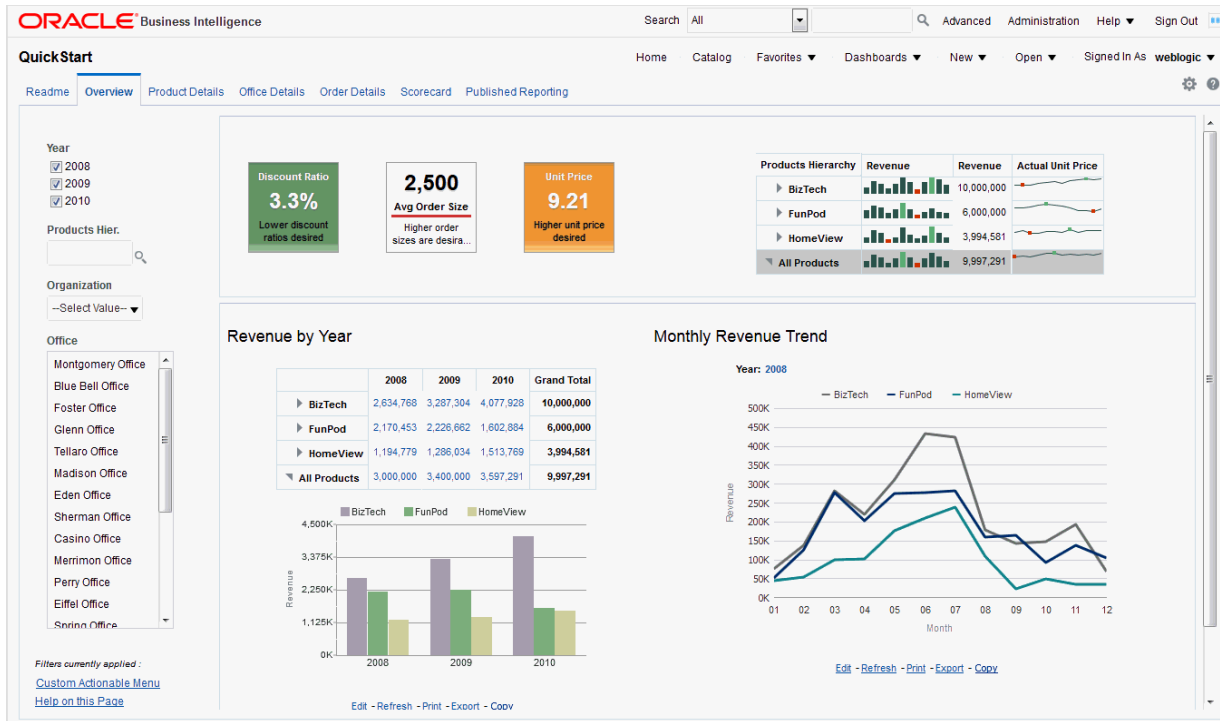
In Oracle BI Enterprise Edition, you can work with:

- **Analyses** — (This area of Oracle BI EE is also known as Answers.) Analyses are queries against an organization's data that provide answers to business questions. Analyses allow you to explore and interact with information by presenting data in easy-to-understand formats (such as tables and graphs). You can save, organize, and share the results of analyses.

  Your organization might also have purchased prebuilt analyses specific to your industry. Prebuilt analyses can be used as purchased or modified to suit your business's information needs.

  For information on working with analyses, see Chapter 2, "Creating Analyses."

- **Dashboards** — (This area of Oracle BI EE is also known as Interactive Dashboards.) Dashboards provide personalized views of corporate and external information. A dashboard consists of one or more pages that contain content, such as analyses, links to web sites, Oracle BI Publisher reports, and so on. Dashboards allow you to provide end users with access to analytics information.

  Your organization might also have purchased preconfigured dashboards that contain prebuilt analyses specific to your industry.

  For information on working with dashboards, see Chapter 5, "Building and Using Dashboards."

- **Filters, Selection Steps, and Prompts** — Filters, selection steps, and prompts allow you to limit or specify the data that is displayed in dashboards and analyses.

For information on working with filters and selections steps, see Chapter 6, "Filtering and Selecting Data for Analyses." For information on working with prompts, see Chapter 7, "Prompting in Dashboards and Analyses."

- **Agents** — (This area of Oracle BI EE is also known as Delivers.) Agents enable you to automate your business processes. You can use agents to provide event-driven alerting, scheduled content publishing, and conditional event-driven action execution. Agents can be scheduled or can be triggered by a specific condition, which enables you to deliver timely information to users.

  For information on working with agents, see Chapter 9, "Delivering Content."

- **Conditions** — Conditions are objects that return a single Boolean value that is based on the evaluation of an analysis or of a Key Performance Indicator (KPI). You use conditions to determine whether something is to be done, for example whether an agent is to deliver its content.

  For information on working with conditions, see Chapter 10, "Working with Conditions."

- **Actions** — Actions provide functionality to navigate to related content or to invoke operations, functions, or processes in external systems. You can include actions in various objects, such as analyses and dashboard pages. Actions allow users to take the proper action based on the business insight that they gained from the data that they received.

  For information on working with actions, see Chapter 11, "Working with Actions."

- **Scorecards** — (This area of Oracle BI EE is known as Oracle Scorecard and Strategy Management). Scorecards allow you to model the objectives and initiatives that comprise your corporate strategy, evaluate their performance by assigning KPIs, and determine and display overall performance.

  For information on working with scorecards, see Chapter 13, "Scorecarding."

- **Other Products** — Oracle BI EE interacts in various ways with other products. For example, with Oracle Hyperion Smart View for Office, you can access and run analyses from Oracle BI EE within your Microsoft Office applications (that is, Excel, Word, and PowerPoint).

  For information, see "How Does Oracle BI EE Interact with Other Products?"

Note that these areas of Oracle BI EE (that is, Analyses, Agents, Dashboards, and so on) are sometimes referred to as Presentation Services.

Where Do I Store and Manage Oracle BI EE Objects?

You use the Oracle BI Presentation Catalog to store the objects, such as analyses, dashboards, and KPIs, that you and other users create using Oracle BI EE. Users have their own personal folder (My Folders), where they can store the objects that they create. The objects in a personal folder can be accessed only by the user who created and saved the content into that folder. Users can add sub-folders to their personal folders to organize their content in the way that is the most logical to them.

You can also store objects in shared folders where other users or groups can access the objects. A combination of business logic security, catalog object security, and data level security determines who can view data and objects, edit objects, and delete objects from the catalog. Your administrator creates and maintains the catalog's shared folder structure.

For more information, see "What is the Oracle BI Presentation Catalog?" and "Managing Objects in the Oracle BI Presentation Catalog." For information about setting up the catalog, see "Configuring and Managing the Oracle BI Presentation Catalog" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

Signing In to Oracle BI Enterprise Edition

To access Oracle BI EE, you use a URL, a user ID, and a password that have been provided by your organization.

> **Notes:** Oracle BI EE requires that the web browser be set to accept cookies. It uses a cookie to track a user's signed-in session.
>
> You might not be prompted to enter values in all fields of the Sign In page (as described in the following procedure), if you have already signed on using single sign-on (SSO).

To sign in to Oracle BI Enterprise Edition:

1. In the address field of a browser, enter the URL that was provided by your organization. The "Sign In page" is displayed.

2. Select the language in which you want to work.

    You can change the default entry for this box by selecting another language in the **User Interface Language field** in the "My Account dialog: Preferences tab." For more information, see "Setting Preferences."

    > **Note:** On Windows, if you select the **Install files for complex script and right-to-left languages (including Thai)** option on the Languages tab of the Regional and Language Options dialog, Hebrew fonts display in the wrong direction, that is left to right rather than right to left.
    >
    > The workaround is to deselect the **Install files for complex script and right-to-left languages (including Thai)** option as follows:
    >
    > 1. In the Control Panel, click the **Regional & Language Options** button to display the Regional and Language Options dialog.
    > 2. Click the Languages tab.
    > 3. Deselect the **Install files for complex script and right-to-left languages (including Thai)** option.
    > 4. Click **OK**.

3. Enter your user ID and password.

4. Select the **Accessibility Mode** box if you want content for Oracle BI EE to be rendered in a browser in a way that facilitates the use of a screen reader.

    If you select this box, then the "BI Composer wizard" in accessibility mode is used as the analysis editor (rather than the "Analysis editor"). For more information on BI Composer, see "Using BI Composer to Work with Analyses." For more information on the Analysis editor, see "What Is the Analysis Editor?"

    For more information on accessibility, see Appendix B, "Accessibility Features."

5. Click **Sign In**. One of the following pages (depending on what has been configured for you) is displayed:

- Your personal dashboard, named My Dashboard.

- The "Home page." For information on the Home page, see "What Is the Oracle BI EE Home Page?"

- A dashboard that is specific to your job function (for example, Call Center representative).

A dashboard (whether My Dashboard or one specific to your job function) typically contains analyses and other information for your area of responsibility. Figure 1–1 shows an example of a dashboard.

You can now navigate Oracle BI EE. For information, see "Navigating Oracle BI Enterprise Edition."

> **Tip:** Once you have signed in, you can select the dashboard to be displayed when you sign in thereafter. For information, see "Setting Preferences."

Signing Out of Oracle BI Enterprise Edition

> **Note:** Do not close the browser window to sign out of Oracle BI EE.

To sign out of Oracle BI EE:

1. In the global header, click **Sign Out**.

Navigating Oracle BI Enterprise Edition

After signing in to Oracle BI EE (as described in "Signing In to Oracle BI Enterprise Edition"), you are presented with one of the following pages, depending on what has been configured for you:

- Your personal dashboard, named My Dashboard

- The "Home page"

- A dashboard that is specific to your job function (for example, Call Center representative)

This page is your starting point for working in Oracle BI EE. As you work, you can use the global header and the Home page as the primary ways to navigate Oracle BI EE:

- **The global header** — The global header is displayed at the top of the Oracle BI EE interface and is always available as you work. It enables you to access the functionality that Oracle BI EE provides. For example, you can access the Home page, access dashboards, open objects (such as analyses and dashboard prompts), create new objects, and so on. Privileges determine which functionality is available to you in the global header. Your administrator can modify the global header by changing the order of the links, or by adding links specific to your company or industry. For example, your administrator could add a link to the Oracle Technology Network (OTN).

  For information on the global header, see "What Is the Oracle BI EE Global Header?"

■ **The Home page** — From the Home page, you can learn how to get started with Oracle BI EE, create and modify objects, and browse and manage objects.

For information on the Home page, see "What Is the Oracle BI EE Home Page?"

After you have accessed the starting point of a task, the interface then presents you with the page, dialog, or editor that you use to perform the task.

> **Note:** It is recommended that you not use the browser's **Back** button to navigate Oracle BI EE, unless no other navigation methods are available. The browser **Back** button may not maintain the state of the dashboard upon return. Breadcrumbs are the recommended navigation approach. For more information on breadcrumbs, see "About Navigating With Breadcrumbs."

What Is the Oracle BI EE Home Page?

The Home page provides a starting point for performing tasks in Oracle BI EE. The Home page is divided into sections that allow you to begin a specific task or locate an object. It also includes sections (for example, Recent and Favorites) that allow you to access objects that you have recently viewed, created, or updated, and objects that are accessed the most often by the users assigned to the groups to which you belong.

Figure 1–2   Example of a Home Page
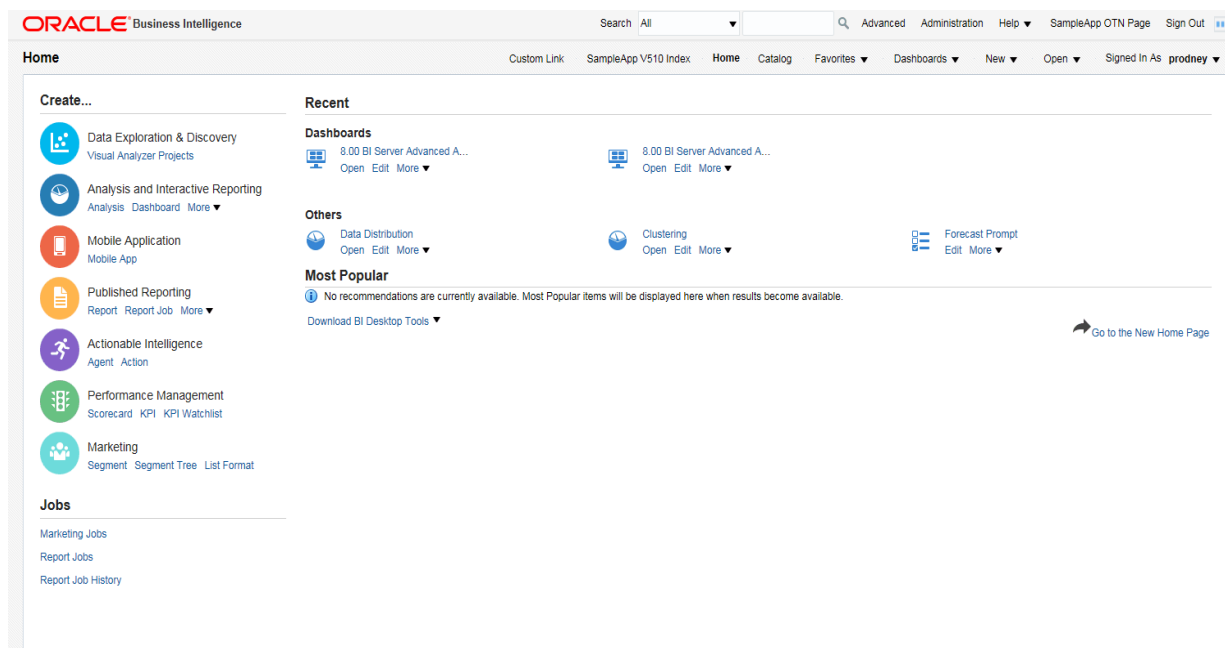
Figure 1–2 shows an example of a Home page.

For specific information about each area on the Home page, see "Home page."

Depending on what has been configured as your starting page, you might be presented with the Home page when you sign in to Oracle BI EE.

Otherwise, you can always navigate to the Home page by clicking the **Home** page link in the global header. For information on the global header, see "What Is the Oracle BI EE Global Header?"

What Is the Oracle BI EE Global Header?

The global header provides quick access to commonly used functions and is always available from the user interface. For example, you can use the global header to begin a new task, search the Oracle BI Presentation Catalog, access the product documentation, or view a different object, without having to return to the Home page. The global header also includes the **Home** page link so that you can access the Home page from other pages. Note that the functionality available on the global header is determined by privileges.

Your administrator can customize the global header by changing the order in which the links display or by adding links to internal or external locations such as Google or OTN. For more information, see "Providing Custom Links in Presentation Services" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

Figure 1–3 shows the leftmost portion of the global header.

Figure 1–3   Oracle BI EE Global Header
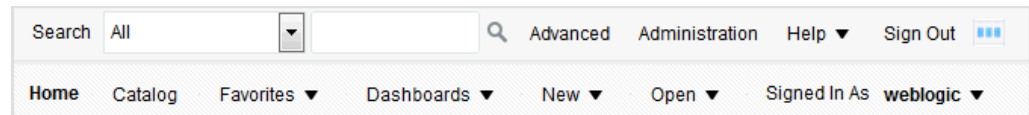
The global header includes the following components:

- **Search** — Enables you to search the catalog. For information on how to use this area, see "How Can I Search for Objects?"

- **Advanced** — Displays the "Catalog page" in search mode, where you can search for objects in the catalog. In search mode, the "Search pane" is displayed rather than the "Folders pane" within the page.

- **Administration** — Available if you are logged in as an administrator. Displays the"Administration page," where you perform administration tasks such as managing privileges and metadata for maps. For information on the administration tasks, see *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition* and *Security Guide for Oracle Business Intelligence Enterprise Edition*.

- **Help** — Displays the following options:

  - *xxx* **Help** (where *xxx* is the name of the page, editor, or tab) — Displays the help topic for the current page, editor, or tab.

  - **Help Contents** — Displays a cascading menu with options that link to the tables of contents for Oracle BI EE, BI Publisher, and Marketing.

  - **Documentation** — Displays the Oracle BI EE documentation library.

  - **OTN** — Displays the Business Intelligence and Data Warehousing Technology Center page on the OTN.

  - **About Oracle BI EE** — Shows the Oracle BI EE version and copyright information.

- **Sign Out** — Signs you out of Oracle BI EE.

- **Alerts** — Available only if one or more alerts have been generated for you. Displays the "Alerts dialog," where you can manage your alerts. An alert is a notification that is generated by an agent that delivers personalized and actionable content to specified recipients and to subscribers to the agent.

- **Home** — Displays the Home page. For information about the Home page, see "What Is the Oracle BI EE Home Page?"

- **Catalog** — Displays the "Catalog page," where you can locate objects in the catalog and perform tasks specific to those objects.

- **Favorites** — Displays your favorite objects and any categories that you created to organize your favorite objects. Also displays the **Manage Favorites** link that you can click to access the "Manage Favorites dialog," where you can create and manage categories to organize your favorites. For more information about favorites, see "What Are Favorites?"

- **Dashboards** — Contains links to all dashboards that are stored within the Dashboards sub-folder of the user's folder or any shared folder. Note that dashboards not saved to the Dashboards sub-folders are not displayed from the global header's Dashboards list).

- **New** — Displays a list of the objects that you can create. To create an object, select it from the list. The appropriate dialog or editor is displayed for you to create the object.

- **Open** — Displays the following options:

  - **Open** — Displays the "Open dialog," where you can select the object with which you want to work.

  - **Recent objects** — Displays a list of the objects that you have recently viewed, created, or updated. You can use this list to select an object with which you want to work.

  - **Most Popular objects** — Displays a list of the objects that are accessed the most often by the users that are assigned to the groups to which you belong. You can use this list to select an object with which you want to work.

- **Signed In As** *username* — (where *username* is the user name that your current session is using) Displays the following options:

  - **My Account** — Displays the "My Account dialog," where you can specify your preferences, such as time zone, delivery devices, and delivery profile. For information about setting preferences, see "Setting Preferences."

  - **Act As** — Available only if your organization has enabled this functionality and you have been granted the appropriate permissions. Enables you to act as another user. For information, see "Acting for Other Users."

Where Can I Get Help or More Information?

Oracle BI EE provides direct access to guides, context-sensitive help, and libraries that contain conceptual and procedural information to help you understand Oracle BI EE.

Specifically, you can access:

- **Oracle Business Intelligence Enterprise Edition Help** — Each Oracle BI EE user interface page, tab, editor, pane, and dialog has a help topic associated with it. Each of these topics contains overview information, links to related concept and procedures, and an explanation of each component.

  To access the online help for a page, editor, tab, or dialog, click its **Help** button.

  Alternatively, for a page, editor, or tab, you can select the *xxx* **Help** option (where *xxx* is the name of the page, editor, or tab) from the **Help** menu that is located in the global header. For example, for help on the Catalog page, select the **Catalog**

Page Help option. For more information about the global header, see "What Is the Oracle BI EE Global Header?"

- **Help Tables of Contents for Oracle BI EE, Oracle BI Publisher, and Marketing** — Navigating through these Table of Contents is a good way to get acquainted with the products and access a particular topic of interest.

  To access one of these tables of contents, click the **Help Contents** option on the **Help** menu in the global header and then select the appropriate table of contents.

- **Oracle Business Intelligence Enterprise Edition Documentation Library** — The books in the Oracle BI EE documentation set are included in the Fusion Middleware Documentation Library on the Oracle Technology Network.

  To access the Oracle BI EE documentation library, click the **Documentation** option on the **Help** menu in the global header.

- **Oracle Technology Network (OTN)** — On OTN, you can find information that is specific to Oracle Business Intelligence and information about all other Oracle products. OTN provides services and resources to help developers, DBAs, and architects share and find expertise and best practices about how to design, build, deploy, manage, and optimize applications. Examples of the types of items that you find on OTN include information about industry-standard technologies such as JAVA and Linux, all Oracle product documentation, discussion forums, Oracle software, blogs and podcasts, and technical articles that are written by other OTN members.

  To access OTN, click the **OTN** option on the **Help** menu in the global header.

About Privileges and Permissions

Privileges and permissions allow you to perform specific actions, such as creating an analysis or editing a scorecard, and entitle you to access and manage objects, applications, and so on. Roles group related privileges together that pertain to specific requirements, enabling continuity and limiting access based on responsibility.

Privileges and roles govern what you can see and access in Oracle Business Intelligence Enterprise Edition. Refer to "Managing Presentation Services Privileges" in *Security Guide for Oracle Business Intelligence Enterprise Edition* for additional information and refer to "Who Uses the Catalog?" in Chapter 14, "Managing Objects in the Oracle BI Presentation Catalog" to learn more about permissions.

About Acting for Other Users

The Act As functionality enables you to act for another user in Oracle BI EE. This functionality is useful, for example, when you must work on another user's dashboard or content, or when IT support staff wants to troubleshoot another user's account.

To use the Act As functionality, the administrator must enable you to act for another user. For information, see "Enabling Users to Act for Others" in *Security Guide for Oracle Business Intelligence Enterprise Edition*.

When the administrator authorizes you to act for another user, the administrator can grant you full access or restricted access to another user's account:

- **Full access** — When you are granted full access, you inherit the target user's privileges and can change the user's default dashboard and modify the user's content and preferences.

- **Restricted access** — When you are granted restricted access, you maintain your user privileges, but inherit the target user's permission for viewing data. Restricted access enables you only to view the user's data.

You can view a list of the users with access to your account by opening the "My Account Dialog: Delegated Users tab." This tab displays a list of the names of the users that have been given access to your account.

For information on acting for another user, see "Acting for Other Users."

Acting for Other Users

You can act for another user, if you have been authorized to do so. For more information, see "About Acting for Other Users."

To act as another user:

1. In the global header, click **Signed In As** *username*, then select **Act As**.

   The "Act As dialog" displays.

2. Select a user's ID from the list or enter the ID in the box (if available), and click **OK**.

   The user's default dashboard is displayed. From this dashboard you can view or modify content, depending upon the access type (full or restricted) that you were granted by the administrator.

3. To return to your account, display the Act As dialog, click **Stop**, then click **OK**.

Setting Preferences

You and end users can set personal preferences for Oracle BI EE. Using the "My Account dialog," and depending on your privileges, you can:

- View general account information, such as your display name and user ID.
- View and modify your preferences, such as language, time zone, and currency.
- View and modify your preferences for BI Publisher, such as location and time zone.
- View and modify your preferences for Oracle BI Mobile.
- View and modify your delivery options for agents. For information about delivery options, see "What Are Devices and Delivery Profiles?"
- View the roles and groups to which you belong.

To set preferences:

1. In the global header, click **Signed In As** *username* and select **My Account**.

   The "My Account dialog" is displayed.

2. Complete the appropriate settings.

3. Click **OK** to save your changes.

How Does Oracle BI EE Interact with Other Products?

Oracle BI EE interacts in various ways with other products. This section contains the following topics:

- "Integration of Oracle BI EE with Oracle BI Publisher"

- "Integration of Oracle BI EE with Oracle BI Mobile App Designer"

- "Integration of Oracle BI EE with Oracle Business Intelligence Mobile"

- "Interaction of Oracle BI EE with Oracle BI Applications"

- "Integration of Oracle BI EE with Microsoft Office"

Integration of Oracle BI EE with Oracle BI Publisher

> **Note:** This guide assumes that Oracle BI EE and BI Publisher have been installed and configured to run as integrated components at your organization. If this is not the case, then some mentions of BI Publisher in this guide might not be applicable to you.
>
> For information on running BI Publisher, see *User's Guide for Oracle Business Intelligence Publisher*.

BI Publisher enables you to create highly formatted reports that are suitable for printing. BI Publisher reports are built on top of BI Publisher data models. A BI Publisher data model can consist of data sets from a wide range of sources, such as subject areas from the BI Server or analyses, SQL queries against relational databases, MDX queries against Essbase or other OLAP sources, LDAP, Web Services, Microsoft Excel, HTTP feeds, or XML files. BI Publisher supports a wide range of layout types, so you can create the full range of documents that your organization might need. Within Oracle BI EE, you can view, create, edit, and schedule BI Publisher reports and can include them in dashboard pages.

Oracle BI EE includes a fully integrated BI Publisher. All the BI Publisher functionality appears within the Oracle BI EE application, and all reports and related objects are created within Oracle BI EE and saved to the Oracle BI Presentation Catalog.

When using the integrated environment, you see that the following areas are affected by the integration:

- Editors — You can create or edit BI Publisher content. When you work with a BI Publisher object, the appropriate BI Publisher editor is displayed. For example, when you work with a data model, the Data Model editor is displayed.

- Dashboards — You can embed BI Publisher reports in dashboards. You can also create custom print layouts for high-fidelity printing of dashboard pages and custom export layouts for exporting dashboard content to Excel. For information, see Chapter 5, "Building and Using Dashboards."

- Catalog — The Oracle BI Presentation Catalog contains all BI Publisher objects, such as reports and templates. You can work with BI Publisher objects in the catalog just as you work with other catalog objects, such as analyses or filters.

- Security — Single sign-on capability is provided. The Release 11*g* security model has been extended to include additional BI Publisher-specific permissions, such as xmlp_template_designer.

For more information about creating a BI Publisher report, see *Report Designer's Guide for Oracle Business Intelligence Publisher*. For more information about scheduling a BI Publisher report, see *User's Guide for Oracle Business Intelligence Publisher*.

Integration of Oracle BI EE with Oracle BI Mobile App Designer

> **Note:** This guide assumes that Oracle BI EE and Oracle BI Mobile App Designer have been installed and configured to run as fully integrated components at your organization. If this is not the case, then some mentions of Oracle BI Mobile App Designer in this guide might not be applicable to you.
>
> For information on Oracle BI Mobile App Designer, see *User's Guide for Oracle Business Intelligence Mobile Application Designer*.

Oracle Business Intelligence Mobile App Designer is a tool for designing purposeful apps for mobile phones and tablets.

The apps you create with Oracle BI Mobile App Designer are platform and device independent. The generated apps are based on the modern HTML5 standard, which means they can run on any modern browser on your mobile device. No client install is required.

Integration of Oracle BI EE with Oracle Business Intelligence Mobile

Oracle Business Intelligence Mobile is an application that enables you to view and interact with Oracle BI content on smartphones and tablets.

Using Oracle BI Mobile, you can access and analyze all BI content such as analyses and dashboards, BI Publisher content, scorecard content, and mobile apps created by Oracle BI Mobile App Designer.

For information on Oracle BI Mobile, see the Oracle Business Intelligence Mobile Products Documentation Library here:

http://docs.oracle.com/cd/E52471_01/index.htm

Interaction of Oracle BI EE with Oracle BI Applications

Oracle Business Intelligence Applications are pre-built business intelligence solutions that are available for Oracle applications such as Oracle Fusion, Oracle E-Business Suite, JD Edwards, Peoplesoft, and Siebel. Oracle Business Intelligence Applications are built on Oracle BI EE.

Oracle BI Applications consist of industry-specific dashboards and analyses that are built using industry best practices to address key functional areas within an organization. Dashboards and analyses are tailored for each end user's role in an organization.

Typically, Oracle BI Applications are integrated with and accessible from other operational applications, such as Oracle's Siebel CRM applications, to provide business metrics in analyses in the context of an organization's business function and industry. Oracle BI Applications include Extract Transform Load (ETL) routines to extract, transform, and load data into the Oracle Business Analytics Warehouse. Oracle BI Applications also contain metadata that maps to the Oracle Business Analytics Warehouse and a transactional database, and define key measures and metrics for all levels of the organization. These measures and metrics are available to content designers in Oracle Business Intelligence.

Integration of Oracle BI EE with Microsoft Office

Oracle BI EE offers a set of add-ins to Microsoft Office that can be downloaded and installed to enable integration between components of Oracle Business Intelligence and Microsoft Office. The Get Started section of the Oracle BI EE "Home page" provides links to install the following add-in components:

- Template Builder for Word

- Oracle Hyperion Smart View for Office

Topics of Interest in Other Guides

Some topics that might be of interest to content designers and administrators are covered in other guides. Table 1–1 lists these topics, and indicates where to go for more information.

Table 1–1   Topics Covered in Other Guides

Topic	Where to Go for More Information
Installing Oracle BI EE	*Installation Guide for Oracle Business Intelligence*
Configuring Oracle BI EE	*System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*
Integrating Oracle BI EE	*Integrator's Guide for Oracle Business Intelligence Enterprise Edition*

System Requirements and Certification

Refer to the system requirements and certification documentation for information about hardware and software requirements, platforms, databases, and other information. Both of these documents are available on Oracle Technology Network (OTN).

The system requirements document covers information such as hardware and software requirements, minimum disk space and memory requirements, and required system libraries, packages, or patches:

http://www.oracle.com/technetwork/middleware/ias/downloads/fusion-requirements-100147.html

The certification document covers supported installation types, platforms, operating systems, databases, JDKs, and third-party products:

http://www.oracle.com/technetwork/middleware/ias/downloads/fusion-certification-100350.html

2

Creating Analyses

This chapter describes how to create analyses in Oracle Business Intelligence Enterprise Edition, including how to specify the criteria for analyses, display the results, and examine the SQL statements. It also explains subject areas and columns, the double column feature, and variables.

This chapter includes the following sections:

- What Is an Analysis?
- What Are Subject Areas and Columns?
- Understanding the Double Column Feature
- What Is the Analysis Editor?
- What Is the Process for Constructing Analyses?
- Creating New Analyses
- Specifying the Criteria for Analyses
- Saving Columns to the Catalog
- Changing the Sort Order of Subject Areas and Subject Area Folders
- Displaying the Results of Analyses
- Adding Prompts to Analyses
- Examining the Logical SQL Statements for Analyses
- Saving Analyses
- Creating Agents from Analyses
- Editing Analyses
- About Embedding an Analysis in a Dashboard
- Working with Direct Database Requests
- Using Variables
- Where Can I Reference Variables?
- What Is the Syntax for Referencing Variables?
- What Predefined Presentation Variables Are Available?
- Example of Referencing a Variable in a Title View

What Is an Analysis?

An analysis is a query against an organization's data that provides answers to business questions.

Analyses let you explore and interact with information by visually presenting data in tables, graphs, pivot tables, and so on. You can save, organize, and share the results of analyses.

Analyses that you create can be saved in the Oracle BI Presentation Catalog and integrated into any Oracle BI EE dashboard. You can enhance analyses through features such as graphs, result layout, calculated items, and drilling.

How Do I Work with an Analysis?

To work with an analysis, you use one of the following editors:

- The "Analysis editor" — A feature-rich editor that allows you to explore and interact with information by visually presenting data in tables, graphs, pivot tables, and so on. For more information, see "What Is the Analysis Editor?"

  You have access to this editor if you have been granted the Access to Analysis privilege by the administrator.

- The "BI Composer wizard" — A simple-to-use wizard that allows you to create, edit, or view analyses without the complexities of the Analysis editor. For more information, see Chapter 15, "Using BI Composer to Work with Analyses."

  You have access to this editor only if you have been granted the Access to BI Composer privilege by the administrator.

You specify which editor you want to use on the "My Account dialog: Preferences tab." However, if you have turned on accessibility mode either in the "Sign In page" or the "My Account dialog: Preferences tab," then the BI Composer wizard in accessibility mode is used as the analysis editor, regardless of your choice.

How Is an Analysis Processed?

When an analysis is processed, the request is sent in the form of logical SQL statements to the Oracle BI Server. The BI Server then generates queries against the appropriate data sources. When the BI Server receives the query results, they are in a format that is not yet suitable for returning to the user. The BI Server merges the results and applies any additional calculations or filters that pertain to the results. The BI Server then sends the data to Oracle BI Presentation Services to format the results for display.

How Can I Always See the Most Current Results of an Analysis?

Embedding an analysis in a dashboard causes it to execute automatically and display the most current results every time the dashboard is accessed. For example, if you are a sales executive whose company captures sales data on a daily basis, then you might want to have the dollar volume of product that was sold today be displayed on the front page of your dashboard.

You can embed a saved analysis by using the Dashboard editor. For information about the Dashboard editor, see "Adding Content to Dashboards."

What Are Subject Areas and Columns?

Subject areas and columns are the building blocks for an analysis. A subject area contains folders, measure columns, attribute columns, hierarchical columns, and hierarchy levels that represent information about the areas of an organization's business or about groups of users with an organization. Subject areas usually have names that correspond to the types of information that they contain, such as Marketing Contracts, Service Requests, and Orders.

A subject area corresponds to the presentation layer in an Oracle BI metadata repository. In a repository, the subject area is the highest-level object in the presentation layer and represents the view of the data that end users see when they create or edit an analyses.

A related subject area is an external data source that is connected to a primary subject area in an analysis.

Individuals who design and build metadata repositories (such as a Business Intelligence strategist, metadata provider, or ETL developer) create subject areas using the Oracle BI Administration Tool. Generally, rather than creating one large subject area for their company's data, they create multiple smaller subject areas. This enables them to provide a particular group of users or a particular area of a company with the most important data that they need in one small subject area and the less important data in one or more related subject areas created from the same business model layer. Having these smaller subject areas makes it easier for users to find the data they need. It also makes it easier to maintain the data. For more information, see "Creating Subject Areas" in *Metadata Repository Builder's Guide for Oracle Business Intelligence Enterprise Edition*.

> **Note:** The individuals who design and build metadata repositories can specify that a subject area, folder (and its children), or column (both attribute and hierarchical) is to be hidden. A hidden subject area, folder, or column is not visible in the "Subject Areas pane" but is visible elsewhere, such as in an analysis or saved filter contents. (Because the object is still visible elsewhere, hiding a subject area, folder, or column in this way is not a solution for security or access control.)
>
> If the criteria of an existing analysis includes a subject area, folder, or column that is subsequently hidden, the analysis is still accessible but the subject area, folder, or column is no longer visible in the Subject Areas pane of the "Analysis editor: Criteria tab."

Columns contain the individual pieces of data that an analysis returns. Columns usually have names that indicate the types of information that they contain, such as Account or Contact. Together with filters and selection steps, columns determine what data an analysis contains.

When you create an analysis, filter, or dashboard prompt, you first select the subject area with which you want to work. This is known as the primary subject area and is displayed in the "Subject Areas pane." If, as you work, you find that you need more data, you can add additional subjects areas that are related to the primary subject area that you have chosen. (You can add related subject areas only if they are available for the primary subject area and only if you have permission to access them.)

Typically, when you query a single subject area, all the measure columns that are exposed in that subject area are compatible with all the attribute columns and

hierarchical columns that are exposed in the same subject area. However, when you combine columns from multiple subject areas, you must ensure that you do not include combinations of measure columns with attribute columns and hierarchical columns that are incompatible with one another.

For example, a measure column in one subject area might not be associated with the Project attribute column. If measure columns associated with the Project attribute column from another subject area are added to the analysis along with columns that are not associated with Project, then the query might fail to return results, or cause the BI Server error "No fact table exists at the requested level of detail: XXXX."

For an analysis to return data, you must select at least one column to include in the analysis.

What Are the Types of Columns?

Subject areas contain the following types of columns:

- **Attribute Column** — Holds a flat list of values that are also known as members. No hierarchical relationship exists between these members, as is the case for members of a hierarchical column. An attribute column was referred to as a presentation column in previous releases (prior to 11*g*).

  Examples include ProductID or City.

- **Hierarchical Column** — Holds data values that are organized using both named levels and parent-child relationships. This column is displayed using a tree-like structure. Individual members are shown in an outline manner. Hierarchies allow you to drill deeper into the data, to view more detailed information. Examples include Time or Geography. Figure 2–1 shows the Time folder and the Time and Fiscal Time hierarchies expanded in the Subject Areas pane.

Figure 2–1   Time and Fiscal Time Hierarchies in the Subject Areas Pane
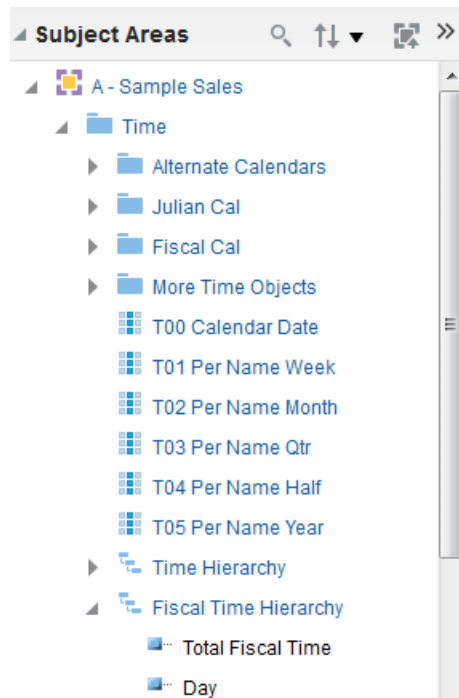
A hierarchical column can be one of the following kinds:

- **Level-based hierarchy** — Consists of an ordered set of two or more levels. For example, a Time hierarchy might have three levels for Year, Quarter, and Month. Level-based hierarchies can also contain parent-child relationships.

- **Parent-child hierarchy** — Consists of values that define the hierarchy in a parent-child relationship and does not contain named levels. For example, an Employee hierarchy might have no levels, but instead have names of employees who are managed by other employees. Employees can have titles, such as Vice President. Vice Presidents might report to other Vice Presidents and different Vice Presidents can be at different depths in the hierarchy.

In addition to being level-based or parent-child, hierarchical columns can be one of the following:

- **Ragged** — A hierarchy in which all the lowest-level members do not have the same depth. For example, a Time hierarchy might have data for the current month at the day level, the previous month's data at the month level, and the previous 5 years' data at the quarter level. This type of hierarchy is also known as an unbalanced hierarchy.

- **Skip-level** — A hierarchy in which certain members do not have values for certain higher levels. For example, in the United States, the city of Washington in the District of Columbia does not belong to a state. The expectation is that users can still navigate from the country level (United States) to Washington and below without the need for a state.

- **Measure Column** — Holds a simple list of data values. It is a column in an Oracle BI EE repository, usually in a fact table, that can change for each record and can be added up or aggregated in some way. Examples include Revenue or Units Sold.

Throughout this guide, the term "column" on its own generally refers to all three types. Names for specific types of columns are included where necessary.

How Are Columns Indicated Visually?

Each type of column is indicated by its own icon in places such as the Subject Areas pane and Layout pane. You can expand level-based hierarchies and see their levels. Parent-child hierarchies are shown as hierarchical columns that have no levels. Figure 2–2 shows the icons and names of various columns.

Figure 2–2   Column Types With Their Icons
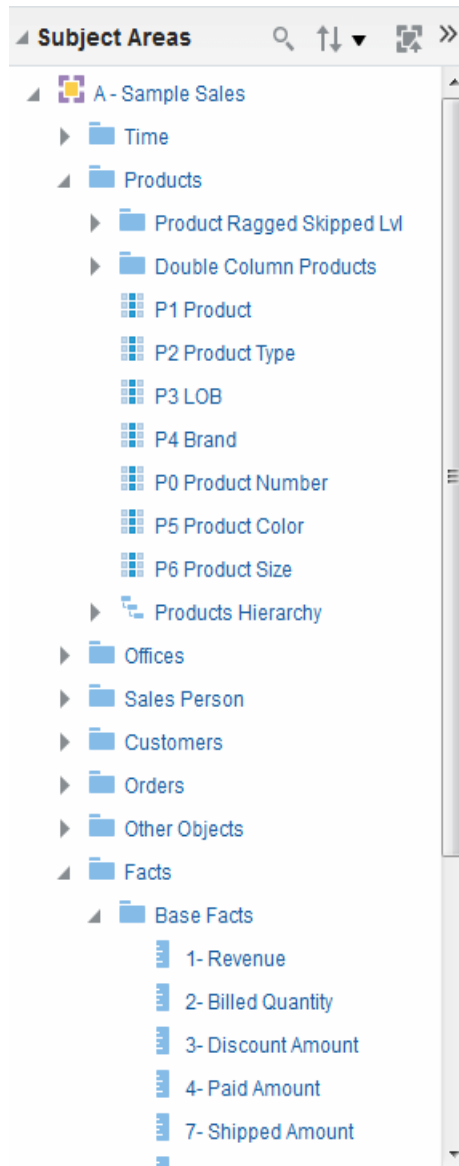
Understanding the Double Column Feature

Oracle BI EE provides a feature called double columns. When a repository is configured for the double column feature, column data includes a display column that has a code column mapped to it (that is, it has double columns). A **display column** contains the display values for the column data, for example, Excellent, Good, and Poor. **A code column** contains code values that uniquely identify display values and are consistent across users or locales, for example, the code values 1 (uniquely identifying Excellent), 2 (uniquely identifying Good), and 3 (uniquely identifying Poor).

When Oracle BI EE processes a double column, for example, as part of the criteria of an analysis or as the basis for a filter, it generates and issues SQL statements to the Oracle BI Server that use code values rather than display values, thereby making the filter language independent.

The double column feature lets you:

- Build internationalized analyses that are automatically filtered by language independent codes. (In previous releases (prior to 11*g*), filters were not language independent.) For example, you can build one filtered analysis that can be used by both French-language users and English-language users.

- Build common analyses that can be shared among groups even if the groups require different display values. For example, you can build a common analysis that displays for a Status field the values Excellent, Good, and Poor to one group, and Superb, Okay, and Bad to another group.

- Change display values without breaking existing analyses. For example, suppose that you have an analysis that is filtered on the display value Excellent. If it is a double column, then the filtering is performed on its code column with the code value for "Excellent" rather than the display value of "Excellent." This means that you can change the display value Excellent to Superb without breaking the existing analysis.

In addition, if your organization allows the display of code values within Oracle BI EE, you can use code values rather than the display values in some dialogs, such as the "New Filter dialog." This means, for example, when specifying the values to use when applying a filter, you can specify code values rather than display values.

Before you can take advantage of the double column feature, your administrator must configure your repository by mapping code columns to display columns. Check with the administrator to see if your repository is configured for double columns.

What Is the Analysis Editor?

The "Analysis editor" lets you explore and interact with information by visually presenting data in tables, graphs, pivot tables, and so on. You can include the views that you create in an analysis for display in dashboards.

The Analysis editor contains the following tabs:

- **Criteria tab** — Lets you specify the criteria for an analysis, including columns, and filters. You can specify the order in which the results should be returned, formatting (such as headings, number of decimal places, styles such as fonts and colors, and conditional formatting), and column formulas (such as adding a Rank or Percentile function). Additionally, you can change the sort order of the subject area and subject area folders (see "Changing the Sort Order of Subject Areas and Subject Area Folders" for additional information).

- **Results tab** — Lets you create different views of the analysis results such as graphs, tickers, and pivot tables. You can also add or modify selection steps.

- **Prompts tab** — Lets you create prompts that allow users to select values to filter an analysis or analyses on a dashboard. Prompts allow users to select values that dynamically filter all views within the analysis or analyses. You can also create prompts for use with selection steps, both for member selection steps and qualifying condition steps.

- **Advanced tab** — Lets you edit XML code and examine the logical SQL statement that was generated for an analysis. You can use the existing SQL statement as the basis for creating a new analysis.

The tabs of the Analysis editor are organized into various panes and areas. As you work, you can manage these panes to suit your needs. See "Managing Panes in the Analysis Editor Tabs."

You access the Analysis editor when you create (or edit) an analysis. See "Creating New Analyses."

> **Note:** If you are using Oracle BI EE in accessibility mode, then, when you create (or edit) an analysis, the Analysis editor is replaced by the "BI Composer wizard." For more information on BI Composer, see Chapter 15, "Using BI Composer to Work with Analyses." For more information on accessibility mode, see Appendix B, "Accessibility Features."

Managing Panes in the Analysis Editor Tabs

Each of the tabs in the Analysis editor consists of several panes. For example, the Results tab consists of the "Subject Areas pane," the "Catalog pane," the "Views pane," the "Compound Layout," and the "Selection Steps pane."

As you work, you can manage these panes to give yourself the most efficient work area for the task that you are performing. For example, if you add multiple views to the compound layout on the Results tab, then you might want to hide the other panes in the Results tab to maximize the area in which to see the views that you are adding. You can:

- Show or hide the panes that are displayed on the left side of the Analysis editor by clicking the sideways triangle button that is displayed between the left and right sides.

- Expand or collapse an individual pane by clicking the plus or minus button in the title bar of the pane.

- Resize an expanded pane by dragging its splitter. For example, you can drag the splitter on top of the Catalog pane up to increase the height of the pane.

- Show or hide a pane by clicking its show/hide toolbar button, if one is available for the pane on the toolbar. For example, you can show or hide the Filters pane in the Criteria tab by clicking the **Show/Hide Filters pane** button on the toolbar.

What Is the Process for Constructing Analyses?

> **Note:** If you are using Oracle BI EE in accessibility mode or you have selected **Wizard (limited functionality)** as the analysis editor, then you use the "BI Composer wizard" rather than the "Analysis editor" to construct analyses. For more information on BI Composer, see Chapter 15, "Using BI Composer to Work with Analyses." For more information on accessibility mode, see Appendix B, "Accessibility Features."

The process for constructing an analysis includes the following steps:

1. "Creating New Analyses"

2. "Specifying the Criteria for Analyses"

3. "Displaying the Results of Analyses"

4. "Adding Prompts to Analyses"

5. "Examining the Logical SQL Statements for Analyses"

6. "Saving Analyses"

Creating New Analyses

This procedure is a step in the process for constructing an analysis. For more information, see "What Is the Process for Constructing Analyses?"

To create an analysis:

1. In the global header, click **New**, then **Analysis**, then one of the following options:

- Select a subject area. If you purchased Oracle Data Visualization, you can also select an external data source (uploaded Microsoft Excel file).

  The Analysis editor is displayed. You can now specify the criteria for the analysis. See "Specifying the Criteria for Analyses."

- **Create Direct Database Query**.

  For information, see "Working with Direct Database Requests."

- **Create Analysis from Simple Logical SQL**.

  The "Analysis Simple SQL Statement dialog" is displayed in which you enter SQL statements for creating an analysis. The results of the analysis can be displayed and manipulated within the Analysis editor, and subsequently incorporated into dashboards and agents.

Specifying the Criteria for Analyses

This procedure is a step in the process for constructing an analysis. For more information, see "What Is the Process for Constructing Analyses?"

You use the "Analysis editor: Criteria tab" to specify the criteria for an analysis, including columns, filters, and selection steps. You also can specify:

- The default order in which columns are to be displayed in the analysis results

- The default sorting for the values that are displayed in views

- The default formatting (such as headings, number of decimal places, conditional formats, and systemwide defaults)

- Column formulas (such as adding a Rank or Percentile function)

- The aggregation rules for column totals

- The sort order for subject area folders and folder objects within the Subject Areas pane

To specify the criteria for an analysis:

1. In the Criteria tab, select the columns to be included in the analysis by doing one of the following:

- Double-clicking the columns in the "Subject Areas pane."

- Dragging and dropping the columns from the Subject Areas pane to the "Selected Columns pane."

  To select multiple non-contiguous columns, press and hold the Ctrl key, then click each column to include.

- Dragging and dropping saved columns from the "Catalog pane."

The selected columns are displayed in a box in the Selected Columns pane. Each column box has two sections. The upper section shows the name of the folder that contains the column, for example, Customers. The lower section shows the name of the column, for example, Customer Name.

If you want to:

- Initiate a search within the subject areas that are displayed in the Subject Areas pane, click the **Search** toolbar button.

- Change the sort order of the subject area folders and objects within each folder, click the **Sort Subject Area** toolbar button. Clicking the button executes the sort and closes all subject area folders except the primary subject area. See "Changing the Sort Order of Subject Areas and Subject Area Folders" for additional information.

- Add or remove related subject areas from which to select columns, click the **Add/Remove Subject Areas** toolbar button in the Subject Areas pane to display the "Add/Remove Subject Areas dialog."

  If you add a related subject area but do not add any columns from that subject area to the analysis, then the subject area is not related to the analysis after you close and re-open the analysis.

- Refresh the content in the Subject Areas pane, click the **Refresh** toolbar button on the Subject Areas pane or click the arrow beside the button.

  Clicking the button executes the default behavior of **Refresh Display**. Clicking the arrow enables you to select **Refresh Display** or **Reload Server Metadata** to refresh the subject area's metadata.

  For more information about these options, see the "Subject Areas pane."

2. Modify the columns or levels of hierarchical columns as needed using the Selected Columns pane:

   - Click the **Options** button to the right of a column name in the Selected Columns pane to display options to:

     - Specify the sort order for columns. (You cannot specify the sort order for hierarchy levels.)

       For more information, see "Sorting Data in Views."

     - Edit formulas for attribute columns and measure columns, including customizing headings, and specifying the aggregation rule. (You cannot customize headings, specify the aggregation rule, or edit the formulas for hierarchical columns or for hierarchy levels.)

       For more information, see "Editing the Formula for a Column."

     - Edit column properties to control the formatting and interaction of columns and hierarchy levels.

       For more information on applying formatting, see "Applying Formatting to a Column."

     - Add filters for attribute columns and measure columns. (You cannot add filters for hierarchical columns or hierarchy levels.) For more information, see "Creating Column Filters."

     - Delete the columns from the analysis. (You cannot delete hierarchy levels.)

   - Click the **Remove all columns from criteria** toolbar button in the Selected Columns pane to remove all columns from the analysis.

- Click the **Combine results based on union, intersection, and difference operations** toolbar button in the Selected Columns pane to combine the results of two or more analyses into a single result. For more information, see "Combining Columns Using Set Operations."

- Use the **Drag Column** buttons in the Selected Columns pane to place the columns in the default order for display in the analysis results.

3. Add and edit inline filters as needed using the "Filters pane."

   For more information, see "Creating Column Filters."

4. Create or edit selection steps as needed using the "Selection Steps pane."

   For more information, see "Working with Selections of Data."

5. Add named filters, calculated items, and groups from the Oracle BI Presentation Catalog as needed using the "Catalog pane."

6. Use the buttons on the toolbar for the Criteria tab, as needed, to show or hide the Filters pane, to show or hide the Selections Steps pane, and to edit the properties of the analysis, such as the type of message (default or custom) to be displayed if no results are available.

You can now add views to the analysis. See "Displaying the Results of Analyses."

Notes

- In general, an analysis should contain at least one measure column. Measure columns are the key additive measurements of business performance, such as dollar sales per store, or the number of service requests opened and closed each day. An analysis without any measure columns generally is not meaningful, and can cause poor query performance or unexpected results. If you want to build an analysis without any measure columns, then first consult the administrator.

- Generally, you should avoid including both a hierarchical column and an attribute column that is also a lower level in the hierarchical column in the same analysis, unless you have selection steps that limit the data in the analysis to only the same level as the attribute column. If you do so, the data for all levels above the level that is the same as the attribute column will not be correct.

  For example, suppose you have a hierarchical column named Merchandise Hierarchy that has these levels:

```
Total Product
   Brand
      LOB
         Product Type
            Product
```

  And you have another attribute column named Product Name, which is the same level as the Product level. If you include both Merchandise Hierarchy and the Product Name attribute column in the same analysis, the data above the Product level will not be correct.

- If you add a column from the Subject Areas pane to the Selected Columns pane after displaying the analysis results, then the column is either included (that is, displayed in the view) or excluded from existing views, depending on the setting of the **Display of Columns Added in Criteria tab** option in the "Analysis Properties dialog: Data tab":

- The column is included in existing views as well as in any new views that you add, if the **Display in existing and new views** option is selected for the **Display of Columns Added in the Criteria tab** option.

- The column is excluded from existing views (that is, it is placed in the Excluded drop target of the Layout pane) but included in any new views that you add, if the **Exclude from existing views, but display in new views** option is selected for the **Display of Columns Added in the Criteria tab** option.

  For more information on the Excluded drop target, see "Understanding Drop Targets."

Understanding Null Suppression

By default, null measure values are suppressed for all analyses. As a content designer sometimes you may want to include null values in an analysis to contribute to the overall understanding of the data. You can set null values to display for the data at both analysis and view levels by selecting the **Include Null Values** option.

The following applies to an analysis or a view when the **Include Null Values** option is selected:

- Column members display.

- When drilling a column on the edge (one with null suppression turned off), null suppression is turned off for all columns on the edge.

- Member selection and conditions are applied to the edge and are filtered first. Note that nulls may not display due to the applied condition.

- Calculated items, groups, totals, grand totals, showing data as a percentage, and server running aggregates, such as a running sum, are not affected by the **Include Null Values** setting.

> **Note:** Oracle BI Presentation Services sorts null values based on the NULL_VALUES_SORT_FIRST setting located in the NQSConfig.INI file.

> **Note:** Null values will be suppressed in a table view if you have a criteria filter set on a measure.

You cannot turn off null suppression for the following:

- Direct Database Requests. See "Working with Direct Database Requests" for additional information.

- Analyses that have been combined. See "Combining Columns Using Set Operations" for additional information.

- Hand-coded logical SQL analyses or any analysis that has been converted by using the Advanced Logical SQL settings. See "Examining the Logical SQL Statements for Analyses" for additional information.

To turn off null suppression at the analysis level:

1. In the Criteria or Results tab, click the Analysis Properties button (see "Analysis Properties dialog" for additional information.)

2. Select the **Include Null Values** option to turn off null suppression for all views. Note that null suppression can be overridden at the view level for funnels, gauges, graphs, tables, pivot tables, and trellises.

To turn off null suppression at the view level for funnels, gauges, graphs, tables, pivot tables, and trellises:

1. Display the Results tab for the specific view. See "Editing Views" for additional information.

2. Click the Properties button.

3. Select the appropriate **Include Null Values** options for the view. For example, if you want to turn off null suppression for both rows and columns in a pivot table (see "Null Values" for additional information), select the **Include rows with only Null values** and **Include columns with only Null values** check boxes. This setting displays corresponding dimensions that have data, as well as null values. Note that if the view contains prompts or section edges, they also inherit the null suppression value from either the row or column edge.

Note: Turning null suppression off may increase the volume of the data returned and impact performance. Contact your administrator for additional information.

If results for analyses that include null values are not as you expect, ensure that data in your sources is consistent. See "Ensuring That Data in Multiple Sources Is Consistent" in Metadata Repository Builder's Guide for Oracle Business Intelligence Enterprise Editionfor more information.

Example 1: Adding a Filter to a Row Edge on a Measure When Null Values Are Included

Suppose that you have a pivot table with Year on the row edge and **Include Null Values** selected in the Pivot Table Properties dialog (that is, nulls are not suppressed). See "Null Values" for additional information.

Figure 2–3 shows an example of T05 Per Name Year on the row edge with null values not suppressed.

Figure 2–3   Pivot Table with "Include Null Values" Set on the Row Edge

Figure 2–4 shows an example of T05 Per Name Year on the row edge with null values not suppressed and a Criteria filter set to 2011 and 2012. When the Criteria filter is set for the attribute column, the filter is applied and the corresponding rows are removed from the analysis.

Figure 2–4   Pivot Table with "Include Null Values" Set on the Row Edge and Criteria Filter Set on an Attribute Column

Example 2: Adding a Filter to a Row Edge on a Measure When Null Values Are Included

Suppose that you have the same pivot table with Year on the row edge and null values selected in the Pivot Table Properties dialog (the same criteria as indicated in Figure 2–3). This time however, you set the filter on the measure, 1 - Revenue, where the value is "greater than 23,000,000." (See "Null Values" for additional information.)

Figure 2–5 shows an example of the results. The Oracle BI Server returns all years (regardless of the measure filter) for unsuppressed edge queries. Because the measure value for T05 Per Name Year is equal to 23,000,000, the value for the row is filtered out, but the row still displays.

Figure 2–5   Pivot Table with "Include Null Values" Set on the Row Edge and Criteria Filter Set on a Measure

Example 3: Adding a "Not Null" Filter to a Row Edge on a Measure When Null Values Are Included

Suppose that you have the same pivot table with Year on the row edge and **Include Null Values** selected in the Pivot Table Properties dialog (the same criteria as indicated in Figure 2–3). This time however, you set the filter on the measure, 1 - Revenue, to *not null*. See "New Filter dialog" for additional information.

Figure 2–6 shows an example of the results. The Oracle BI Server returns all values and honors the **Include Null Values** option for the member. Therefore, all rows with null values are displayed.

Figure 2–6   Pivot Table with "Include Null Values" Set on the Row Edge and a Measure Filter Set to "Not Null"

Editing the Formula for a Column

You can edit the formulas for attribute columns and measure columns when you specify the criteria for an analysis. This editing affects the column only in the context of the analysis and does not modify the formula of the original column in the subject area. You can also customize table and column headings and specify the aggregation rule for column totals. (This functionality is not available for hierarchical columns.)

A column formula specifies what the column values represent. In its most basic form, such as "Base Facts"."1 - Revenue", a column takes the data from the data source as is. You can edit the formula to add functions, conditional expressions, and so on. This editing enables you to present analysis results in a variety of ways. For example, suppose that you want to perform what-if analysis and show what the revenue might be by product if you increased revenue by 10%. You can see this increase by changing the formula for the 1 - Revenue column to show the revenue increased by 10%. Figure 2–7 shows an analysis in a pivot table that includes the 1 - Revenue column (which shows the revenue in the data source) and the 1 - Revenue Increased by 10% column, where the formula for the 1 - Revenue column was edited to calculate revenue increased by 10%.

Figure 2–7   Analysis Showing Revenue and Revenue Increased by 10%

To edit the formula of a column:

1. In the "Selected Columns pane," click the **Options** button beside the column whose formula you want to edit and select **Edit Formula**. The "Edit Column Formula dialog" is displayed.

2. Use the "Edit Column Formula dialog: Column Formula tab" to perform various tasks such as creating customized headers and creating or editing the formula for the column. You can build a simple mathematical formula using operator and character buttons, such as "Base Facts"."1 - Revenue"*1.10.

3. Optionally, use the "Edit Column Formula dialog: Bins tab" to combine values for the column into sets.

4. Click **OK**.

   The column formula is saved with the analysis with which it is used.

Related Topics
"What Is an Analysis?"
"Specifying the Criteria for Analyses"

Combining Columns Using Set Operations

After you have selected a subject area for an analysis, you can combine columns from one or more subject areas using Set operations such as Union or Intersect. By combining columns, you create a column for displaying the data in a different way.

Guidelines for Selecting Columns to Combine

When selecting columns to combine, keep the following guidelines in mind:

- The number and data types of the columns to combine must be the same. The number of rows that are returned for each column can differ.

- You can select columns from the same subject area or from a different subject area, but the columns must have some commonality.

- You can specify one Set operation for one collection of criteria. For example, if you create criteria from the A-Sample Sales subject area, you can apply only one Set operation to those columns. You cannot apply different Set operations to different columns in the collection of criteria.

- You cannot use hierarchical columns, selection steps, or groups when you combine criteria.

Difference Between Combining Columns Using Set Operations and Adding Columns from Related Subject Areas

Combining columns using Set operations produces different results than adding columns from related subject areas:

- When you combine columns using Set operations, the analysis results show a single newly combined column governed by a Set operation. For example, see "Example: Combining Columns from One Subject Area."

- When you add columns from related subject areas to an analysis, the results show each added column individually. For example, if you have the appropriate permissions, then you can create an analysis by selecting one column from a primary subject area and selecting another column from a related subject area.

For information, see "What Are Subject Areas and Columns?"

Example: Combining Columns from One Subject Area

The A-Sample Sales subject area contains the Offices folder, which contains the D1 Office and D2 Department columns. You can combine these two columns and create a column called Offices & Departments. You can include the Union All Set operation to specify that this new column shows all the values from both columns in a single column in a table.

Combining Columns from One or More Subject Areas

The following procedure describes how to combine columns from one or more subject areas. Some steps include references to the example of creating the Offices & Departments column with the A-Sample Sales subject area.

> **Note:** Data formatting that has been saved as the systemwide default for a column is not reflected in a combined column. If you want the data formatting in the combined column, then you must reapply it to the combined column. For more information on data formatting, see "Column Properties dialog: Data Format tab."

To combine columns from one or more subject areas:

1. In the Analysis editor, create an empty analysis that uses a subject area such as A-Sample Sales.

2. In the Criteria tab, select the columns to include in the analysis. For example, select D1 Office from the Offices folder and 1 - Revenue from the Base Facts folder.

3. In the "Selected Columns pane," click the **Combine results based on union, intersection, and difference operations** toolbar button to display the Select Subject Area menu.

4. Select a subject area that contains the columns to combine with the columns that you have previously included. For example, click A-Sample Sales.

   The Set Operations area is displayed in the Selected Columns pane. Note the boxes with dotted line borders that are displayed below the criteria. These boxes indicate the kind of column that you must combine with those that you have previously included. For example, the boxes might include "Add Column (D1 Office)" and "Add Column (1 - Revenue)". This text indicates that the columns that you include in each of those boxes is combined with the previously selected D1 Office and 1 - Revenue columns using a Set operation to form a new column. When you combine measure columns, no arithmetic operations are performed.

5. In the Subject Areas pane, select the columns to combine with the originally selected columns. For example, from the Offices folder, select D2 Department and from the Base Facts folder, select 1 - Revenue.

   Note that the boxes that previously had dotted line borders now hold the columns that you have just selected. You have now specified the columns to combine.

6. Click the **Union** button under the **Result Columns** link. Select the operation type to use for combining the columns. For example, select the **Union All** type.

   The result columns are those that are displayed in views after applying the set operation of the derived columns.

7. Click the **Result Columns** link. Note that the Selected Columns pane is updated to show the newly combined columns that you have just created. You can work with these columns as you do other columns in this pane. For example, you can rename the first column (that is the single newly combined column) by following these steps:

   a. Click the **Options** button for the D1 Office column.

   b. Select **Column Properties**.

   c. Select **Column Format**.

   d. Ensure that **Custom Headings** is selected.

    e. In the **Column Heading** box, enter `Offices & Departments`.

    f. Click **OK**.

8. Click the Results tab to view the columns in a table in the "Compound Layout."

Figure 2–8 shows how the combined Offices & Departments column is displayed in a table.

Figure 2–8 Combined Column Displayed in a Table

Viewing Metadata Information from the Subject Areas Pane

You can view metadata information for subject areas, folders, columns, and hierarchy levels. This is helpful, for example, if you need a full description of one of these objects when creating an analysis.

Metadata information is contained in a metadata dictionary. A metadata dictionary is a static set of XML documents. Each XML document describes a metadata object, such as a column, including its properties and relationships with other metadata objects.

To view metadata information:

1. In the Subject Areas pane in the Criteria tab or the Results tab, select the subject area, folder, column, or hierarchy level for which you want to view metadata information.

2. Click **Show More Buttons** on the toolbar and then click **Open Metadata Dictionary**.

The metadata dictionary information for the object is displayed either in a new browser window or in a tab, depending on the browser setting.

> **Note:** If the metadata dictionary information does not display in the browser, then ensure that the browser setting to access data sources across domains is enabled.

Saving Columns to the Catalog

You can save a column to the catalog for reuse in other analyses. This is helpful for example, if you have edited the formula of a column or set column properties that you would like to save and reuse in other analyses.

When you save a column to the catalog:

- Oracle recommends that you save the column to the subject area folder. If a subject area folder does not exist in your /My Folders folder or within the /Shared Folders folder, then Oracle BI EE creates a subject area folder and the Save As dialog defaults a save path to /My Folders/Subject Area Contents/*<subject area>*. Saving the column to the subject area folders ensures that it is available when you build an analysis for the same subject area.

- Selections, filters, conditional actions links, and conditional formatting are not saved.

- References to the column are changed from the subject area to the catalog.

- You can reuse the saved column in another analysis by dragging and dropping it from the Catalog pane.

- You can edit the saved column from

  - The "Catalog pane"

  - The "Catalog page"

  - Within an analysis in which you reuse it.

  Changes that you make from the Catalog pane and Catalog page apply to all versions of the saved column. Edits that you make within an analysis apply only to that analysis.

To save columns to the catalog, you must have been granted the Save Column privilege by the administrator.

To save a column to the catalog:

1. In the "Selected Columns pane," click the **Options** button beside the column that you want to save and select **Save Column As**. The "Save As dialog" is displayed.

2. Complete the dialog to save the column to the catalog.

Changing the Sort Order of Subject Areas and Subject Area Folders

Subject area folders are displayed in the Subject Areas pane in the sort order specified in the "My Account dialog: Preferences tab" by default. This sort order, established in the Oracle BI metadata repository and initially set by the administrator, can be changed by modifying the **Subject Area Sort Order** option in the "My Account dialog: Preferences tab." See "Changing the Sort Order of Subject Areas and Subject Area Folders" for additional information.

To change the sort order for subject areas, subject area folders, and the columns within the subject area folders for all analyses, perform the following steps:

1. In the global header, click **Signed In As** *username* and select **My Account**.

    The "My Account dialog: Preferences tab" is displayed.

2. Click the **Subject Area Sort Order** list, and then make the appropriate selection. Your options follow:

    - **Sort A to Z** (ascending)

- **Sort Z to A** (descending)

- **Sort in Saved Order** (The subject areas sort order specified in an analysis is saved as the default and subsequently used as the default sort order.)

- **Default - Sort in Saved Order** (The subject areas sort order is originally defined in the repository.)

Note: The primary subject area specified when creating the analysis is always fixed at the top; that is, it will always display as the first subject area in the "Subject Areas pane." For example, if you have three subject areas (A - Sample Sales, B - Sample Quotas, and C - Sample Headcount) participating in the analysis with C - Sample Headcount as the primary subject area, and the sort order is ascending, then the subject areas display as follows:

- C - Sample Headcount

- A - Sample Sales

- B - Sample Quotas

---

3. Click **OK** to save your changes.

To change the sort order for subject area folders and objects within each folder for the current analysis that you are creating or modifying, perform the following steps:

1. In the "Subject Areas pane," add the appropriate subject areas.

2. Click the **Sort Subject Area** button, and then select one of the following sort orders from the drop-down list

   - **Sort A to Z**

   - **Sort Z to A**

   - **Sort in Saved Order**

   There is a fixed sort order for column types. This fixed sort order is:

   - Nested folders

   - Measures

   - Attributes

   - Hierarchies

3. Complete your analysis.

Note: Subject area sorts are not case-sensitive.

Where Else is the Subject Areas Sort Order Reflected?

In addition to seeing the subject areas sort order in the Subject Areas pane in the Criteria tab, you can also see the subject areas sort order that you configured in the Subject Areas pane reflected in the following places:

- Select the **More columns** option in the "Filters pane" to display the "Select Column dialog." See "Creating Column Filters."

- Select the **More options** in the "Filters pane" and select **Add EVALUATE_ PREDICATE function** to display the "New EVALUATE_PREDICATE Function

dialog." See "Working with the EVALUATE_PREDICATE Function."

- Select the **More options** button for a column in the Criteria tab, the Available pane displays in the "Edit Column Formula dialog: Column Formula tab." See "Editing the Formula for a Column."

- Select the **More options** button for a column in the Criteria tab, the "Edit Column Formula dialog: Column Formula tab" displays. Click the **Filter** button to display the "Insert Filter dialog." See "Editing the Formula for a Column."

- Select the "Analysis editor: Prompts tab," and then click the **New** button and select **Column Prompt - More Columns** to display the "Select Column dialog." See "Adding Prompts to Analyses."

- Click the **Show/Hide Selection Steps Pane** button to display the "Selection Steps pane." Click **Then New Step** and select **Apply a Condition**. From the "New Condition Step dialog," select a Condition Type to display the Measure drop-down list. See "Creating Selection Steps."

You can also see the subject areas sort order in the subject areas pane within the Results tab. The Results tab reflects the subject areas sort order, but the values for columns are not sorted. Figure 2–9 shows an example of A - Sample Sales sorted in descending order. The values for D52 Country Name (for example, Australia, Brazil, China, and so on) are not sorted in descending order.

Figure 2–9   Example of a Subject Areas Sort With A - Sample Sales Sorted in Descending Order

Displaying the Results of Analyses

This procedure is a step in the process for constructing an analysis. For more information, see "What Is the Process for Constructing Analyses?"

You use the "Analysis editor: Results tab" to add different views of the results such as graphs, tickers, and pivot tables. For a list of the views that you can add, see "What Types of Views Are Available?"

When you create an analysis and display the Results tab, you see in the "Compound Layout" a title view and either a table or pivot table view by default, based on the following:

- If the analysis contains only attribute columns and measure columns, then a table is displayed by default.

- If the analysis contains at least one hierarchical column, then a pivot table is displayed by default.

The administrator might have configured different views to display by default in the Results tab.

You can combine views and position them anywhere in the Compound Layout. For example, you can create side-by-side pivot tables that reflect different views of the data, graphs that allow you to explore interrelationships in depth, and filters that limit the results.

Together all of these views are called a compound layout. You can create additional compound layouts, as described in "Creating Additional Compound Layouts."

To display the results of an analysis:

1. Click the Results tab.

   The results of the analysis are displayed in a table or pivot table.

2. (Optional) Edit the table or pivot table or add additional views. For more information, see "Adding Views for Display in Dashboards."

Creating Additional Compound Layouts

As you work with an analysis, you can create multiple compound layouts that use different combinations of views. For example, one layout might include a graph and a title, and another layout might include a graph and a narrative view. When you add the analysis to a dashboard page, you can select which layout you want to include on that page.

To create additional compound layouts:

1. Click the "Analysis editor: Results tab."

2. Create another compound layout in the "Compound Layout" by clicking one of the following buttons on the toolbar of the Results tab:

   - **Create Compound Layout** — Creates a new instance of the compound layout.

   - **Duplicate Compound Layout** — Creates a copy of the current compound layout, with the same views.

Alerting Users to No Data in the Results of Analyses

When the results of an analysis return no data, the following default message is displayed to users:

```
No Results
The specified criteria didn't result in any data.
This is often caused by applying filters and/or selections that are too
restrictive or that contain incorrect values.
Please check your Analysis Filters and try again.
```

```
The filters currently being applied are shown below.
```

Rather than display the default message, you can create a customized message to alert users. This message enables you to provide your own explanation for why the analysis returned no data.

To create a custom message to alert users to no data in the results of an analysis:

1. Edit the analysis to which you want to add a custom message.

2. Click the "Analysis editor: Results tab."

3. Click the **Analysis Properties** toolbar button. The "Analysis Properties dialog" is displayed.

4. In the **No Results Settings** box, select **Display Custom Message**.

5. In the **Header** field, enter the text of the header for the custom message.

6. In the **Message** field, enter the explanatory text.

7. Click **OK**.

Adding Prompts to Analyses

This procedure is a step in the process for constructing an analysis. For more information, see "What Is the Process for Constructing Analyses?"

You use the "Analysis editor: Prompts tab" to create prompts that allow users to select values to filter an analysis. Prompts allow users to select values that dynamically filter all views within the analysis.

To add a prompt to an analysis:

1. Click the Prompts tab.

2. Add the prompt, as described in Chapter 7, "Prompting in Dashboards and Analyses."

Examining the Logical SQL Statements for Analyses

This procedure is an advanced step in the process for constructing an analysis. For information, see "What Is the Process for Constructing Analyses?"

You use the "Analysis editor: Advanced tab" to examine the XML code and logical SQL statement that is generated for an analysis and optionally create an analysis based on that SQL statement. Generally you need not use the features of this tab, because the vast majority of functionality for working with analyses is provided through the user interface. The following list provides examples of situations in which you might want to examine SQL statements:

- You can use the Prefix section to override any user variable or session variable that has been marked as available for updating. You can specify multiple variables to update with one line of code.

  To override variables, use the following syntax:

  SET VARIABLE *var-name=value*

  For example, you can set the variables that are shown in the following code line:

  SET VARIABLE "My Variable"=4, DISABLE_CACTHE_HIT = 1, LOGLEVEL = 2;

  For information on variables, see "Where Can I Reference Variables?"

- You can temporarily change the logging level for an analysis for troubleshooting, even when logging is turned off for analyses. In the Prefix section of the Advanced tab, you can specify the following:

  `SET VARIABLE LOGLEVEL=4;`

  This specification runs the analysis at level 4, which facilitates advanced troubleshooting. The default level is 0, which indicates no logging. You can view the logs using the **View Log** link on the "Administration: Manage Sessions page."

  See *Metadata Repository Builder's Guide for Oracle Business Intelligence Enterprise Edition* for information on logging levels.

- You can enter your own logical SQL statements. Entering your own statements eliminates many features of Oracle BI EE (such as hierarchical columns, selection steps, groups, and formatting), but enables you to use functions such as SET operations.

- You can create an analysis using the SQL statements from an existing analysis as your starting point.

Before working with the Advanced tab, keep the following important points in mind:

- This procedure is only for advanced users and developers that have the appropriate responsibilities to access the Advanced tab. It is assumed that you understand advanced SQL statements, have expertise working with the Oracle BI Server metadata, are familiar with the SQL information in Appendix C, "Logical SQL Reference,", and understand the content and structure of the underlying data sources.

- This tab provides the Advanced SQL Clauses area, which enables you to add clauses to the SQL statements and other similarly advanced features. These features, except for the ability to specify a prefix, are disabled for analyses that contain hierarchical columns, member selections, or groups.

  > **Note:** You can see the logical SQL statement that an analysis is using by inserting a logical SQL view. You can also enter SQL statements using the "Administration: Issue SQL page."

To edit the XML code or examine the SQL statement that is generated for an analysis:

1. Click the "Analysis editor: Advanced tab."

2. Use the link that corresponds to the analysis name in the Referencing the Results area at the top of the tab to display pages that contain links for working with the results of the analysis.

3. Use the fields in the Analysis XML area to view and modify the XML code, and click **Apply XML**.

   If you modify the XML code, then you affect the analysis as it is saved in the Oracle BI Presentation Catalog.

   To apply the settings for the **Partial Update** and the **Bypass Oracle BI Presentation Services Cache** boxes, you must also click the **Apply SQL** button at the bottom of the tab.

4. Use the read-only box in the SQL Issued area to examine the SQL statement that is sent to the Oracle BI Server when the analysis is executed.

If you want to create an analysis using the SQL statement from the current analysis as the starting point, then click the **New Analysis** button. Any hierarchical columns, selection steps, groups, or formatting that are specified in the current analysis are removed.

5. Depending on the content of the analysis, use the available fields in the Advanced SQL Clauses area to change the subject area, add GROUP BY or HAVING clauses, and specify DISTINCT processing and a prefix.

6. Click **Apply SQL** to apply your changes.

> **Note:** Use care when clicking the **Apply SQL** button. When you do, Oracle BI EE creates a new analysis based on the SQL statement that you have added or modified. Therefore, you lose all views, formatting, and so on that you had previously created for the analysis. The XML code is also modified for the new analysis.

Saving Analyses

This procedure is a step in the process for constructing an analysis. For more information, see "What Is the Process for Constructing Analyses?"

You can save an analysis to a:

■ Personal folder, from which only you can access it.

Your top-level personal folder is called My Folders. Every user with a unique user name has a folder called My Folders. This is designed to hold the analyses that you run most often, and other content that you access frequently.

When you click the **Refresh Display** link at the bottom of the pane, the analysis is listed under the folder in which you saved it.

■ Shared folder, from which users with permission to access that folder can access it.

■ Lotus Notes database by either:

  ■ Saving the analysis to a Web Archive file (file extension .mht), and then uploading the file to the Lotus Notes database.

  ■ Saving the analysis and scheduling it to be sent by email automatically to a specific address on a Lotus Notes server using an agent. The Lotus Notes server can then process the email and write it to the database.

To save an analysis:

1. In the Analysis editor, click the **Save Analysis** toolbar button to display the dialog to save the analysis.

2. If you want to save the analysis to a personal or shared folder:

   a. In the **Save In** box, select the personal or shared folder in which to save the analysis.

   b. In the **Name** field, enter a name for the analysis, such as forecasted_sales.

   c. Click **OK**.

3. If you want to save the analysis to a Lotus Notes database using a Web Archive file:

   a. In the **Save In** box, select the folder in which to save the analysis.

    b. In the **Name** field, enter a name for the analysis, including an .mht file extension, such as forecasted_sales.mht.

    c. Click **OK**.

    d. Upload the .mht file to the Lotus Notes database.

4. If you want to save the analysis to a Lotus Notes database using an agent:

    a. In the **Save In** box, select the folder in which to save the analysis.

    b. In the **Name** field, enter a name for the analysis, such as forecasted_sales.

    c. Click **OK**.

    d. Create the agent, scheduling it to be sent by email to a specific address on a Lotus Notes server.

    For more information on creating an agent, see "Creating Agents."

Creating Agents from Analyses

You can create an agent directly from an analysis. When you create an agent using this method, Oracle BI EE does the following:

- Creates a condition based on the analysis and adds the condition to the "Agent editor: Condition tab"

- Adds the analysis as the content delivery on the "Agent editor: Delivery Content tab"

For more information on agents, see Chapter 9, "Delivering Content."

To create an agent from an analysis:

1. Locate the analysis from which you want to create an agent using one of the following methods:

- Open the analysis, click the "Analysis editor: Results tab" and then the **Schedule** toolbar button.

  The analysis is saved and then the "Agent editor" is displayed.

- Navigate to the analysis on the "Catalog page," click the **More** list, and then click the **Schedule** option.

  The "Agent editor" is displayed.

2. Complete the following tabs of the Agent editor:

- "Agent editor: General tab"

- "Agent editor: Schedule tab"

- "Agent editor: Condition tab"

- "Agent editor: Delivery Content tab"

- "Agent editor: Recipients tab"

- "Agent editor: Destinations tab"

- "Agent editor: Actions tab"

3. Save the agent.

Editing Analyses

> **Note:** If you are using Oracle BI Enterprise Edition in accessibility mode, then you use the "BI Composer wizard" rather than the "Analysis editor" to edit analyses. For more information on BI Composer, see Chapter 15, "Using BI Composer to Work with Analyses." For more information on accessibility mode, see Appendix B, "Accessibility Features."

To edit an analysis:

1. In the global header, click **Catalog** to display the "Catalog page."

2. Navigate to the analysis to edit and click the **Edit** link. The analysis is displayed in the "Analysis editor."

3. Make the desired changes.

4. Save the analysis.

About Embedding an Analysis in a Dashboard

Embedding an analysis in a dashboard causes it to execute automatically and display the results within the dashboard. This provides access to current results. For example, if you are a sales executive whose company captures sales data on a daily basis, then you might want to have the dollar volume of product that was sold today be displayed on the front page of your dashboard.

You can embed previously created analyses from the Oracle BI Presentation Catalog by using the Dashboard editor. For information about the Dashboard editor, see "Adding Content to Dashboards."

Working with Direct Database Requests

Users with the appropriate privileges can create and issue a direct database request directly to a physical back-end database. The results of the request can be displayed and manipulated within the Analysis editor, and subsequently incorporated into dashboards and agents. This section includes the following topics:

- "Setting Privileges for Direct Requests"
- "Executing a Direct Database Request"
- "Seeing the Results of Direct Database Requests"

Setting Privileges for Direct Requests

The following privilege settings in Oracle BI Presentation Services Administration control whether you can modify and execute direct requests:

- Edit Direct Database Analysis

  If this privilege is set for you, then you can create and edit direct database requests.

- Execute Direct Database Analysis

  If this permission is set for you, then you can issue direct requests and see the results.

For information, see "Managing Presentation Services Privileges" in *Security Guide for Oracle Business Intelligence Enterprise Edition*.

Executing a Direct Database Request

You can send a direct request to the database from Oracle BI EE.

> **Note:** Oracle BI Server security rules for data are bypassed and cannot be applied when direct database requests are issued from Oracle BI EE.

To execute a direct database request:

1. In the global header, select **New**, then **Analysis**, then **Create Direct Database Query**.

   The "Analysis editor: Criteria tab" is displayed with options for creating a database request.

2. Specify the appropriate options on the Criteria tab.

3. To issue the request and see the results, if any, click the Results tab.

Seeing the Results of Direct Database Requests

After you retrieve columns to create an analysis from a direct database request, you can work with that analysis similarly to how you work with other analyses. The following list outlines differences with analyses whose columns originated from direct database requests:

- The "Subject Areas pane" does not contain any columns, because you are not working with columns from a repository.

- You cannot create groups or selection steps for this analysis.

- You cannot specify conditional formatting for the columns.

- The Sort Ascending (upward-facing triangle) and the Sort Descending (downward-facing triangle) that display when you hover the mouse over the area to the right of a column name in the header of a pivot table, table, or trellis view are not supported.

Using Variables

You can reference variables in several areas of Oracle BI Enterprise Edition, including in analyses, dashboards, KPIs, actions, agents, and conditions. For example, suppose that you wanted to create an analysis whose title displays the current user's name. You can do this by referencing a variable.

There are five types of variables that you can use:

- Session
- Repository
- Presentation
- Request
- Global

What Are Session Variables?

A session variable is a variable that is initialized at login time for each user. When a user begins a session, the Oracle BI Server creates a new instance of a session variable and initializes it.

There are as many instances of a session variable as there are active sessions on the Oracle BI Server. Each instance of a session variable could be initialized to a different value.

Session variables are populated by a query specified in an initialization block (INIT BLOCK). These session INIT BLOCKs are typically executed only once at login time. However, if the INIT BLOCK is marked as deferred, then it can be executed at a later time when the relevant variables are referenced.

Session INIT BLOCKS are generally associated with a query statement, but can also be associated with an LDAP object. For more information about INIT BLOCKs, see "Working with Initialization Blocks" in *Metadata Repository Builder's Guide for Oracle Business Intelligence Enterprise Edition.*

There are two types of session variables:

- **System** — A session variable that the Oracle BI Server and Oracle BI Presentation Services use for specific purposes.

  System session variables have reserved names that cannot be used for other kinds of variables (such as static or dynamic repository variables and non-system session variables).

- **Non-system** — A system variable that the administrator creates and names. For example, the administrator might create a SalesRegion non-system variable that initializes the name of a user's sales region.

The administrator creates non-system session variables using the Oracle BI Administration Tool.

> **Note:** Certain system session variables (such as, USERGUID or ROLES) cannot be overridden by request variables. Other system session variables, such as DATA_TZ and DATA_DISPLAY_TZ (Timezone), can be overridden if configured in the Oracle BI Administration Tool.
>
> For more information, see "Working with Repository Variables" in *Metadata Repository Builder's Guide for Oracle Business Intelligence Enterprise Edition.*

For more information, see "About Session Variables" in *Metadata Repository Builder's Guide for Oracle Business Intelligence Enterprise Edition.*

What Are Repository Variables?

A repository variable is a variable that has a single value at any point in time.

There are two types of repository variables:

- **Static** — Repository variables whose value persist and do not change until the administrator decides to change them.

- **Dynamic** — Repository variables whose values are populated by a query specified in an INIT BLOCK. You can specify the interval for which the INIT BLOCK is

refreshed. A dynamic INIT BLOCK automatically refreshes its variables' values at the specified interval.

Dynamic INIT BLOCKs can only be associated with a query (that is, by a SQL statement, an ADF query, or another supported data source). For more information about INIT BLOCKs, see "Working with Initialization Blocks" in *Metadata Repository Builder's Guide for Oracle Business Intelligence Enterprise Edition*.

The administrator creates repository variables using the Oracle BI Administration Tool.

For more information, see "About Repository Variables" in *Metadata Repository Builder's Guide for Oracle Business Intelligence Enterprise Edition*.

What Are Presentation Variables?

A presentation variable is a variable that you can create as part of the process of creating one of the following types of dashboard prompts:

- **Column prompt** — A presentation variable that is created as part of a column prompt is associated with a column, and the values that it can take come from the column values.

  To create a presentation variable as part of a column prompt, in the "New Prompt dialog" (or Edit Prompt dialog), you have to select **Presentation Variable** in the **Set a variable** field and then enter a name for the variable in the *Variable Name* field.

  For information on working with column prompts, see "Creating a Column Prompt."

- **Variable prompt** — A presentation variable that is created as part of a variable prompt is not associated with any column, and you define the values that it can take.

  To create a presentation variable as part of a variable prompt, in the "New Prompt dialog" (or Edit Prompt dialog), you have to select **Presentation Variable** in the **Prompt for** field and then enter a name for the variable in the *Variable Name* field.

  For information on working with variable prompts, see "Creating a Variable Prompt."

The value of a presentation variable is populated by the column or variable prompt with which it was created. That is, each time a user selects one or more values in the column or variable prompt, the value of the presentation variable is set to the value or values that the user selects.

What Are Request Variables?

A request variable lets you override the value of a session variable but only for the duration of a database request initiated from a column prompt or a variable prompt.

> **Note:** Certain system session variables (such as, USERGUID or ROLES) cannot be overridden by request variables. Other system session variables, such as DATA_TZ and DATA_DISPLAY_TZ (Timezone), can be overridden if configured in the Oracle BI Administration Tool.
>
> For more information, see "Working with Repository Variables" in *Metadata Repository Builder's Guide for Oracle Business Intelligence Enterprise Edition*.

You can create a request variable as part of the process of creating one of the following types of dashboard prompts:

- **Column prompt** — A request variable that is created as part of a column prompt is associated with a column, and the values that it can take come from the column values.

  To create a request variable as part of a column prompt, in the "New Prompt dialog" (or Edit Prompt dialog), you have to select **Request Variable** in the **Set a variable** field and then enter the name of the session variable to override in the *Variable Name* field.

  For information on working with column prompts, see "Creating a Column Prompt."

- **Variable prompt** — A request variable that is created as part of a variable prompt is not associated with any column, and you define the values that it can take.

  To create a request variable as part of a variable prompt, in the "New Prompt dialog" (or Edit Prompt dialog), you have to select **Request Variable** in the **Prompt for** field and then enter a name of the session variable that you want to override in the *Variable Name* field.

  For information on working with variable prompts, see "Creating a Variable Prompt."

The value of a request variable is populated by the column prompt or variable prompt with which it was created. That is, each time a user selects a value in the column or variable prompt, the value of the request variable is set to the value that the user selects. The value, however, is in effect only from the time the user presses the **Go** button for the prompt until the analysis results are returned to the dashboard.

> **Note:** Only string and numeric request variables support multiple values. All other data types only pass the first value.

What Are Global Variables?

A global variable is a column created by combining a specific data type with a value. The value can be a string, number, date, time, expression, formula, and so on. You create a global value during the process of creating an analysis by using the "Edit Column Formula dialog." The global variable is then saved in the catalog and made available to all other analyses within a specific tenant system.

You create a global variable as part of the process of creating an analysis.

Global variables can be of the following types:

- Date

- Date and Time

- Number

- Text

- Time

To create a global variable:

1. In the "Selected Columns pane" on the Criteria tab, click the **Options** button beside the column whose formula you want to edit and select **Edit Formula**. The "Edit Column Formula dialog: Column Formula tab" is displayed. You can create a custom header for the global variable by using this tab.

2. Click the **Variable** button, and then select **Global**. The "Insert Global Variable dialog" is displayed.

3. Click the **Add New Global Variable** button. The "New Global Variable dialog" displays.

4. Enter a unique name.

5. Select a data type.

6. Enter a value.

> **Note:** If you are selecting "Date and Time" as the data type, enter the value, as in the following example: `03/25/2004 12:00:00 AM`
>
> If you are entering an expression or a calculation as a value, you must use the Text data type, as in the following example: `"Base Facts"."1-Revenue"*3.1415`

7. Click **OK**. The new global variable is added to the Insert Global Variable dialog.

8. Select the new global variable that you just created, and then click **OK**. The Edit Column Formula dialog is displayed with the global variable inserted in the Column Formula pane.

   The **Custom Headings** check box is automatically selected. Enter a new name for the column to which you have assigned a global variable to more accurately reflect the variable.

9. Click **OK**.

The global variable is evaluated at the time the analysis is executed, and the value of the global variable is substituted appropriately. Only users with appropriate privileges can manage (add, edit, and delete) global variables.

Where Can I Reference Variables?

You can reference variables in the following areas (but not all types of variables can be referenced in each area):

- Title views. See "Results tab: Title editor."

- Narrative views. See "Results tab: Narrative editor."

- Static text views. See "Results tab: Static Text editor."

- Filters. See "New Filter dialog" and "New EVALUATE_PREDICATE Function dialog."

- Column formulas. See "Edit Column Formula dialog: Column Formula tab."

- Conditional formatting conditions. See "Column Properties dialog: Conditional Format tab" and "New Condition dialog."

- Table and column headings in analyses. See "Column Properties dialog: Column Format tab."

- Direct database requests. See "Working with Direct Database Requests."

- Dashboard prompts and inline prompts. See "New Prompt dialog."

- Headers and footers for PDF output. See "Edit Footer or Header dialog."

- Link or image objects in a dashboard. See "Link or Image Properties dialog."

- Text objects in a dashboard. See "Text Properties dialog."

- Graphs to specify conditional formatting of graph data. See "Graph Properties dialog: Style tab" and "Style and Conditional Formatting dialog: Conditional Formatting tab."

- Gauge thresholds. See "Enter Expression dialog."

- Gauge limits. See "Customize Gauge Limit dialog."

- Agents. See the "Agent editor: Delivery Content tab."

- Actions to specify parameters. See "Create New Action dialog" and "Edit Parameter Mapping dialog."

- Conditions to specify parameters. See "New Condition dialog."

- Selection steps to override steps. See "New Condition Step dialog." and "Select Values dialog.".

- KPIs to define thresholds. See "KPI editor: States page."

- KPIs included in a KPI watchlist. See "Add KPI dialog."

- URL fields in dialogs. See "Image Map Prompt Properties dialog."

For the syntax that you use to reference variables, see "What Is the Syntax for Referencing Variables?"

What Is the Syntax for Referencing Variables?

You can reference variables in analyses, dashboards, KPIs, and agents. How you reference a variable depends on the task that you are performing.

For tasks where you are presented with fields in a dialog, you must specify only the type and name of the variable (not the full syntax), for example, referencing a variable in a filter definition.

For other tasks, such as referencing a variable in a title view, you specify the variable syntax. The syntax you use depends on the type of variable as described in Table 2–1.

> **Note:** In the syntax, if the "at" sign (@) is not followed by a brace ({), then it is treated as an "at" sign.

Table 2–1   Syntax for Referencing Variables

Type of Variable	Syntax	Example
Session	@{biServer.variables['NQ_SESSION.*variablename*']} where *variablename* is the name of the session variable, for example DISPLAYNAME. For a list of system session variables that you can use, see "About System Session Variables" in *Metadata Repository Builder's Guide for Oracle Business Intelligence Enterprise Edition*.	@{biServer.variables['NQ_SESSION.USER']}
Repository	@{biServer.variables.*variablename*} or @{biServer.variables['*variablename*']} where *variablename* is the name of the repository variable, for example, prime_begin.	@{biServer.variables.prime_begin} or @{biServer.variables['prime_begin']}
Presentation or request	@{variables.*variablename*}{*format*}{*defaultvalue*} or @{*scope*.variables['*variablename*']} where: ■ *variablename* is the name of the presentation or request variable, for example, MyFavoriteRegion. ■ (optional) *format* is a format mask dependent on the data type of the variable, for example #,##0, MM/DD/YY hh:mm:ss. (Note that the format is not applied to the default value.) ■ (optional) *defaultvalue* is a constant or variable reference indicating a value to be used if the variable referenced by *variablename* is not populated. ■ *scope* identifies the qualifiers for the variable. You must specify the scope when a variable is used at multiple levels (analyses, dashboard pages, and dashboards) and you want to access a specific value. (If you do not specify the scope, then the order of precedence is analyses, dashboard pages, and dashboards.) **Note:** When using a dashboard prompt with a presentation variable that can have multiple values, the syntax differs depending on the column type. Multiple values are formatted into comma-separated values and therefore, any format clause is applied to each value before being joined by commas.	@{variables.MyFavoriteRegion}{EASTERN REGION} or @{MyFavoriteRegion} or @{dashboard.variables['MyFavoriteRegion']} or (@{myNumVar}[#,##0]{1000}) or (@{variables.MyOwnTimestamp}[YY-MM-DD hh:mm:ss]{}) or (@{myTextVar}{A, B, C})
Global	@{global.variables.*variablename*} where *variablename* is the name of the global variable, for example, gv_region. When referencing a global variable, you must use the fully qualified name as indicated in the example. **Note:** The naming convention for global variables must conform to EMCA Scripting language specifications for JavaScript. The name must not exceed **200** characters, nor contain embedded spaces, reserved words, and special characters. If you are unfamiliar with JavaScripting language requirements, consult a third party reference.	@{global.variables.gv_date_n_time}

You also can reference variables in expressions. The guidelines for referencing variables in expressions are described in Table 2–2.

Table 2–2   Guidelines for Referencing Variables in Expressions

Type of Variable	Guidelines	Example
Session	■ Include the session variable as an argument of the VALUEOF function. ■ Enclose the variable name in double quotes. ■ Precede the session variable by NQ_SESSION and a period. ■ Enclose both the NQ_SESSION portion and the session variable name in parentheses.	`"Market"."Region"=VALUEOF(NQ_` `SESSION."SalesRegion")`

Repository	■ Include the repository variable as an argument of the VALUEOF function.
	
	■ Enclose the variable name in double quotes.
	
	■ Refer to a static repository variable by name.
	
	■ Refer to a dynamic repository variable by its fully qualified name.
	
	If you are using a dynamic repository variable, then the names of the initialization block and the repository variable must be enclosed in double quotes ("), separated by a period, and contained within parentheses. For example, to use the value of a dynamic repository variable named REGION contained in a initialization block named Region Security, use this syntax:
	
	VALUEOF("Region Security"."REGION")
	
	For more information, see "About Repository Variables" in *Metadata Repository Builder's Guide for Oracle Business Intelligence Enterprise Edition*.
		`CASE WHEN "Hour" >= VALUEOF("prime_begin") AND`
		`"Hour" < VALUEOF("prime_end") THEN 'Prime`
		`Time' WHEN ... ELSE...END`

Table 2–2   (Cont.) Guidelines for Referencing Variables in Expressions

Type of Variable	Guidelines	Example

Presentation	■ Use this syntax:
	
	`@{variablename}{defaultvalue}`
	
	where *variablename* is the name of the presentation variable and *defaultvalue* (optional) is a constant or variable reference indicating a value to be used if the variable referenced by *variablename* is not populated.
	
	■ To type-cast (that is, convert) the variable to a string, enclose the entire syntax in single quotes, for example:
	
	`'@{user.displayName}'`
	
	Note: If the @ sign is not followed by a {, then it is treated as an @ sign.
	
	When using a presentation variable that can have multiple values, the syntax differs depending on the column type.
	
	Use the following syntax in SQL for the specified column type in order to generate valid SQL statements:
	
	■ **Text** — (@{*variablename*}['@']{*defaultvalue*})
	
	■ **Numeric** — (@{*variablename*}{*defaultvalue*})
	
	■ **Date-time** — (@{*variablename*}{timestamp *'defaultvalue'*})
	
	■ **Date** (only the date) — (@{*variablename*}{date *'defaultvalue'*})
	
	■ **Time** (only the time) — (@{*variablename*}{time *'defaultvalue'*})
		`"Market"."Region"=@{MyFavoriteRegion}{EASTERN REGION}`
		
		or
		
		`"Products"."P4 Brand"=(@{myTextVar}['@']{BizTech})`
		
		or
		
		`"Products"."PO Product Number"=(@{myNumVar}{1000})`
		
		or
		
		`"Sales Person"."E7 Hire Date"=(@{myDateTimeVar}{timestamp '2013-05-16 00:00:01'})`
		
		or
		
		`"Time"."Total Fiscal Time"=(@{myDateVar}{date '2013-05-16'})`
		
		or
		
		`"Time"."Time Right Now"=(@{myTimeVar}{time '00:00:01'})`
		
		For multiple values (in specified data types) when using SQL:
		
		If the column type is **Text** and *variablename* is passing val1, val2, and val3, the resultant is ('val1', 'val2', 'val3').
		
		or
		
		If the column type is **Date** and *variablename* is passing 2013-08-09 and 2013-08-10, the resultant is (date '2013-08-09', date '2013-08-10').
		
		or
		
		If the column type is **Date-time** and *variablename* is passing 2013-08-09 00:00:00 and 2013-08-10 00:00:00, the resultant is (timestamp '2013-08-09 00:00:00', timestamp '2013-08-10 00:00:00').

For the specific areas where you can reference variables, see "Where Can I Reference Variables?"

What Predefined Presentation Variables Are Available?

Table 2–3 contains a list of the predefined presentation variables that you can reference in analyses, dashboards, KPIs, and agents. (Note that the syntax for these predefined presentation variables omits the `variables.` qualifier, for example, `@{session.locale}` rather than `@{session.variables.locale}`.)

> **Note:** For time zone variables, the time zone for a user must be set to a value other than Default in order for this variable to work. (Users set their preferred time zone in the "My Account dialog: Preferences tab.")

Table 2–3   Predefined Presentation Variables

Scope	Presentation Variable	Example
system	productVersion	system.productVersion = 11.1.1.3 (Build 090619.0110.000)
system	currentTime	system.currentTime = 6/29/2009 7:35:59 PM
session	locale	session.locale = en-us
session	language	session.language = en
session	rtl This indicates whether the language selection in the Login page is a right to left language. For example, if the language selection is Hebrew, then this variable returns true.	session.rtl = false
session	timeZone	session.timeZone = (GMT-06:00) Central America
session	timeZone.id This returns a value that is not localized.	session.timeZone.id = (GMT-06:00) Central America
session	timeZone.name This returns a localized value.	session.timeZone.name = (GMT-06:00) Central America
session	timeZone.value This returns a localized value.	session.timeZone.value = (GMT-06:00) Central America
session	loginTime	session.loginTime = 6/29/2009 7:12:01 PM
session	logoutTime	session.logoutTime = 6/29/2009 8:02:01 PM
session	lastAccessTime	session.lastAccessTime = 6/29/2009 7:35:59 PM
session	currentUser	session.currentUser = Administrator
session	currency.name	session.currency.name = $ English - United States
session	currency.symbol	session.currency.symbol = $
session	currency.userPreference	session.currency.userPreference = Global Currency 2
session	accessibility This indicates whether accessibility mode is enabled for the current user session.	session.accessibility = true
user	id	user.id = Administrator
user	displayName	user.displayName = Administrator
user	homeDirectory	user.homeDirectory = /users/administrator
dashboard	currentPage	dashboard.currentPage = page 1
dashboard	xml	dashboard.xml = the dashboard XML
dashboard	dashboard.currency.name	dashboard.currency.name = Euro
dashboard	dashboard.currency.symbol	dashboard.currency.symbol = $
dashboard	dashboard.currency.userPreference	dashboard.currency.userPreference = Global Currency 1
dashboard	dashboard.path This returns the path in the catalog.	dashboard.path = /users/administrator/_portal/Sales

Table 2–3 (Cont.) Predefined Presentation Variables

Scope	Presentation Variable	Example
dashboard	dashboard.name	dashboard.name = MyDashboard
dashboard	dashboard.caption This returns the localized name of the dashboard.	dashboard.caption = Sales
dashboard	dashboard.location This returns the URL for the location.	dashboard.location = Dashboard&PortalPath=/users/administrator/_portal
dashboard	dashboard.description	dashboard.description = Sales by region and district
dashboard	dashboard.author	dashboard.author = Administrator
dashboard.currentPage	dashboard.currentPage.name	dashboard.currentPage.name = Sales page 1
dashboard.currentPage	dashboard.currentPage.path	dashboard.currentPage.path = /users/administrator/_portal/Sales/page 1
dashboard.current Page	dashboard.currentPage.currency.name	dashboard.currentpage.currency.name = USD
dashboard.current Page	dashboard.currentPage.currency.symbol	dashboard.currentPage.currency.symbol = USD
dashboard.current Page	dashboard.currentPage.currency.userPreference	dashboard.currentPage.currency.userPreference = Global Currency 2
analysis	report.currency.name	report.currency.name = $ English - United States
analysis	report.currency.symbol	report.currency.symbol = $
analysis	report.currency.userPreference	report.currency.userPreference = Global Currency 2

Example of Referencing a Variable in a Title View

Suppose that you have created a dashboard prompt called Region, which is based on the D50 Region column and which creates a presentation variable called MyFavoriteRegion as shown in Figure 2–10.

Figure 2–10   Region Prompt

Suppose also that you have created an analysis that shows Revenue by Region and Area. You have also added a filter on the D50 Region column that is set to **Is Prompted** so that you can prompt the user for a region using this Region prompt.

You can reference the MyFavoriteRegion variable in the Title view so that the user's selection in the Region prompt is displayed in the title of the analysis. To do so, you enter the variable syntax @{variables.MyFavoriteRegion} in the **Title** field in the Title editor, as shown in .

Figure 2–11   MyFavoriteRegion Variable Referenced in the Title View

shows the results on a dashboard page when a user selects AMERICAS REGION in the Region prompt. Notice that the variable in the analysis title has been updated to the user's selection, AMERICAS REGION.

Figure 2–12   Results of Referencing My Favorite Region in the Title View

3

Adding External Data to Analyses

This chapter explains how to include external data in the analyses you create in Presentation Services. External data is data from outside of the repository, and this data is contained in external subject areas which are created and saved in Visual Analyzer. After the external subject areas are saved, they are available for you to use in Presentation Services.

This chapter includes the following sections:

- About Including External Data in Analyses
- Accessing External Subject Areas and Sharing Analyses Containing External Subject Area Data
- Subject Area Icons
- Adding External Subject Areas to an Analysis
- Removing External Subject Areas from an Analysis
- Downloading External Subject Area Data
- Deleting External Subject Areas from Oracle BI EE

About Including External Data in Analyses

When you create or modify analyses in Presentation Services, you can include data from external subject areas that were created and saved in Visual Analyzer.

The data sets created and saved in Visual Analyzer are matched and modeled to the subject areas in the Oracle BI metadata repository. When you create an analysis with an external subject area you can only add columns to the analysis, and you cannot model the data. Any updates to the external subject area made in Visual Analyzer will appear in Presentation Services.

When you create a new analysis or modify an existing analysis, the external subject areas matched to the subject areas in the Oracle BI metadata repository and which you have the permission to access will display in the Select Subject Area dialog or the Add/Remove Subject Areas dialog. See "Accessing External Subject Areas and Sharing Analyses Containing External Subject Area Data" for more information about which external subject areas are included in your subject area list.

When creating or modifying an analysis, you can use the data from external subject areas in these ways:

- Create an analysis that uses the external subject area on its own.

You can create an analysis that is based solely on an external subject area. You do not have to use the subject area to which the external subject area is matched and modeled.

■ Create an analysis that uses an external subject area along with the subject area to which the external subject area is matched and modeled.

For example, you can overlay metrics on enterprise data such as updating a progress report against new budget data that was made into and saved as an external subject area. You can enrich analyses with attributes in an external subject area such as demographics to gain insight into how different levels of education might affect sales quantity. You can define custom roll-ups and segments such as seeing how revenue segmentation changes if products are re-classified.

Suppose that you have a subject area that contains data about sales, such as Products, Brands, and Salespeople. You have an external subject area that contains Target Revenue sales figures, which do not exist in the subject area. You'd like to create an analysis that combines Product and Brand values from the subject area with the Target Revenue figures from your external subject area. The external subject area has been modeled so that the Product and Brand columns in the external subject area match with those in the subject area and add Target Revenue as a measure. The matching connects the external subject area with the subject area.

Accessing External Subject Areas and Sharing Analyses Containing External Subject Area Data

Only the external subject areas that you have permission to access will be available for you to add to analyses. Permissions to the external subject area are granted either in Visual Analyzer or through the analyses that use the external subject area.

An external subject area will display in the Select Subject Area dialog or the Add/Remove Subject Areas dialog if the user who created and saved the external subject area in Visual Analyzer gave you access permission as an individual user or member of a role.

You will also see external subject areas in the Select Subject Area dialog or the Add/Remove Subject Areas dialog when a Presentation Services user creates and saves analyses that include those external subject areas and grants you permission to view or edit those analyses. Note the following information:

■ When the user saves an analysis that contains an external subject area, Oracle BI EE reminds the user that the external subject area data will be shared.

■ Any permissions saved with an analysis using an external subject area are applied to the analysis and to the external subject area.

■ An analysis using an external subject area must be saved to a shared catalog folder. This ensures that a user who views or edits the analysis will also see data from the external subject area.

■ If an analysis using an external subject area was saved anywhere but a shared folder, and if a user who was not granted access to the external subject area in Visual Analyzer views or edits the analysis, then the data from the external subject area will not display in the analysis.

Subject Area Icons

The Select Subject Area dialog and the Add/Remove Subject Areas dialog in Oracle BI EE uses different icons to distinguish between subject areas created with the Administration Tool and external subject areas created and saved in Visual Analyzer.

The purple and yellow square icon displays for subject areas created with the Administration Tool. The green square icon displays for external subject areas created and saved in Visual Analyzer. See Figure 3–1.

Figure 3–1   Subject Area Icons
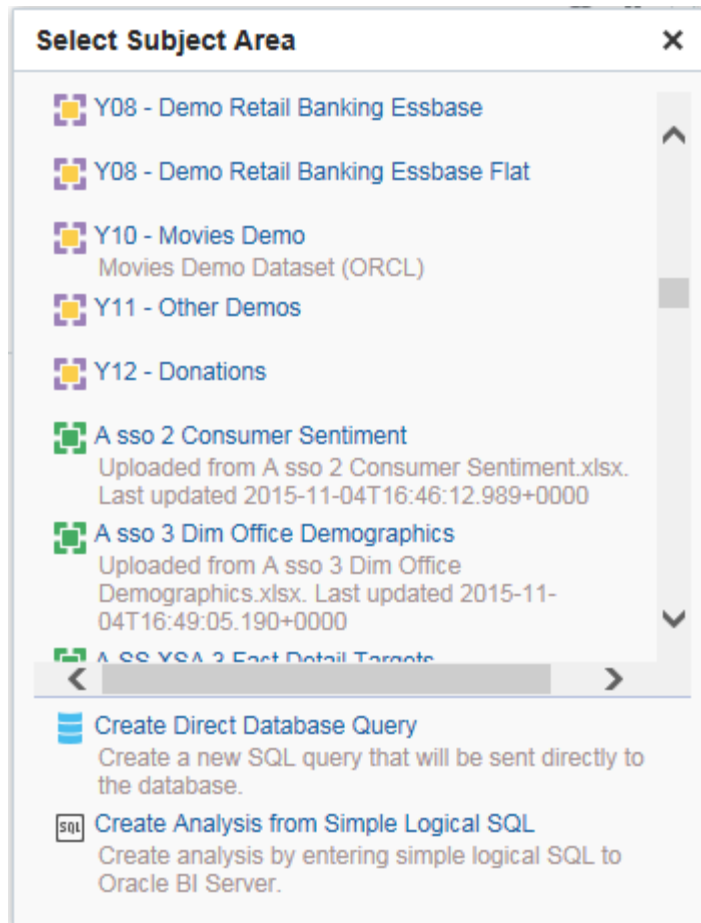
Adding External Subject Areas to an Analysis

You can add data from external subject areas when you create an analysis or when you are modifying an existing analysis.

To add an external subject area when creating an analysis:

1. In the global header, click **New**, then **Analysis**.

2. In the Select Subject Area dialog, scroll to and select the external subject area that you want to use in the analysis. See "Subject Area Icons" for more information.

    You can only select one subject area or external subject area from the Select Subject Area dialog. To add other subject areas or external subject areas, you must use the **Add / Remove Subject Areas** option in the Analysis Editor.

To add an external subject area when modifying an analysis:

1. Open for editing the analysis to which you want to add an external subject area.

2. In the Subject Areas pane, click **Add / Remove Subject Areas**.

3. In the Add / Remove Subject Areas dialog, select the external subject area that you want to add, then click **OK**. See "Subject Area Icons" for more information.

Removing External Subject Areas from an Analysis

You can remove an external subject area from an analysis.

If you remove an external subject area, then its data is removed from the analysis. The external subject area and its data remain on the Oracle BI server. See "Deleting External Subject Areas from Oracle BI EE" for more information about removing the subject area and deleting the data from the Oracle BI Server.

Note that you cannot remove a subject area upon which the external subject area is matched and modeled.

To remove data that you added:

1. Open for editing the analysis to which you added external data.

2. In the Subject Areas pane, click **Add / Remove Subject Areas**.

3. In the Add / Remove Subject Areas dialog, select the external subject area that you want to remove, then click **OK**. See "Subject Area Icons" for more information.

Downloading External Subject Area Data

You or any user who has Read access can download the data in an external subject area. The downloaded data is saved into a file containing all worksheets and all columns for each worksheet. The downloaded data reflects the most recently uploaded data, which is not necessarily the original data uploaded in the external subject area.

To download external data:

1. In the Subject Areas pane, right-click the external subject area, and select **Download**.

2. In the **Save as** dialog, keep the default file name or give the file a new name.

3. Click **Save**.

> **Note:** Any sharing permission on the external subject area of either **Read**, **Modify**, or **Full Control** provides access to download the entire spreadsheet file. For more information, see "Accessing External Subject Areas and Sharing Analyses Containing External Subject Area Data."

Deleting External Subject Areas from Oracle BI EE

You can permanently delete an external subject area from the Oracle BI Server when you need to free up space to stay within your storage limit.

You can delete only external subject areas. You cannot delete external subject areas that you have included in analyses. Deleting an external subject area differs from removing an external subject area from an analysis, as described in Removing External Subject

Areas from an Analysis.

To delete data that you added:

1. In the Subject Areas pane, right-click the external subject area, and select
   Download.

4

Adding Views for Display in Dashboards

This chapter describes the views that are available in Oracle Business Intelligence Enterprise Edition to present the results of analyses in meaningful, intuitive ways. It explains how to add views for display in dashboards, how to modify values (that is, perform write back) in views, and how to set up master-detail linking of views. It also describes interactions, drilling, sorting, and printing in views.

This chapter includes the following sections:

- What Are Views?
- What Types of Views Are Available?
- Adding Views to the Results of Analyses
- What Is the Recommended Visualizations Feature?
- Editing Views
- Modifying Values and Performing Write Back
- Interactions in Views
- Drilling in Views
- Sorting Data in Views
- Resizing Rows and Columns in Table Views, Pivot Table Views, and Advanced Trellis Views
- Saving Views
- Renaming Views or Compound Layouts
- Rearranging Views
- Printing Views
- Changing Print and Export Options for Views
- Previewing How Views Are Displayed on a Dashboard
- Removing Views
- Refreshing the Results in Views
- Customizing Views for Delivery to Agent Users
- What Is Master-Detail Linking of Views?
- Linking Views in Master-Detail Relationships

What Are Views?

Views use the presentation capabilities of Oracle BI Enterprise Edition to help you look at results of analyses in meaningful, intuitive ways. You can add a variety of views to the results, such as graphs and pivot tables that allow drilling down to more detailed information, explanatory text, a list of filters that were used to limit the results, and more.

When you display the results of a new analysis, the following views are displayed by default in the "Compound Layout" in the "Analysis editor: Results tab":

- A title view, which displays the name of the saved analysis.

- A table or pivot table view, which displays the results of the analysis, depending on the types of columns that the analysis contains:

    - If the analysis contains only attribute columns, only measure columns, or a combination of both, then a table is the default view.

    - If the analysis contains at least one hierarchical column, then a pivot table is the default view.

You can customize or delete the existing views for an analysis, add other views, and combine and position views anywhere in the pane.

Preparing multiple views of results can help you identify trends and relationships in data. If you are customizing results for display on a dashboard, then you can preview how the combination and position of views looks when viewed on a dashboard.

You can then save the analysis with the collection of views.

Related Topics

"What Types of Views Are Available?"
"Adding Views to the Results of Analyses"
"Editing Views"
"Saving Views"
"Removing Views"

What Types of Views Are Available?

Table 4–1 describes the types of views that are available.

> **Note:** Your privileges control whether you can access all views or specific views only.

Table 4–1   View Names and Descriptions

View Name	Description
Title	Displays a title, a subtitle, a logo, a link to a custom online help page, and timestamps to the results.
Table	Displays results in a visual representation of data organized by rows and columns. A table provides a summary view of data and enables users to see different views of data by dragging and dropping rows and columns.
Pivot Table	Displays results in a pivot table, which provides a summary view of data in cross-tab format and enables users to see different views of data by dragging and dropping rows and columns. Pivot tables structure data similarly to standard tables that contain column groups, but can display multiple levels of both row and column headings. Unlike regular tables, each data cell in a pivot table contains a unique value. By organizing data in this way, a pivot table is more efficient than a row-based table. Pivot tables are ideal for displaying a large quantity of data, for browsing data hierarchically, and for trend analysis.
Performance Tile	Displays a single aggregate measure value in a manner that is both visually simple and prominent, yet it immediately reveals summary metrics to the user that will likely be presented in more detail within a dashboard view. Performance tiles: ■ Focus the user's attention on simple, need-to-know facts directly and prominently on the tile. ■ Communicate status through simple formatting by using color, labels, and limited styles, or through conditional formatting of the background color or measure value to make the tile visually prominent. For example, if revenue is not tracking to target, the revenue value may appear in red. ■ Respond to prompts, filters, and user roles and permissions by making them relevant to the user and their context. ■ Support a single, aggregate or calculated value.
Treemap	Displays a space-constrained, two-dimensional visualization for hierarchical structures with multiple levels. Treemaps: ■ Are limited by a predefined area and display two levels of data. ■ Contain rectangular tiles. The size of the tile is based on a measure, and the color of the tile is based on a second measure. ■ Are similar to a scatter plot graphs in that the map area is constrained, and the graph allows you to visualize large quantities of data and quickly identify trends and anomalies within that data.
Heat Matrix	Displays a two-dimensional depiction of data in which values are represented by a gradient of colors that are well suited for analyzing large amounts of data and identifying outliers. Heat matrices structure data similarly to pivot tables in that they are formed by the grouping and intersection of rows and columns.

Table 4–1   (Cont.) View Names and Descriptions

View Name	Description
Trellis	Displays multidimensional data shown as a set of cells in a grid, where each cell represents a subset of data using a particular graph type. Data can be represented with graphs, microcharts, and numbers.
	The trellis view has two subtypes: Simple Trellis and Advanced Trellis.
	Simple trellis views are ideal for displaying multiple graphs that enable comparison of like to like. Advanced trellis views are ideal for displaying spark graphs that show a trend.
	A simple trellis displays a single inner graph type, for example a grid of multiple Bar graphs. The inner graphs always use a common axis; that is to say, the graphs have a synchronized scale.
	An advanced trellis displays a different inner graph type for each measure. For example, a mixture of Spark Line graphs and Spark Bar graphs, alongside numbers. In this example, the Spark Line graph might show Revenue over time, and the Spark Bar graph might show Units Sold. A measure column displaying numbers might be placed adjacent to the Spark Line graphs, showing the Revenue measure as a total value for a year.
	In an advanced trellis, each measure column operates independently for drilling, axis scaling, and so on.
	For definitions of *microchart*, and *spark graph*, see "What Terms are Used with Trellis Views?"
Graph	Displays numeric information visually, which makes it easier to understand large quantities of data. Graphs often reveal patterns and trends that text-based displays cannot. However, when precise values are needed, graphs should be supplemented with other data displays, such as tables.
	A graph is displayed on a background, called the graph canvas.
	For the types and subtypes of graphs that are available, see Table 4–2.
Gauge	Shows a single data value. Due to its compact size, a gauge is often more effective than a graph for displaying a single data value. Beside displaying the data visually, each gauge also displays the result in numeric form
	Gauges identify problems in data. A gauge usually plots one data point with an indication of whether that point falls in an acceptable or unacceptable range. Thus, gauges are useful for showing performance against goals.
	Depending on the data in the analysis, a gauge view might consist of multiple gauges in a gauge set. For example, if you create a gauge view to show the sales data for the last twelve months, the gauge view consists of twelve gauges, one for each month. If you create one to show the total sales in the US, then the gauge view consists of one gauge.
	A gauge or gauge set is displayed on a background, called the gauge canvas.
	For the types of gauges that are available, see Table 4–4.
Funnel	Displays results as a three-dimensional graph that represents target and actual values using volume, level, and color. Typically, funnel graphs are used to graphically represent data that changes over different periods or stages. For example, funnel graphs are often used to represent the volume of sales over a quarter.
	Funnel graphs are well suited for showing actual compared to targets for data where the target is known to decrease (or increase) significantly per stage, such as a sales pipeline.
	In funnel graphs, the thresholds indicate a percentage of the target value, and colors provide visual information for each stage. You can click one of the colored areas to drill down to more detailed information.
	For the types of funnel graphs that are available, see Table 4–3.

Table 4–1 (Cont.) View Names and Descriptions

View Name	Description
Map view	Displays results overlain on a map. Depending on the data, the results can be overlain on top of a map as formats such as images, color fill areas, bar and pie graphs, and variably sized markers.
Filters	Displays the filters in effect for an analysis. Filters, like selection steps, allow you to constrain an analysis to obtain results that answer a particular question. Filters are applied before the query is aggregated.
Selection Steps	Displays the selection steps in effect for an analysis. Selection steps, like filters, allow you to obtain results that answer particular questions. Selection steps are applied after the query is aggregated.
Column Selector	Adds a column selector in the results. A column selector is a set of drop-down lists that contain pre-selected columns. Users can dynamically select columns and change the data that is displayed in the views of the analysis.
View Selector	Adds a view selector in the results. A view selector is a drop-down list from which users can select a specific view of the results from among the saved views.
Legend	Adds a legend to the results, which enables you to document the meaning of special formatting used in results, such as the meaning of custom colors applied to gauges.
Narrative	Displays the results as one or more paragraphs of text. You can type in a sentence with placeholders for each column in the results, and specify how rows should be separated.
Ticker	Displays the results as a ticker or marquee, similar in style to the stock tickers that run across many financial and news sites on the Internet. You can control what information is presented and how it scrolls across the page.
Static Text	Adds static text in the results. You can use HTML to add banners, tickers, ActiveX objects, Java applets, links, instructions, descriptions, graphics, and so on, in the results.
Logical SQL	Displays the SQL statement that is generated for an analysis. This view is useful for trainers and administrators, and is usually not included in results for typical users. You cannot modify this view, except to format its container or to delete it.
Create Segment	Displays a Create Segment link in the results. Users can click this link to create a segment in their Oracle's Siebel Marketing operational application, based on the results data. This view is for users of the Oracle's Siebel Marketing Version 7.7 (or higher) operational application. For information, see *Oracle Marketing Segmentation Guide*.
Create Target List	Displays a Create Target List link in the results. Users can click this link to create a target list, based on the results data, in their Oracle's Siebel operational application. This target list can be used as the foundation for initiating and logging call activity information for this defined set of targets. This view is for users of Oracle's Siebel Life Sciences operational application integrated with Oracle's Siebel Life Sciences Analytics applications.

What Types of Graphs Are Available?

Table 4–2 shows the types of graphs that are available and describes their uses. It also shows the available styles for each type. All graph types except for scatter, radar, and microchart can be 2-dimensional (2D) or 3-dimensional (3D). Not all types of graphs are appropriate for all types of data.

Table 4–2   Graph Types

Graph Type	Graph Subtype	Description	Styles
Bar	- Vertical - Horizontal - Stacked Vertical - Stacked Horizontal 100% Stacked Vertical 100% Stacked Horizontal	Shows quantities associated with categories. Bar graphs show quantities as bar lengths and categories as bars or groups of bars. Bar graphs are useful for comparing differences among like items; for example, competing product sales, same product sales over different time periods, or same product sales over different markets. Can be used to compare measure columns by showing bars in a horizontal or vertical direction.	Rectangle Triangle Cylinder Diamond Gradient Pattern Fill
Line	-	Shows quantities over time or by category. Line graphs are useful for showing trends over time. Can be used to plot multiple measure columns.	Standard Line Stepped Line Curved Line
Area	- Stacked 100% Stacked	Shows the trend of the contribution of each value over time or by category. An area graph is a line graph for which the regions between lines are filled in. Regions stack, adding up to the total value for each time period or category. In 100% stacked graphs, each category is displayed as a percentage contribution to the total value.	Solid Fill Gradient Fill Pattern Fill
Pie	-	Shows data sets as percentages of a whole. Pie graphs are useful for comparing parts of a whole, such as sales by region or by district.	Solid Fill Gradient Fill Pattern Fill
Line-Bar	- Standard - Stacked	Plots two sets of data with different ranges, one set as bars, and one set as lines overlaid on the bars. Line-bar graphs are useful for showing trend relationships between data sets.	Rectangle Triangle Cylinder Diamond Gradient Pattern Fill
Time Series Line	-	Plots time series data. It scales the horizontal axis based on the time that has elapsed between data points.	Standard Line Stepped Line Curved Line

Table 4–2   (Cont.)   Graph Types

Graph Type	Graph Subtype	Description	Styles
Pareto	-	Is a form of bar graph and line graph that displays criteria in descending order. In this graph type, the line shows a cumulative total of the percentages. Pareto graphs are useful for identifying significant elements, such as best and worst or most and least.	Rectangle Triangle Cylinder Diamond Gradient Pattern Fill
Scatter	-	Displays x-y values as discrete points, scattered within an x-y grid. It plots data points based on two independent variables. This enables you to plot large numbers of data points and observe the clustering of data points. Scatter graphs are useful for observing relationships and trends in large data sets.	Standard Scatter Scatter-with-Lines
Bubble	-	Is a variation of a scatter graph that displays data elements as circles (bubbles). It shows three variables in two dimensions. One value is represented by the location of the circle on the horizontal axis. Another value is represented by the location of the circle on the vertical axis. The third value is represented by the radius of the circle. Bubble graphs are useful for plotting data with three variables, and for displaying financial data over a period of time.	None

Table 4–2   (Cont.)   Graph Types

Graph Type	Graph Subtype	Description	Styles
Radar	-	Plots the same information as a bar graph, but instead displays data radiating from the center of the graph. Each data element has its own value axis. Radar graphs are useful for examining overlap and distribution.	None
Microchart	■ Spark Line ■ Spark Bar ■ Spark Area	A text-sized graphic (of similar size to a piece of nearby text) that displays only in the context of the trellis view and that is ideal for showing trend information. A microchart graph type is useful within an advanced trellis, where data is displayed as a mixture of spark graphs and numbers. A microchart does not have axes or legends. Like larger graphs, a microchart's measure values are rendered as relatively sized bars (or lines, or area). Each measure name is displayed in its column header. Further details of the measure appear as tooltip text when you hover the mouse over a data cell.	None
Waterfall	-	A waterfall graph lets you visualize how a value increases or decreases sequentially and cumulatively. Waterfall graphs have the following characteristics: ■ Focus the user's attention on how each measure contributes to the overall total. ■ Communicate through simple formatting by using color. An initial value is summed with subsequent values (both negative and positive deltas or changes) to arrive at a total. There is only one total per waterfall graph and subtotals can be added. See "What Types of Waterfall Graph Formats Are Available?" for additional information.	None

What Types of Funnel Graphs Are Available?

Table 4–3 lists and describes the types of funnel graphs that are available. The style of each type can be either solid or gradient fill.

Table 4–3   Funnel Graph Types

Type	Description
Standard	Uses a standard shape with equal stage widths.
Non-Standard	Uses a standard shape with unequal stage widths
Last-Stage Only	Uses a standard shape with equal stage widths. It is similar to standard funnel except that the target values of all the stages before the last is calculated based on the last stage target value and a constant called target factor.

What Types of Graphs Are Available to Trellis Views?

The list of graph types that are available for use in trellis views varies by trellis view subtype: Simple Trellis or Advanced Trellis.

The following types of graphs can be used in simple trellises:

- Bar (subtype Vertical)

- Bar (subtype Horizontal)

- Line

- Area

- Line-Bar

- Pie

- Scatter

- Bubble

The following visualization choices are available in advanced trellises:

- Numbers

- Microchart, of the following subtypes:

  – Spark Bar

  – Spark Line

  – Spark Area

For details on each graph type, see Table 4–2.

What Types of Gauges Are Available?

Table 4–4 lists and describes the types of gauges that are available. All gauges are 2-dimensional (2-D) except for bulb gauges which can be either 2-dimensional or 3-dimensional (3-D). Their sizes can be small, medium, large, or a custom size.

Table 4–4   Gauge Types

Type	Description
Dial	Shows data using a dial arc with one or more indicators that point to where the data falls within predefined limits.

Table 4–4   (Cont.) Gauge Types

Type	Description
Horizontal bar	Shows data using a horizontal bar that changes color to indicate whether the data is within predefined limits. The inner rectangle of the horizontal bar shows the current level of data against the ranges marked on an outer rectangle.
Vertical bar	Shows data using a vertical bar that changes color to indicate whether the data is within predefined limits. The inner rectangle of the vertical bar shows the current level of data against the ranges marked on an outer rectangle.
Bulb	Shows data using a circle that changes color to indicate whether the data is within predefined limits. Bulb gauges are useful when you must know what the status is, and not any indication of a specific value, or relative information about other threshold ranges.

What Types of Logical SQL Views Are Available?

Table 4–5 lists and describes the types of Logical SQL views that are available.

Table 4–5   Logical SQL View Types

Type	Description
Standard	Displays only logical SQL. This view is useful to check whether the generated logical SQL is correct.
Diagnostic	Displays diagnostic information that is helpful to include with a Service Request when you are having issues with incorrect data.

What Types of Waterfall Graph Formats Are Available?

Waterfall graph formats have predefined bar color combinations. The default colors for increasing (positive) and decreasing (negative) are green and red, respectively. The format defines the appearance of the waterfall graph, including the color of the bars and the bars that display.

Table 4–6 lists and describes the types of formats available for waterfall graphs.

Table 4–6   Waterfall Graph Formats

Format Type	Description
Increase, Decrease and Total	Use this format to display increasing measures, decreasing measures, and a total (subtotal) in the specified colors. Both the total and subtotal display in the same associated color.
First, Increase, Decrease and Total	Use this format to display increasing measures, decreasing measures, and a total (or subtotal), where the first bar and the total (subtotal) have the same color bar.
Single Color	Use this format to display all bars in the same color.
Dual Color	Use this format to display the first bar and total (or subtotal) in one color, and positive or negative values in a second color.
Custom	Use this format to create unique colors for increasing and decreasing values, the first bar, and total bars. Once you select a color from one of the color block lists, the format automatically becomes custom. Both the total and subtotal display in the same associated color.

By default, the waterfall graph includes the following characteristics:

- The bars are rendered in a cumulative manner. Each bar starts rendering from the top of the previous bar (positive values go up, negative values go down). Cumulative totals may be rendered (from the chart baseline) at various points.

- The graph is rendered as a 2D bar graph with a format of **Increase**, **Decrease** and **Total**.

- Default colors are green (positive), red (negative), and blue (total).

- Zoom to data range is not supported for waterfall graphs.

- Data labels display according to defined specifications. See the **Vertical Axis Labels, Horizontal Axis Labels or Data Markers: Format Label** button in the "Graph Properties dialog: Titles and Labels tab" for additional information.

- Tooltips for waterfall graphs contain the same information as other graph types (for example, member name, dimension, and actual value), but they also contain a subtotal value.

- Left-click interactions are not available for the total bar or the legend.

See "Graph Properties dialog: Style tab" and "Graph Properties dialog: Titles and Labels tab" for detailed information on editing waterfall graph properties.

Adding Views to the Results of Analyses

To add a view to the results of an analysis:

1. In the "Analysis editor: Results tab" (or alternatively in the "Views pane"), click the **New View** toolbar button, then select a type of view to create in one of the following ways:

   - If you know which view type you want to create, click it.

   - If you want to have Oracle BI EE's recommended visualizations feature automatically create the most appropriate view based on the data in your analysis, click **Best Visualization**, rather than a specific view type.

   - If you want to have Oracle BI EE's recommended visualizations feature provide a ranked list of view types for you based on the data in your analysis as well as on what you want the view to illustrate, click **Recommended Visualization for** and then in the Select Visualization list, select your preference, such as **Discovering Patterns and Outliers**.

   Note: For some view types, you can also use the recommended visualizations feature to choose a recommended subtype.

   The view is displayed in a container on the "Compound Layout." (Note that defaults are used to generate this view, such as the default view type, default formatting, and so on.)

2. To format the container for the view, click the **Format Container** toolbar button on the view container to display a formatting dialog.

   For information, see Chapter 8, "Formatting Analyses, Views, and Dashboard Pages.".

3. To set the properties for a funnel, gauge, graph, heat matrix, map, performance tile, pivot table, table, treemap, or trellis (simple and advanced) view, click the **View Properties** button.

4. To edit the view, click the **Edit View** toolbar button on the view container.

   For more information, see "Editing Views."

5. Save the view. For information, see "Saving Views."

Notes

- If you select a graph type or gauge type that is incompatible with the results, then no results are shown.

- Do not use a pie graph to visualize data that includes negative values. Either filter the analysis to ensure that all values are greater than 0 or use a different graph type.

- As you design graphs, funnel graphs, and gauges, note that there are differences in the display of a graph or gauge legend, depending on the whether the graph or gauge is displayed on a desktop or on a mobile device:

  - On a desktop (where the graph or gauge format is Flash), the legend list is scrollable and the legend text does not wrap.

  - On a mobile device (where the graph or gauge format is PNG), the legend list is not scrollable and the legend text can wrap.

  For more information on Oracle BI EE's recommendation functionality, see "What Is the Recommended Visualizations Feature?"

What Is the Recommended Visualizations Feature?

Oracle BI EE provides recommendation functionality whenever you create a view. As you are in the process of creating a new view in the Analysis editor, this feature delivers a ranked list of view-type suggestions in a dialog, as shown in Figure 4–1.

Figure 4–1 Recommended Visualizations in Select Visualization List
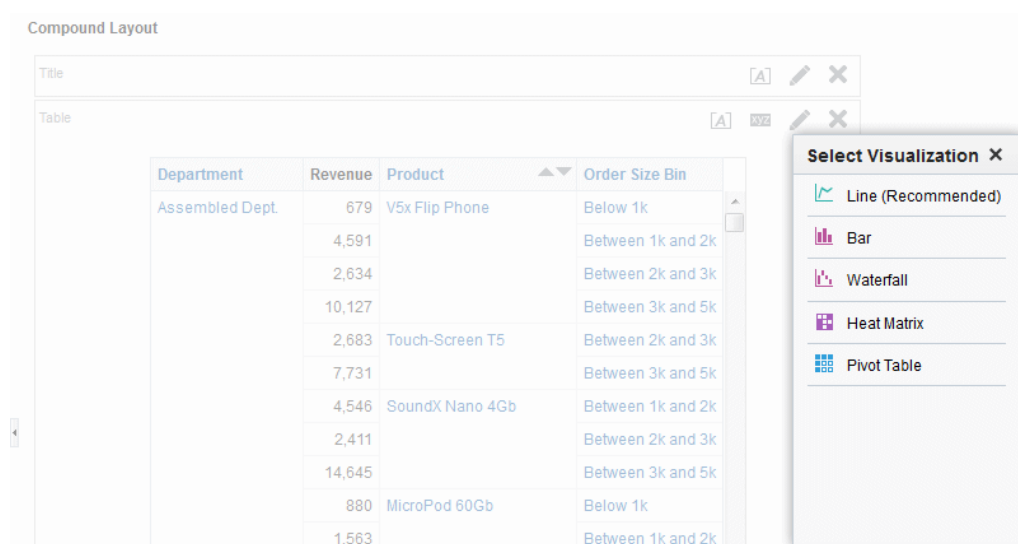
The recommended visualizations feature works by gathering information on your inputs for a view, such as number of dimensions, number of members, and so on. It then determines the optimal layout for each possible view.

Will your new view be useful for analyzing trends? Comparing values and their parts? Discovering patterns and outliers? In the Recommended Visualization submenu, you can tell the Analysis editor what you intend to illustrate with the view you are creating, as shown in Figure 4–2.

Figure 4–2   Recommended Visualizations Submenu for Stating Your Intent
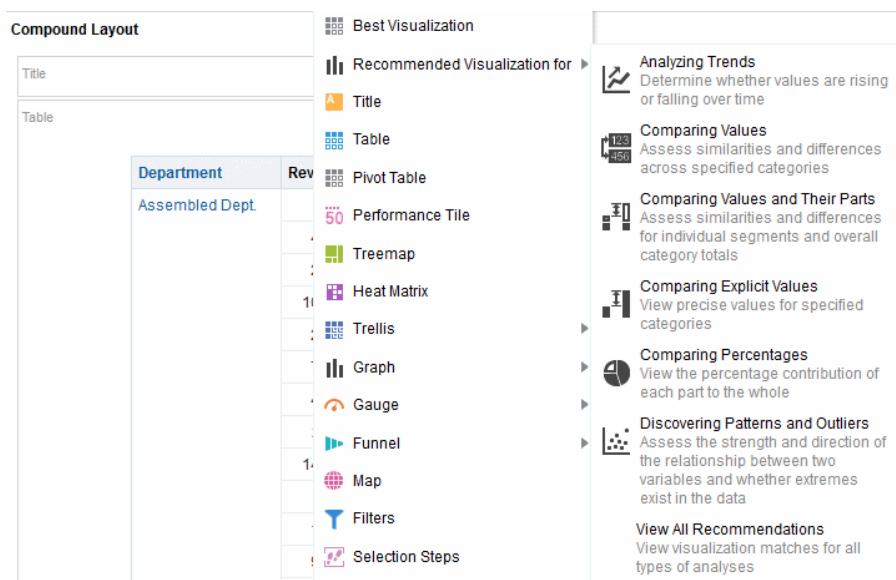
Each possible view receives a score based on a predefined set of rules. Certain view types are excluded as possibilities based on their scores. With scores above a certain level, the recommended visualizations feature then builds an ordered list of view recommendations.

If you want to skip the step of choosing from a ranking of suggested views, you can instead select the **Best Visualization** option from the Create View menu, to have the best view created for you immediately, without being presented with a list of recommendations.

Editing Views

Each view type, except for a Logical SQL view, has its own editor in which you perform your edits. (You cannot edit a Logical SQL view. You can only format its container or delete it.)

Each view editor contains unique functionality for that view type but might also contain functionality that is the same across view types.

To edit a view:

1. Open the analysis that contains the view to edit.

2. Click the "Analysis editor: Results tab."

3. Click the **Edit View** button for the view (or, alternatively, select the view in the "Views pane" and click the **Edit View** toolbar button).

   One of the following editors is displayed:

- "Results tab: Column Selector editor"
- "Results tab: Create Segment editor"
- "Results tab: Create Target List editor"
- "Results tab: Filters editor"
- "Results tab: Funnel editor"
- "Results tab: Gauge editor"
- "Results tab: Graph editor"
- "Results tab: Heat Matrix editor"
- "Results tab: Legend editor"
- "Results tab: Map editor"
- "Results tab: Narrative editor"
- "Results tab: Performance Tile editor"
- "Results tab: Pivot Table editor"
- "Results tab: Selection Steps editor"
- "Results tab: Static Text editor"
- "Results tab: Table editor"
- "Results tab: Ticker editor"
- "Results tab: Title editor"
- "Results tab: Treemap editor"
- "Results tab: Trellis editor"
- "Results tab: View Selector editor"

4. Using the editor for the view, make the appropriate edits.

   For additional guidance, see:

   - "Editing Column Selector Views"
   - "Editing Gauge Views"
   - "Editing Graph Views"
   - "Editing Heat Matrix Views"
   - "Editing Legend Views"
   - "Editing Map Views"
   - "Editing Narrative Views"
   - "Editing Performance Tile Views"
   - "Editing Table and Pivot Table Views"
   - "Editing Treemap Views"
   - "Editing Trellis Views"
   - "Editing View Selector Views"

5. Click **Done.**

6. Save the view. For information, see "Saving Views."

> **Note:** If your table or pivot table view contains a grand total or subtotal on the row edge, the display totals, that is the grand total and subtotals, are included in the **Rows per Page** count for content paging. In releases prior to 11*g*, if you had the **Rows per Page** count set to 10 for example, the table or pivot table would display more than 10 records if display totals were shown in the view results. See "Table Properties dialog: Style tab" for additional information.
>
> Figure 4–3 includes a subtotal on the D50 Region row edge and content paging set to 10 rows per page. Note that the subtotals are included in the row count.

Figure 4–3   Row Count

Editing Table and Pivot Table Views

Two common views for analyzing and displaying data are the table and pivot table. Figure 4–4 shows a sample table and pivot table on a dashboard page.

Figure 4–4 Sample Table and Pivot Table

D50 Region	R2 Order Type	31 # of Orders (Cnt Distinct)	T05 Per Name Year
AMERICAS	Express	1263	2010
		1358	2011
		1486	2012
	Secure	3065	2010
		2895	2011
		2700	2012
	Standard	2771	2010
		2594	2011
		2823	2012
APAC	Express	1311	2010

Rows 1 - 10

		2010	2011	2012
D50 Region	R2 Order Type	31 # of Orders (Cnt Distinct)	31 # of Orders (Cnt Distinct)	31 # of Orders (Cnt Distinct)
AMERICAS	Express	1263	1358	1486
	Secure	3065	2895	2700
	Standard	2771	2594	2823
AMERICAS Total		**7099**	**6847**	**7009**
APAC	Express	1311	1373	1539
	Secure	3082	2944	2907
	Standard	2833	2668	2862
APAC Total		**7226**	**6985**	**7308**
EMEA	Express	1788	1848	2014
	Secure	4087	3945	3722

Rows 1 - 10

These views share the same type of editor and much of the same functionality such as dragging and dropping, sorting, drilling, and conditional formatting. The following list provides some differences between the two types:

- **Default View** — When you create an analysis and display the results, the default view depends on the data in the analysis:

  - **Table** — If the analysis contains only attribute columns, only measure columns, or a combination of both, then a table is the default view.

  - **Pivot Table** — If the analysis contains at least one hierarchical column, then a pivot table is the default view.

- **Drop Targets** — Drop targets, which you use to modify column layout, differ slightly between the two views. Both views have the *<view-type>* Prompts, Sections, and Excluded drop targets. Figure 4–4 shows that when multiple columns are placed in the *<view-type>* Prompts target, or page edge, each column displays its values in an individual drop-down list.

  - **Table** — Tables have columns and measures in the same drop target, and they do not have rows.

  - **Pivot Table** — Pivot tables can have rows, columns, and measures as separate drop targets.

- **Drag and Drop Measure Columns** — Measure columns behave slightly differently when you drag and drop them on tables and pivot tables.

  - **Table** — In tables, you can drag and drop measure columns in the middle of the table and they act as columns.

- **Pivot Table** — In pivot tables, you can drag and drop measure columns in the middle and their labels can be in many locations.

■ **Column Names and Headings** — You can turn off the display of the column headings in both tables and pivot tables. For column names, however, the following differences apply:

- **Table** — In tables, you always see the names of columns.

- **Pivot Table** — In pivot tables, you can turn off the display of the column names.

■ **Properties** — The properties of the two views differ slightly, in areas such as paging controls and green bar formatting.

You can use the editors for the table and pivot table to customize the look and functionality of the view. The editors share much of the same functionality.

To edit a table or pivot table:

1. Display the "Results tab: Table editor" or the "Results tab: Pivot Table editor." For information, see "Editing Views."

2. To set the properties of the table or pivot table, click the **Table View Properties** or the **Pivot Table View Properties** button on the toolbar. The "Table Properties dialog" or the "Pivot Table Properties dialog" is displayed, where you can:

   ■ Specify the method to be used to browse data — either scrolling or paging controls.

   ■ Specify formatting preferences for tables and pivot tables.

   ■ Specify master-detail linking.

   ■ Specify null values display.

   ■ Set up for users to modify values in columns in tables, which is referred to as "write back."

3. Use the buttons on the toolbar of the editor to perform functions such as the following:

   ■ To modify formatting, see "Applying Formatting to Tables and Pivot Tables."

   ■ To add a group or calculated item to the view, see "Working with Groups and Calculated Items."

   ■ To add a calculated measure to the view, see "Working with Calculated Measures."

   For more information on the buttons common to all views, see "Toolbar Buttons Common to All Views." For more information on specific data view buttons, see "Data View Editor Toolbar."

4. To affect the contents of the view, use the following panes:

   ■ The "Subject Areas pane"

   ■ The "Catalog pane"

   ■ The "Layout pane," as described in "Modifying the Layout of Data in Views"

   ■ The "Selection Steps pane"

5. To specify the sort order for a column in the view, see "Sorting Data in Views."

6. To drill in the data in the view, see "Drilling in Views."

7. Right-click to perform basic view interactions. For information, see "Right-Click Menu for Data Views."

8. Enable the write-back capability for a table, which enables a user to update or write to the back-end database, if your user name has the appropriate permissions. For example, a user can enter sales targets for the current quarter in a Sales dashboard. See "Modifying Values and Performing Write Back" for information about the write-back capability.

Applying Formatting to Tables and Pivot Tables

Green bar styling shows alternating rows or columns in a light green color. Cosmetic formatting affects the overall appearance of the view and enables you to change the default green bar color. Figure 4–5 shows a pivot table on a dashboard page with green bar styling.

Figure 4–5   Pivot Table with Green Bar Styling

| Pivot Table | | [A] | XYZ | ✎ ✕ |

		2010	2011	2012
D50 Region	R2 Order Type	31 # of Orders (Cnt Distinct)	31 # of Orders (Cnt Distinct)	31 # of Orders (Cnt Distinct)
AMERICAS	Express	1263	1358	1486
	Secure	3065	2895	2700
	Standard	2771	2594	2823
AMERICAS Total		7099	6847	7009
APAC	Express	1311	1373	1539
	Secure	3082	2944	2907
	Standard	2833	2668	2862
APAC Total		7226	6985	7308
EMEA	Express	1788	1848	2014
	Secure	4087	3945	3722
⇧ ∧ ∨ ↕ Rows 1 - 10				

To add green bar styling and cosmetic formatting to a table or pivot table:

1. On the toolbar of the editor, click the **View Properties** button or from the "Compound Layout" in the Results tab, click the **View Properties** button.

   The "Table Properties dialog" or "Pivot Table Properties dialog" is displayed.

2. To add green bar styling, click the **Enable alternate styling** box.

   To change the way the styling is applied, select a style from the list.

3. To add cosmetic formatting, click the alternate formatting button.

   The "Edit Format dialog" is displayed.

4. To change the default green bar color, choose a new background color for the cell format. Make any other appropriate changes, and click **OK**.

5. In the Properties dialog, make any other appropriate changes, and click **OK**.

   For more information about cosmetic formatting, see "What is Cosmetic Formatting?"

Editing Graph Views

You can use graphs of various types for analyzing and displaying data. Figure 4–6 shows a sample bar graph on a dashboard page.

Figure 4–6 Sample Bar Graph
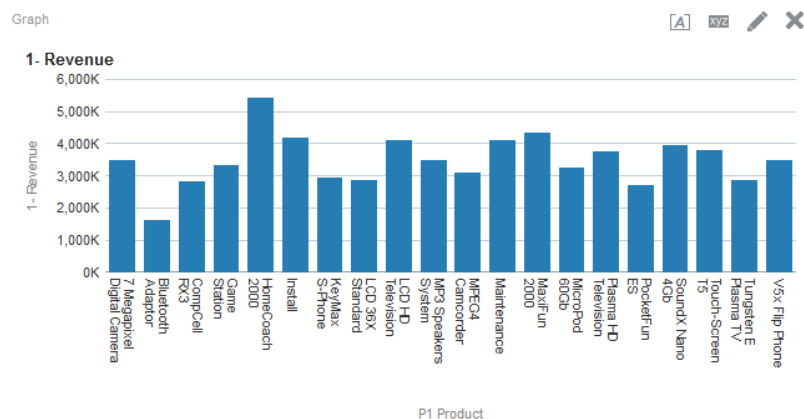
To edit a graph view:

1. Display the "Results tab: Graph editor." For information, see "Editing Views."

2. To set the properties of the graph, click the **Edit Graph Properties** button on the toolbar. The "Graph Properties dialog" is displayed, where you can set properties:

   - Related to the graph canvas, such as width and height and legend location

   - That control the appearance of the graph, such as the style

   - For axis limits and tick marks

   - That control the display of titles and labels for the graph

3. Use the buttons on the toolbar of the editor to perform functions such as printing a view, exporting a view, and so on.

   For more information on the buttons common to all views, see "Toolbar Buttons Common to All Views." For more information on specific data view buttons, see "Data View Editor Toolbar."

4. To affect the contents of the view, use the following panes:

   - "Subject Areas pane"

   - "Catalog pane"

   - "Layout pane," as described in "Modifying the Layout of Data in Views"

   - "Selection Steps pane"

   - (for funnel graphs and gauges only) "Settings pane" to set thresholds

5. Right-click to perform basic view interactions. See "Right-Click Menu for Data Views" for additional information.

6. To drill in the data in the view, see "Drilling in Views."

Formatting the Visual Appearance of Graphs

You can format the visual appearance of graphs based on two settings:

- The position of the graph elements (such as lines or bars in a line-bar graph or slices in a pie graph).

  See "Graph Formatting Based on Position."

- Conditions applied to columns. See "Graph Formatting Based on Columns."

Graph Formatting Based on Position Positional formatting enables you to customize the appearance of a graph based on the position of graph elements; that is, the numeric sequence in which graph elements (for example, bars) are displayed in a group. A group is determined by the attribute columns that are displayed in the Group By drop target area. (For information on drop target areas, see "Understanding Drop Targets.")

For example, suppose that you have a bar graph whose criteria include the D50 Region, 1 - Revenue, and 2 - Billed Quantity columns. 1 - Revenue is displayed first, then 2 - Billed Quantity in the Measures drop target area. D50 Region is displayed in the Group By drop target. In this graph, 1 - Revenue is in position 1 and 2 - Billed Quantity is in position 2 for each regional grouping as shown in Figure 4–7.

Figure 4–7   Example of Position in a Graph

You can format the visual appearance of a graph based on position in terms of its color, line width, and line symbols.

> **Note:**   Positional formatting is not supported for waterfall graphs.

Graph Formatting Based on Columns Conditional formatting enables you to customize the appearance of a graph based on conditions applied to columns. The formatting is applied to the column values that meet the condition.

You can specify a color in which to display graph data based upon a specific column value, or range of column values that meet the condition specified for the column.

For example:

- Conditionally changing the color of a graph based on specific column values.

   A user wants to create a bar graph to compare sales between two beverages, Lemonade and Cola. When creating a bar graph the user specifies two conditions, one where the bar representing Lemonade sales is yellow, and another where the bar representing Cola sales is blue.

- Conditionally changing the color of a graph based on a range of column values.

   A sales manager wants to create a bar graph to compare sales for all reps across two sales brands. When creating a bar graph the sales manager specifies two conditions, one where the bar is red for all sales reps with sales less than $250,000, and another where the bar is green for all sales reps with sales greater than $250,000.

The way that you specify conditional formatting for graphs is different from that used for other views. For information, see "Applying Conditional Formatting to Tables, Pivot Tables, Performance Tiles, Graphs, Heat Matrices, and Trellises."

To format the appearance of a graph:

1. Click **Edit Graph Properties** on the toolbar of the graph editor or from the "Compound Layout" in the Results tab, click the **View Properties** button on the specific view container.

    The "Graph Properties dialog" is displayed.

2. Click the "Graph Properties dialog: Style tab."

3. Click the **Style and Conditional Formatting** button.

    The "Style and Conditional Formatting dialog" is displayed.

4. Click "Style and Conditional Formatting dialog: Style Formatting tab" to format the appearance of a graph based on position of the graph elements.

    To add a custom formatted position:

    a. Select the tab for the graph element (for example, bar) to which you want to add a custom formatted position.

    b. Click the **Add new position** button. A new position entry is displayed in the Custom Formatted Positions table.

    c. Specify the formatting. For example, to select the color to be applied to the position, click the down arrow next to the **Color** box to access the Color Selector dialog. (Note that the formatting options depend on the element.)

5. Click the "Style and Conditional Formatting dialog: Conditional Formatting tab" to format the appearance of a graph based on a condition that is applied to columns.

    To add a condition to a column:

    a. Click **Add Condition Format** and select the column to which you want to apply a condition.

        The "New Condition dialog" is displayed.

    b. Select the operator and enter a column value, or a range of column values for this condition.

    c. Click **OK** when you have finished.

        The new condition is displayed in the Conditional Formatting tab.

    d. To select the color to be applied to column values when the condition is met, click the down arrow next to the **Color** box to access the Color Selector dialog.

6. Click **OK**.

Rules for Applying Conditional Formats in Graphs The following rules apply for building and using conditions in graphs:

■ Conditions can be created only from columns that are being used by the graph.

■ When format conditions conflict with each other, conflicting conditions are prioritized in the following order:

    1. Conditional formatting on attributes

    2. Conditional formatting on measures

    3. Style formatting based on the positions of graph elements

- In line, line-bar, radar, scatter, and time series line graphs, symbols and color that are specified for conditional and positional formatting are shown in the legends as follows:
  - If only conditional formatting has been applied:
    * For graphs without disjointed points, then symbols are not shown on the legend marker. If color is applied to the whole series, then color is applied to legend markers.
    * For graphs with disjointed points (in line or scatter graphs), then the original symbols shown in the legends by default are changed to line symbols in line graphs and square symbols in scatter graphs. If color is applied to the whole series, then color is applied to legend markers.
  - If only positional formatting has been applied, then symbols and color are shown on legend markers.
  - If both conditional formatting and positional formatting have been applied, then the symbols that have been specified for positional formatting are shown. If color is applied to the whole series by a conditional format rule, symbols are shown on the legend marker. Color is applied to both the symbols and legend markers.

- When a user drills on a graph that has conditional formatting applied, the following rules apply:
  - A conditional format based on measures is not carried to the next level. (It does not make sense to carry the conditional format to a different level; for example if, in a geographic hierarchy, from Region to City.)
  - A conditional format based on attributes is carried to the next graph if it has not been drilled on.

    For example, if you had the conditional format "Lemonade = Blue" and only drill on years, then "Lemonade = Blue" stays in place.

- Conditional formatting is not supported on subtotals and totals for waterfall graphs.

Graph Exceptions for Conditional Formatting on Columns Table 4–7 lists the graph exceptions that apply to conditional formatting based on columns.

Table 4–7   Graph Exceptions that Apply to Conditional Formatting Based on Columns

Graph Type	Exception
Line Line-Bar Radar Time Series Line	Only symbol formatting is allowed for the line.
Pareto	Formatting is applied only to the bars, not to the Pareto line.

Editing Trellis Views

A trellis view is a kind of graph view that displays a grid of multiple graphs, one in each data cell.

Figure 4–8 shows a sample trellis view.

Figure 4–8   Sample Trellis View

A trellis view falls into one of two subtypes:

- **Simple Trellis.** A simple trellis displays a core inner graph multiplied across row sets and column sets, rendering many small multiples that are ideal for comparing and contrasting. Figure 4–8 is a simple trellis.

- **Advanced Trellis.** An advanced trellis displays a grid of small spark graphs that are ideal for monitoring trends and spotting patterns in a data set.

To edit a trellis view:

1. Display the "Results tab: Trellis editor." For information, see "Editing Views."

2. To set the properties of the trellis, click the **Trellis Properties** button on the toolbar. The "Trellis Properties dialog" is displayed, where you can set properties:

   - Related to the grid canvas, such as legend location (simple trellis views only)

   - Related to graph size for the visualizations included in the trellis

   - That specify the method to be used to browse data — either scrolling or paging controls

   - That control whether the trellis listens to master-detail events

   - That control the appearance of the trellis's grid and its visualizations, such as various style choices and the way that legends are displayed

   - That control the type of scale and the appearance of scale markers for each of the trellis's visualizations (simple trellis views only)

   - That control the display of titles and labels (simple trellis views only)

3. Use the buttons on the toolbar of the editor to perform functions such as printing a view, exporting a view, and so on.

    For more information on the buttons common to all views, see "Toolbar Buttons Common to All Views." For more information on specific data view buttons, see "Data View Editor Toolbar."

4. To affect the contents of the view, use the following panes:

    ■ "Subject Areas pane"

    ■ "Catalog pane"

    ■ "Layout pane," as described in "Modifying the Layout of Data in Views"

    ■ "Selection Steps pane"

5. To specify the sort order for a column in the view, see "Sorting Data in Views."

6. Right-click to perform basic view interactions. For information, see "Right-Click Menu for Data Views."

Note: If you notice any issues with the alignment of trellis views, then you can edit a configuration file to adjust the alignment. Locate the `xdo.cfg` file in the following directory:

`config/OracleBIJavahostComponent/coreapplication_objh1`

and increase the value of the `fo-chunk-size` setting.

What Terms are Used with Trellis Views?

Table 4–8 defines the terms that are used with trellis views.

Table 4–8   Terms for Trellis Views

Term	Definition
Visualization	In the context of Oracle BI EE, a visualization is the choice of graph that appears within a data cell in a trellis view. There are many visualizations from which to choose when creating a trellis view, including bar graphs, scatter graphs, and spark graphs.
Inner Graph	A nested graph, inside the grid of a trellis graph. Each inner graph has its own dimensionality as specified in the Visualization area of the Layout pane.
Outer Edge	The outer edges are the parts of a trellis view that border the inner graphs. These include the column and row headers, the section headers, and so on.
Simple Trellis	A trellis view that displays inner visualizations that are all the same type, such as all scatter graphs. The inner visualizations all use a common axis, also known as a synchronized scale.
Advanced Trellis	A trellis view that can display multiple visualization types within its grid, for example, Spark Line graphs, Spark Bar graphs, and numbers. Each visualization type displays a different measure. You can think of an advanced trellis as a pivot table, except that for each measure you add to the pivot table, you can optionally associate a dimension and render that dimension as a spark graph visualization.
Synchronized Scale	(Applicable to Simple Trellis subtype only) A synchronized scale means that all the visualizations within the trellis are viewed on the same scale, that is, they share a common axis. Having a common axis makes all graph markers easy to compare across rows and columns.

Table 4–8   (Cont.) Terms for Trellis Views

Term	Definition
Microchart	A text-sized graphic displayed in a grid along with other text-sized graphics and numbers, comprising the data cell contents of an advanced trellis view. In Oracle BI EE, a microchart is always a spark graph.
Spark Graph	An embedded mini-graph that, in conjunction with other mini-graphs and numbers, illustrates a single trend. Spark graphs are also known as *sparks*. Sparks do not include axes or labels; they get their context from the content that surrounds them. Each type of spark graph has only one measure, which is hidden; the scale is relative to itself only. A spark graph can be of the graph subtype Spark Line, Spark Bar, or Spark Area.

What Makes a Trellis View Unique?

The trellis view, also referred to as a *trellis graph*, is the same as a pivot table—with one major exception: the data cells within the trellis contain graphs. Whereas a *stand-alone graph* type such as a single bar graph or a single scatter graph works on its own, the trellis graph works only by displaying a grid of nested graphs, known as *inner graphs*. So a bar-graph trellis view is actually comprised of multiple bar graphs.

In a general sense within the field of business analytics, a *visualization* is a visual representation of data, displayed in graphs, gauges, maps, and so on. In the trellis editor, within the Layout pane, there is a drop target called Visualizations; this is where you drag the columns for the inner graphs that will comprise the trellis you are building.

The visualizations that make up a simple trellis view are all graphs, and they can be many types of the existing stand-alone graphs described in "What Types of Graphs Are Available?" The visualizations that make up an advanced trellis are always *microcharts*, of the graph subtypes Spark Line, Spark Bar, or Spark Area. Ideally, the microcharts within an advanced trellis are placed alongside numbers (representing the same measure). For more information, see "What Are Microcharts?"

What Are the Functions of Trellis Views?

For the most part, a trellis view behaves like a pivot table, and the main difference between a trellis and a pivot table is the way the data cells appear.

In the row and column label cells of a trellis, you can:

- Right-click to move measure labels

- Right-click to sort data

- Drag to reposition rows and columns

In the data cells of a trellis, you can hover the mouse pointer to show related contextual information.

Numeric data cells in a trellis behave the same as numeric data cells in a pivot table.

The ways in which the behavior of a trellis view differs from the behavior of a pivot table are the following:

- Graph data cells: There is no right-click functionality for the data cells in simple trellises, nor drilling in trellis graph data cells (left-click functionality).

- Microchart data cells: When you hover the cursor over the data cells in spark graphs, you are shown contextual information (such as first, last, minimum, and

maximum values) that otherwise is not displayed as it would be in a pivot table view.

Figure 4–9 shows an advanced trellis with a tooltip displayed as the cursor hovers over a microchart data cell. Microcharts do not show axis labels, as regular charts do, so it is not immediately obvious what the inner graph dimensionality is. Use a microchart's tooltips to understand the data being represented inside the graph—sample individual values, as well as the overall dimensionality.

Figure 4–9   Sample Microchart Shown After Mouse Hover for Tooltip
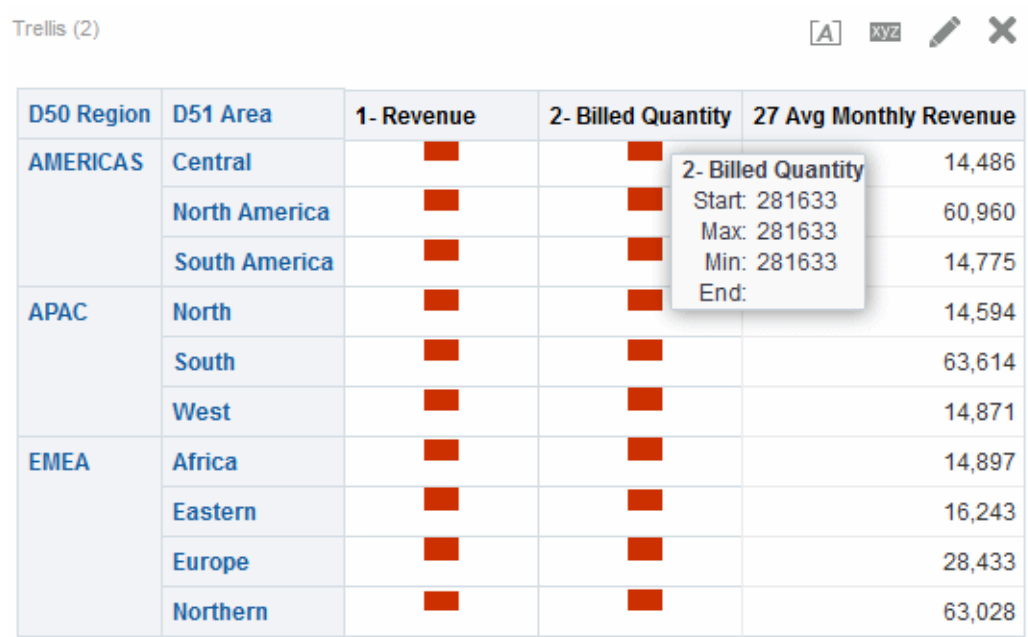
What Are Microcharts?

A *microchart* is a tiny chart. A microchart is displayed in trellis views of the Advanced Trellis subtype. A microchart is unique as a graph type in that it can never be an independent, stand-alone graph. It can be used only within the context of a trellis view, and its meaning comes only from the fact that it is one of many small multiples.

Spark Graphs in Oracle BI EE A microchart can be one of several graph subtypes, including Spark Line, Spark Bar, and Spark Area.

Figure 4–10 shows a sample trellis composed of the Spark Line subtype, and numbers.

Figure 4–10   Sample Microchart in a Trellis View
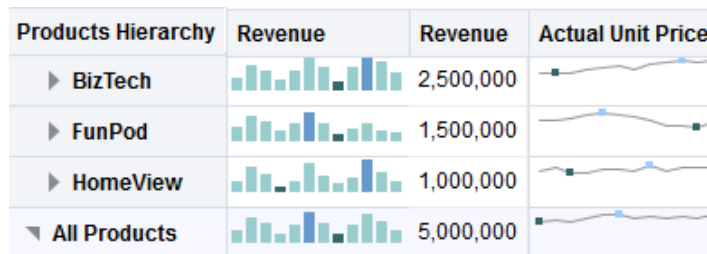
Spark graphs, also called *sparks*, are unique from line graphs, bar graphs, and the other stand-alone graphs available in Oracle BI EE. Spark graphs are embedded mini-graphs

that illustrate a single trend. Simple in their appearance, they do not include axes or labels and they get their context from the content that surrounds them. Each type of spark graph has only one measure, which is hidden; the scale is relative to itself only.

In Oracle BI EE, the visual appearance of sparks emphasizes trends, and within those trends, the highest and lowest values. Due to the condensed manner in which sparks display trends, it is possible for many trends to be compared (along with numeric values) on a single page.

Notice how the advanced trellis in Figure 4–10 visualizes the same measure twice (1 - Revenue), setting the first instance to "Number," and associating a time dimension (T02 Per Name Month) with the second instance (1 - Revenue renamed to Revenue Trend), while displaying the second instance as a spark. This advanced trellis shows the total value for the year, and next to it, how the total value trended over the year.

While sparks are useful for certain types of analysis, such as high-level observation of trends and spotting of patterns, it is important to note that they do not illustrate the same specificity as their larger, fuller-featured counterparts.

Working with Spark Graphs Sparks are unique mainly because they are small and because they can display a lot of information in a very constricted space. In Oracle BI EE, a spark graph is also different from a stand-alone graph in that, as a microchart, it can only be used within trellis views.

You can modify the size of your sparks in the same way that you do with full-featured graphs, in the Graph Properties dialog.

For more information about creating trellis views that include sparks, see "Design Considerations for Trellis Views and Microcharts."

About Simple Trellis Versus Advanced Trellis

When you create a trellis view, the first thing you do is choose between two subtypes: Simple Trellis and Advanced Trellis.

The Simple Trellis subtype, which is useful for showing comparisons, displays a single type of inner visualization, for example, all bar graphs. The inner visualization always uses a common axis, so that all inner graphs are viewed on the same scale. (This concept of a common axis is also referred to as a *synchronized scale*.) Having a common axis makes all graph markers easy to compare across rows and columns.

The Advanced Trellis subtype, which is useful for showing trends, allows for display of multiple visualization types within its grid. An advanced trellis illustrating sales trends might show a grid containing numbers in the cells of one column (revenue, for example), while another column alongside the numbers column displays Spark Line graphs in its cells, and those Spark Line graphs visualize the same measure as represented by the numbers (again revenue, but over a time period). Next to that column, a different microchart might be displayed, such as a column of Spark Bar graphs that visualize a different measure, such as unit totals.

Each measure that is visualized is assigned a different inner graph type. Each cell of the grid is scaled independently.

Think of an advanced trellis as a pivot table with spark graphs inside its data cells. But, for each measure you add, you can optionally associate a dimension and render it as a microchart visualization. This makes an advanced trellis very different from a simple trellis. In a simple trellis, *all of the measures* are rendered in the *same* visualization, along with additional dimensions.

Design Considerations for Trellis Views and Microcharts

The following are some ideas to consider when designing content displayed in trellis views:

- For comparisons, choose the Simple Trellis subtype.

- For trend analysis, choose the Advanced Trellis subtype.

- The inner graphs that make up a trellis should be readable and not too dense, so a trellis view is not especially useful for displaying multiple series or multiple groups. If you cannot easily target a data point with your mouse (to be shown a tooltip), then it is likely that the inner graph is too dense to be readable.

- When using the Simple Trellis subtype, note the following:

  - Designing a simple trellis is like designing a pivot table, except that the total number of cells that can be rendered is much less for a trellis.

  - The main difference between designing a simple trellis and designing a pivot table is that for a trellis, one or two of the dimensions can be associated with the visualization; so, that many less dimensions must be added to the outer edge.

  - It is best to design the trellis with a small number of outer-edge dimensions. The entire graph series should be visible at once (for easy comparison of like to like) with no need to scroll. If you must show additional dimensionality, consider adding the dimensions to the graph prompt.

  - When determining which data to show in column headers and which to show in row headers, the column headers should show one or two dimensions (each dimension with a small number of members). Most often, the dimension shown in column headers is time. Place the remaining dimensions in the row headers or in graph prompts.

- When using the Advanced Trellis subtype, note the following:

  - The key use case for an advanced trellis is to show trend graphs alongside numeric values, in a compressed form. So a typical advanced trellis contains a combination of spark graphs alongside number representations of the same measure.

  - Ideally, place no dimensions in the column headers, just place the measures here.

  - The dimensionality typically associated with a spark graph is time. As there are no visible labels in a spark graph, it is important that the data visualized is intrinsically ordered. For example, a spark graph visualizing regions would be meaningless, because the ordering of the regions (which would be the specific bars, in a Spark Bar graph) is not intuitive.

  - Just as when designing pivot tables, you generally display time on the horizontal axis, with the other dimensions displayed on the vertical axis. The eye then scans from left to right to see how the dimensionality changes over time.

When Might a Trellis Not Be the Best Visualization to Use? Hierarchical columns do not work well with the Simple Trellis subtype, because when a hierarchical column is displayed on the outer edge, parents and children (such as Year and Quarter) will by default be shown using a common axis scale. However, because Year and Quarter have different magnitudes, the markers in child graphs may be extremely small and hard to read

against the parent scale. (Hierarchical columns do work well with the Advanced Trellis subtype, however, because each data cell is a different scale.)

Editing Gauge Views

You can use gauge views of various types for analyzing and displaying data. Figure 4–11 shows a sample gauge view on a dashboard page.

Figure 4–11   Sample Gauge View
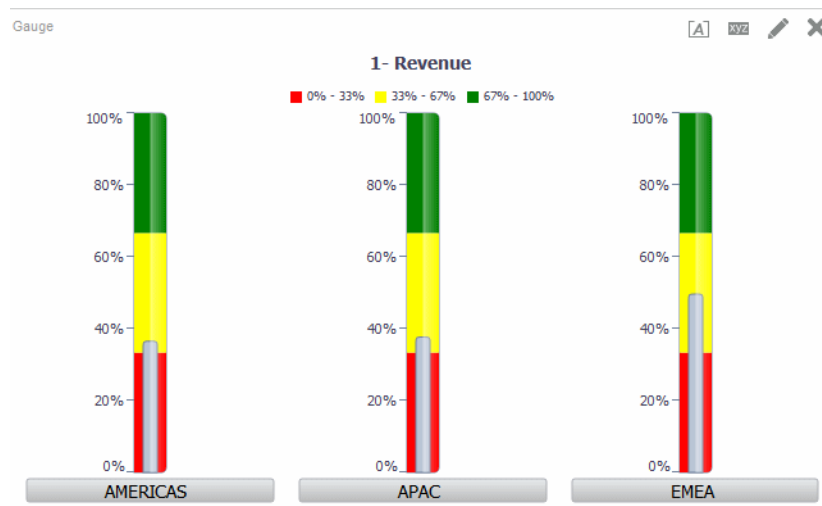
To edit a gauge view:

1. Display the "Results tab: Gauge editor." For information, see "Editing Views."

2. To set the properties of the gauge view, click the **Edit Gauge Properties** on the toolbar. The "Gauge Properties dialog" is displayed, where you can set properties:

   ■ Related to the gauge canvas, such as, legend location

   ■ That control the appearance of the gauge, such as the width and height of the gauge

   ■ For gauge limits and tick marks

   ■ That control the display of titles, footers, and labels for the gauge or gauges in a gauge set

3. Use the buttons on the toolbar of the editor to perform functions such as printing a view, exporting a view, and so on.

   For more information on the buttons common to all views, see "Toolbar Buttons Common to All Views." For more information on specific data view buttons, see "Data View Editor Toolbar."

4. To change the appearance of the contents of the view, use the following panes:

   ■ "Subject Areas pane"

   ■ "Catalog pane"

   ■ "Layout pane", as described in "Modifying the Layout of Data in Views"

   ■ "Selection Steps pane"

   ■ "Settings pane" to set thresholds

5. To drill in the data in the view, see "Drilling in Views."

Editing Map Views

You can create a map view for presenting business data to users.

As with views such as tables, pivot tables, and graphs, map views allow users to display data on maps in several different formats and to interact with the data. When data is visualized on a map, relationships among data values that might not have been obvious previously can be displayed in a much more intuitive manner. For example, a map view can show a map of a city with the postal codes color-coded by sales performance, while an image marker displays the average discount given per order.

Changes to data are reflected in the map views, and users can perform the following tasks:

- Display data with a spatial attribute on a map:
  - Display color-coded regions as thematic maps.
  - Vary line geometries by changing line widths.
  - Show point-based information, such as sales locations within territories.
  - Zoom, pan, and drill to additional map detail.
- Use a map view to interact with other dashboard elements:
  - Dashboard prompts drive map content.
  - Interaction with the map view updates other dashboard content, including master-detail interactions with other views.
- Show additional related contextual information by hovering the mouse pointer over map areas.
- Complete additional tasks using actions.
- Use the Map editor (see "Results tab: Map editor" for additional information) to correct a broken map.

> **Note:** Before you as the content designer can create map views for analyses, the administrator must set configuration options and manage metadata, as described in "Configuring Mapping and Spatial Information" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

Using Auto Correct

A map view error can occur for various reasons. If the issue appears to be related to missing layers, maps, or styles, then it might be possible to correct the map by replacing the missing map view components with similar items that exist in the spatial metadata. Before contacting your administrator, you can attempt to correct the issue yourself. To do so, perform these steps:

1. Edit the map in the Compound Layout. A View Error message box displays.

2. Click **Yes** in the View Error message box and the Map View compiler will attempt to auto correct the error. If you click **No**, you can use the **Auto Correct** icon at a later time to attempt to fix the error. If the compiler can correct the error, the map displays.

3. Sometimes only a partial correction may be possible. If this is the case, a Partial Fix dialog displays and provides a visual cue regarding the layers that must be deleted to proceed with auto correction. Click **Yes** to proceed. Although some formats may be deleted, the majority of the original map's formats are preserved.

> **Note:** The Map View compiler can only fix a limited subset of errors that may arise. If Auto Correct fails to fix the map view, contact your administrator.

What are the Functions of Map Views?

Map views offer the following functions:

- You can display multiple attribute columns and measure columns on a map view. Map views do not support hierarchical columns.

- You can format a map view, including with colors, bar graphs, pie graphs, variably sized bubbles, images, lines, or colored shapes that provide the ability for binning and other formatting options.

- You can drill in information windows. When you hover over a value, you see a popup with information, such as the geographic region (city, state, or country), the measures in the form of column names and column values and formatting metrics, and non-geographic data such as year. The appropriate related data is highlighted in the interactive pane as well. You can click the value to display the actionable links for drilling in the information window, then click the appropriate link.

What Terms Are Used with Map Views?

Table 4–9 defines the terms that are used with map views.

Table 4–9   Terms for Map Views

Term	Definition
Feature	An entity with spatial and non-spatial attributes such as cities, rivers, and highways. A feature can be represented by a polygon, a line, or a point.
Format	Defines rendering properties for a feature. For example, if the feature is a polygon that shows a county, then the format can define the fill color for the county or can define a pie graph to be drawn over the county. Formats are tied to a particular geographic level such as continent, country, region, state, or city.
Layer	Any collection of features and formats that have a common set of attributes and a location. For example, a layer that shows US states can include color coding of states by sales, and a pie graph that shows sales per brand for that state. In addition to the US states layer, you can use a layer that displays stores within a state as individual points, with popup notes that show sales for each store.

Layers are displayed on a background or template map. When you zoom in and out on the map, various layers are hidden or displayed. Some layers must be enabled for data, so you can display it in the map. Other layers, such as one that shows roads, is not related to data. |
| Map | A map that consists of a background or template map and a stack of layers that are rendered on top of each other in a window. A map has an associated coordinate system that all layers in the map must share. The map can be an image file, the object representation of an image file, or a URL that refers to an image file. |

What Are the Components of Map Views?

A map view contains the following components:

- Main content — The main content is the background or template map, which provides the background geographic data and zoom levels. The main content can be any image that can be configured using MapViewer, for example, the floor maps of office buildings and the appearance and presence of items such as countries, cities, and roads.

- Layers — One or more interactive or custom layers overlay the main content. For information, see "What Are Layers?"

- Toolbar — Provides buttons that allow you to manipulate map contents directly. The map view itself has a toolbar. The content designer specifies whether to display the toolbar for the map view on a dashboard page. On a dashboard page, the toolbar is displayed directly over the map and contains only the **Zoom Out** and **Zoom In** buttons. When you create a new map view, the toolbar is visible by default. You can control display of the toolbar in the "Map Properties dialog: Tools tab."

  When you are not in one of the zoom modes, the default mode for manipulating the map contents is Pan. To pan the contents of the map view, you click and drag the mouse.

  The toolbar in the Map editor contains additional options for modifying the map view.

- Zoom controls — Adjusts the detail of the geographic data that is shown in the map view. For example, zooming in from a country might show state and city details.

  On the Administration page, the administrator specifies which zoom levels each layer is visible for. You can have multiple zoom levels for one layer, and you can have a single zoom level associated with multiple layers. When you zoom, you change the map information at that zoom level, but you do not affect the display of Oracle BI data at that level. You affect the display of Oracle BI data by drilling.

  The zoom controls also have a zoom slider that renders in the upper left-hand corner of the map view. When the zoom control is zoomed-out all the way, the zoom level is set to 0 and the entire map view is displayed.

  The "Map Properties dialog: Tools tab" lets you determine the visibility of the zoom control. By default, the map is initially zoomed into the highest zoom level that fits the entire contents of the top-most layer. For example, if the highest ordered layer contains data only in the state of California, then the map zooms to the highest zoom level that still shows all of California.

  - Zoom slider — Consists of a slider with a thumb for large scale zooming and buttons for zooming a single level. You can use the plus button to zoom in and the minus button to zoom out one level at a time. When the thumb is at the bottom of the slider, the zoom level is zero.

- Scale tool — Also known as Distance Indicator. Provides a key to distance interpretation of the map and consists of two horizontal bars that display in the lower left-hand corner of the map view below the information panel and above the copyright. The top bar represents miles (mi) and the bottom bar represents kilometers (km). Labels are displayed above the miles bar and below the kilometers bar in the format: [distance] [unit of measure]. The length and distance values of the bars change as the zoom level changes and as the map is panned.

- Legend — The legend is a semi-transparent area in the upper right-hand corner of the map view that you can display and hide. The legend shows the information that relates to the current zoom level. The legend provides a read-only visual key for symbols, layers, and formatting on the map and displays the following:

  - All visible formats that are applied to the map. If a format is turned off, then the corresponding legend item is hidden also. If a format is turned on but zoomed out of view, then it is not displayed in the legend. The legend displays text such as "No formats defined for current zoom level" if you have no formats defined at the zoom level that is currently displayed.

  - Scrollbars, if needed.

  Selecting a format on the map will cause the corresponding legend item to be highlighted. Highlights have varying granularity, depending on the selected formats (for example, a pie graph does not have the level of granularity that color fill has). See "How Do Formats Affect Layers?"for additional information.

  Use the **Expand Map Legend** and **Collapse Map Legend** buttons in the upper right-hand corner to control the display of the legend.

- Overview map — Consists of a miniature view of the main map that is shown in the lower right-hand corner of the main map. This overview map provides regional context and lets you change the viewable area of the main map.

  The following items are part of the overview map:

  - **Reticule:** Displays as a small window that you can move across a miniature view of the main map. The position of the reticule in the miniature map determines the viewable area of the main map. As you move the reticule, the main map is updated automatically. You can also pan in the overview map without using the reticule.

    The overview map is automatically hidden if the reticule cannot be shown. This hiding generally happens when the scale difference between successive zoom levels is too small to show the miniature view in the overview map.

  - **Show/Hide** button: Displays in the upper left-hand corner when the overview map is displayed. When you click the **Show/Hide** button, the overview map becomes invisible and only the button can be seen in the lower right-hand corner of the main map.

- Interactive panel — Accompanies the view in a dashboard and in the "Compound Layout." The top section of the interactive panel enables you to create and edit BI data formats in the Analysis editor. If a format has editable thresholds, then a slider is displayed in the Map editor that enables you to edit thresholds by dragging the slider. The interactive panel enables you to rearrange formats within a geographic layer. For example, if the States layer has three formats, then you can select the order in which the formats are displayed.

  When displaying a tooltip by hovering your mouse cursor over a map area, the corresponding detail is updated and highlighted in the interactive panel.

  Dashboard users can control the visibility of formats (by turning them on or off) and can adjust format thresholds if the content designer has allowed them to.

  The lower section of the panel includes the Feature Layer area, where you can select non-BI layers to add to the map. A non-BI layer is one that has not been associated with a BI column. Typical examples include Google Maps™ Tile Layer and Bing Maps™ Tile Layer, highways, parks, or automated teller machines. You cannot apply formats to non-BI layers.

What Are Layers?

Layers are collections of geometries that share common attributes. Layers can be either predefined or custom:

- A predefined layer is one whose geometry is defined in a spatial table in an Oracle Database. The administrator makes predefined layers available using the Administration pages, as described in "Administering Maps" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

- A custom point layer is one that you define while editing a map view, as described in this section.

Layers can be of different types. A polygon layer represents regions, such as states. An example is a New England layer for the United States that consists of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

A point layer represents specific points on a map, based on a coordinate system. For example, a point layer might identify the locations of warehouses on a map. The layer can use a different image for the type of inventory (electronics, housewares, garden supplies) in a set of warehouses to differentiate them from each other.

You can create a custom point layer that applies points to a map using longitude and latitude coordinates. For example, suppose that your company is headquartered in New York City. You can create a custom point layer that displays your company icon over New York City, and that icon is always displayed whenever a map that includes New York City is shown. The custom point layer is always on top of the other layers and is not affected by zoom levels. The custom point layer is used only by the current map view in the current analysis; it is not used by other map views, even for the same analysis.

You can select layers to be visible or hidden on a map, but you cannot modify predefined layers. You also create formats to apply to the layers, such as colored regions, bubbles, points, lines, or bar or pie graphs. Not all formats are available for all layer types. For example, point layers cannot have color fill formats.

Creating Map Views

When the administrator has configured maps, you as the content designer can create analyses whose data is displayed in map views.

You create a map view after selecting columns to display in that view. If the administrator has specified multiple background maps, then the map view is initially displayed using the first background map that was specified by the administrator that includes at least one layer that has been associated with a column that you selected. When editing the map view, you can select a different background map. You can apply layers to the background map and formats to the layers.

To create a map view for an analysis:

1. Create an analysis by selecting the attribute and measure columns to display on a map view. You generally select attribute columns that are related to geography, such as Cities, States, or Regions.

   Select only those geography columns that the administrator has mapped to layers using the Administration pages, as described in "Administering Maps" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

2. Select the Results tab.

3. On the toolbar, click the **New View** button, then select **Map**.

If you see a message that states that a background map is required to render a map, then no metadata exists to populate the map. Contact the administrator about configuring the metadata for maps using the Administration page.

Otherwise you see a map that uses the background map that was specified on the Administration page.

4. Click the **Edit View** button to display the view in the "Results tab: Map editor."

You see a default map view in which the measures have been divided into reasonable bins and color coding has been applied. You can adjust the map view and layers as you like. If you do not see any default format created, then you must create a format.

5. Specify map view properties, such as canvas size or master-detail linking by using the "Map Properties dialog."

6. Apply formats to the layers, as described in "Applying Formats to Layers."

How Do Formats Affect Layers?

A map view uses columns of Oracle BI EE data. Each column has a set of properties that define its characteristics, such as for formatting and interaction. Any formatting that has been applied to a column is not applied to the map, except for the settings for interaction. Any formatting that originates from thresholds that the map contains is applied.

You can apply various kinds of formats to map views. The following list describes the options for defining formats to apply to BI layers. You cannot apply formats to non-BI layers.

- **Color Fill** — Displays the "Color Fill (Layer) dialog," which you use to render areas in fill colors that indicate that an area meets a particular condition.

  Color fill formats apply to regions or polygons. For example, a color fill format might identify a range of colors to represent the population in the states of a region or the popularity of a product in the states of a region. A map view can have multiple color formats visible at different zoom levels. For example, a color fill format for the layer at zoom levels 1-5 might represent the population of a state, and the county median income for the layer at zoom levels 6-10. You can also specify different colors to identify a range of data values.

- **Bar Graph** — Displays the "Bar Graph (Layer) dialog," which you use to render a series of data as a bar graph within an area. Graph formats can show statistics related to a given region such as states or counties. For example, a graph format can display the sales values for several products in a state.

  Even though you can create multiple graph formats for a particular layer, such creation is not recommend as the formats might overlap on the layer and the displayed results might be undesirable.

- **Pie Graph** — Displays the "Pie Graph (Layer) dialog," which you use to render a series of data as a pie graph within an area.

- **Shape** — Displays the "Variable Shape (Layer) dialog," which you use to render a measure column that is associated with an area by drawing markers or shapes within the region. You can also specify different colors for the shape to identify a range of data values.

- **Bubble** — Displays the "Bubble (Layer) dialog," which you use to render a bubble within an area, similar to the shape format.

- **Image** — Displays the "Image (Layer) dialog," which you use to render an image within an area, similar to the shape format. You can specify different images to identify a range of data values. You select images that have been specified by the administrator.

- **Line** — Displays the "Line (Layer) dialog," which you use to render a line on a map.

  You can include lines on maps to display paths such as highways, railway lines, and shipping routes. You can specify the width of lines and you can use the Map Wrap-Around feature on the "Map Properties dialog: Canvas tab" to allow lines to be unbroken, such as when showing an airline flight path from San Francisco to Tokyo.

  You can vary the width of a line by each measure to accentuate a feature.

- **Custom Point** — Displays the *Format* Custom Point (*Layer*) dialog, which you use to render a point format, such as a bubble, image, or shape in a layer. Custom points are displayed at all zoom levels and on top of all other map formatting. When you create a Custom Point format, you select columns to specify the latitude and longitude.

When Are Formats Visible? The visibility of a format depends on the following:

- The zoom level on the map and the "zoom range" of the format. For example, a Color Fill format for States is visible when state boundaries are visible and it is turned on, but is no longer visible when the map is zoomed out to the Continent level.

- The data point limit. Formats are generally visible when they are zoomed into view and are turned on, but they might not be displayed if a particular layer has exceeded its maximum number of data points.

Custom point formats are unique in that they are displayed on the map always, for all zoom levels.

Format data is displayed in the legend only when the format is both turned on and zoomed into view. A format is turned on when the box beside its name is selected in the Map Formats area.

The map cannot display multiple non-point formats at a time (at a single zoom level) but can display multiple point formats simultaneously, if they do not share the same latitude and longitude location. If multiple graph formats are specified at the same geographic layer, then they render on top of each other.

Where Can Formats Be Applied? The following formats apply to geographic areas such as polygons: Color Fill, Bubble, Pie Graph, and Bar Graph.

The following formats are based on a single latitude and longitude location (a point): Bubble, Variable Shape, Image, and Custom Point.

The line format is displayed only when a line geometry is present. Line formats are the only format that you can create for line geometries.

When you define formats, you can specify that different formats apply to different measure columns in a layer.

Applying Formats to Layers

To apply a format to each layer as appropriate, use one of the following ways:

■   Click the **Create a new Map Format** link, if no layers are specified in the Map Formats list.

■   Click the **Add New Map Formats** button, either in the Map Formats title bar or beside a layer name.

For more information, see "Showing or Hiding Formats on a Map View."

Setting the Initial View Ports for Map Views

You can use options on the "Map Properties dialog: Interaction tab" to specify the view port (the initial center of the map and zoom level) when a map view is first loaded or refreshed in a browser. This specification allows you to affect the initial display of the map for users.

Editing Map Views and Displaying Map Views on Dashboard Pages

Many of the same functions are available for map views, whether you are editing them or displaying them on a dashboard page. Some functions are available only when editing map views, as described in the following list:

■   When you edit a map view and work with layers, you create formats for the BI layers. You can display a dialog for adding and editing formats. You can also specify the order of formats for each layer. The order affects the visibility of the formats for the layer. Formats that are displayed higher in the list overlay formats that are lower in the list. When you display a map view, you can turn on and off the display of formats, but you cannot add or remove them from the map view.

As the content designer editing a map view, you can control the display of layers, but only of those layers that the administrator has associated with this background map. The administrator must ensure that BI layers are ordered higher than non-BI layers. If a non-BI layer is ordered higher than any BI layers, then the non-BI layer is displayed on top of the lower BI layers on the map, which prevents the BI layers from being interactive.

■   When you edit a map view, you decide whether users of dashboard pages can modify the thresholds of Color Fill formats using sliders. When you display a map view, you can modify the thresholds of Color Fill formats (if that ability was provided). If you close and re-open the map view, then you see the thresholds or scaled lines at the same state in which you left them. To save the thresholds when you leave the dashboard, first save the customizations of the dashboard.

■   When you edit or display a map view, legend contents display all active and visible formats.

For more information on the functions that are available when you display a map, see "About Working with Map Views on Dashboard Pages."

Editing Narrative Views

You use a narrative view to provide information such as context, explanatory text, or extended descriptions along with column values. Figure 4–12 shows a sample of a narrative view on the left, alongside a table.

Figure 4–12   Sample Narrative View

Figure 4–13 shows the Narrative editor markup to achieve the look of the narrative view shown in Figure 4–12. The Narrative text box includes HTML markup code for centering the three values for the second column. See "Editing Views" for additional information.

Figure 4–13   Sample of the Narrative Editor

In a narrative view, you can include values from attribute columns, hierarchical columns, and measure columns. For a hierarchical column, you can use selection steps to display hierarchy levels with the hierarchical column. For example, create a step to select members based on hierarchy and add members of the specified level. You cannot drill in narrative views.

To edit a narrative view:

1. Display the "Results tab: Narrative editor." For information, see "Editing Views."

2. In the **Narrative** box, specify the columns to include in the view. To do so, use an at sign (@), optionally followed by a number. For example, include @3 to indicate the third column per the order of the column criteria.

3. Complete other fields as needed.

Editing Column Selector Views

A column selector is a set of drop-down lists that contain pre-selected columns. Users can dynamically select columns and change the data that is displayed in the views of the analysis. Figure 4–14 shows a sample of a column selector view.

Figure 4–14   Sample Column Selector View

One drop-down list can be attached to each column in the analysis, and multiple columns can be attached to each drop-down list. You can create drop-down lists for attribute columns and measure columns. Updates that you make in the column selector view affect all the data views in the analysis.

You add columns to drop-down lists from the Subject Areas pane. When you add columns in this way, they are not added to the Criteria tab for the analysis. Instead, when you display the Criteria tab, you see that the column is now referred to as a "Column Group" with the default column for the list specified also. The default column is the one on which you created the drop-down list.

To edit a column selector view:

1. Display the "Results tab: Column Selector editor." For information, see "Editing Views."

2. Select **Include Selector** for each column for which you want to include a drop-down list of columns. Ensure that the column is highlighted in the editor.

3. To add a new column to a drop-down list, double-click the column to add in the "Subject Areas pane."

4. Complete the other fields as appropriate.

Editing View Selector Views

A view selector view enables users to select a specific view of the results from among the saved views for an analysis. When placed on a dashboard, the view selector is displayed as a list from which users can choose the view to see below the selector. Figure 4–15 shows a sample of a view selector view in which a table view was the most recently selected view.

Figure 4–15   Sample View Selector View
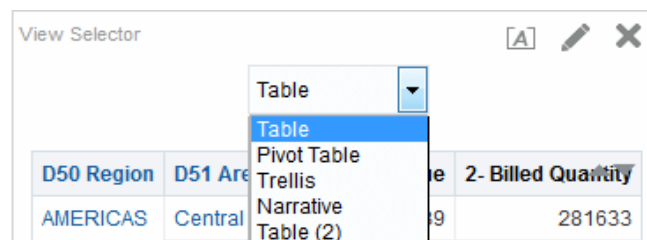
Generally, you would include views in the view selector that are not being displayed in the Compound Layout view. For example, you might create a table, graph, gauge, and view selector view for an analysis, but include only the table and view selector view on the Compound Layout view. When the analysis is displayed on a dashboard page, users can select the graph or gauge view from the view selector view.

To edit a view selector view:

1. Display the "Results tab: View Selector editor." For information, see "Editing Views."

2. In the **Available Views** list, select the views to be included in the view selector and move them into the **Views Included** list.

3. Complete other fields as needed.

Editing Legend Views

You use a legend view to document the meaning of special formatting used in an analysis, such as the meaning of custom colors that are applied to gauges. Figure 4–16 shows a sample of a legend view in which the captions describe the meanings of the colored data.

Figure 4–16   Sample Legend View
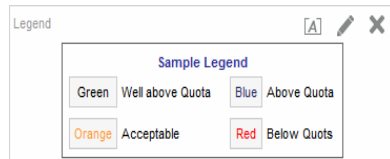
To edit a legend view:

1. Display the "Results tab: Legend editor." For information, see "Editing Views."

2. In the **Captions** box on the toolbar, select the position for the caption relative to the legend symbol.

3. In the **Legend items per row** box on the toolbar, select the number of legend items to display in a row.

4. For each legend item:

   a. In the **Caption** box, enter the meaning of the legend symbol.

   b. In the **Sample Text** box, enter the text that is to be displayed within the legend symbol.

   To add additional legend items, click **Add Caption**.

5. Complete other fields as needed.

Editing Performance Tile Views

Performance tiles focus attention on a single piece of high-level aggregate data in a simple and prominent manner and reveal summary metrics. Figure 4–17 shows an example of four performance tiles on a dashboard page.

Figure 4–17 Sample Performance Tiles on a Dashboard
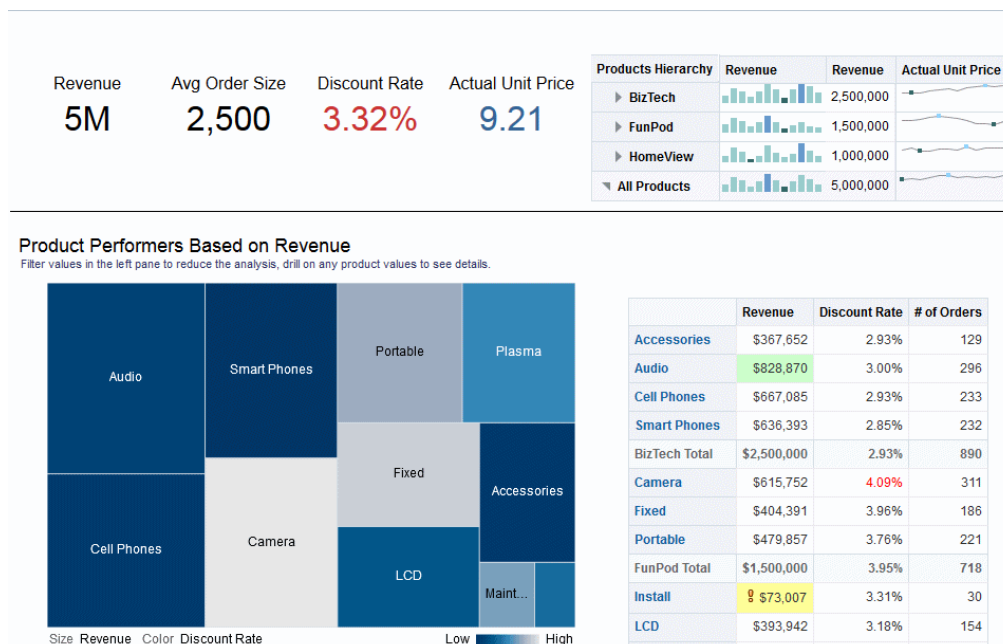
By default, the first measure in the analysis on the Criteria tab is selected as the performance tile measure. You must set up aggregation and filters on the Criteria tab to ensure that the correct measure value is displayed in the tile. To change this measure, edit the performance tile view. To include additional performance tile views for each measure in your analysis, add a separate view for each measure. See "Adding Views to the Results of Analyses" for additional information.

There are five panes or areas available for you to use in customizing performance tiles:

- Layout pane — Controls formatting for labels and measures. See "Drop Target Guidelines for Performance Tiles" for additional information.

- Styles pane — Manages common attributes such as the size or theme of the tile measures. See "Styles pane" for additional information.

- Performance Tile Results pane — Displays the results of the performance tile view and immediately reflects any customizations.

- Performance Tile Properties dialog — Manages advanced properties such as custom size, background or border color, label text alignment, and value compression customizations. See "Performance Tile Properties dialog" for additional information.

- Conditional Formatting dialog (invoked from the **Edit Conditional Formatting** link on the "Performance Tile Properties dialog") — Edits the properties for the measure associated with the tile to control its appearance. See "Applying Conditional Formatting to Tables, Pivot Tables, Performance Tiles, Graphs, Heat Matrices, and Trellises" for additional information.

To edit a performance tile view:

1. Display the "Results tab: Performance Tile editor" to edit the performance tile or to change the default measure. For information, see "Editing Views."

2. To customize or set the properties of the performance tile, click the **Performance Tile Properties** button on the toolbar. The "Performance Tile Properties dialog" is displayed, where you can set properties:

- Related to the size of the tile

- That indicate where labels should appear and how values should appear

- That control the appearance of the tile, such as the background and border colors

You can also click the **Edit Conditional Formatting** link to open the "Conditional Formatting dialog" to change the defaults carried over from the Criteria page or to add conditional formatting. (See "Applying Conditional Formatting" for additional information.) Conditional formatting will override any user defined styles. (See "Performance Tile Properties dialog" for additional information on advanced properties.)

3. Use the buttons on the toolbar of the editor to perform functions, such as printing or exporting a view. For more information on the buttons common to all views, see "Toolbar Buttons Common to All Views." For more information on specific data view buttons, see "Data View Editor Toolbar."

4. In the Styles pane, select the **Small**, **Medium**, or **Large** option button to change the size of the tile. **Custom** may display if you have entered a size by using the "Performance Tile Properties dialog."

Select a themed (or stylized) tile located below the **Tile Size** option buttons to change the theme for your performance tile. Figure 4–18 displays the themes available in the "Styles pane" for performance tiles. The gradient theme is selected and highlighted in this figure in the Styles pane, and is also reflected in the Performance Tile Results pane, as shown in the image.

See "Styles pane" for additional information on style attributes.

Figure 4–18   Styles Pane
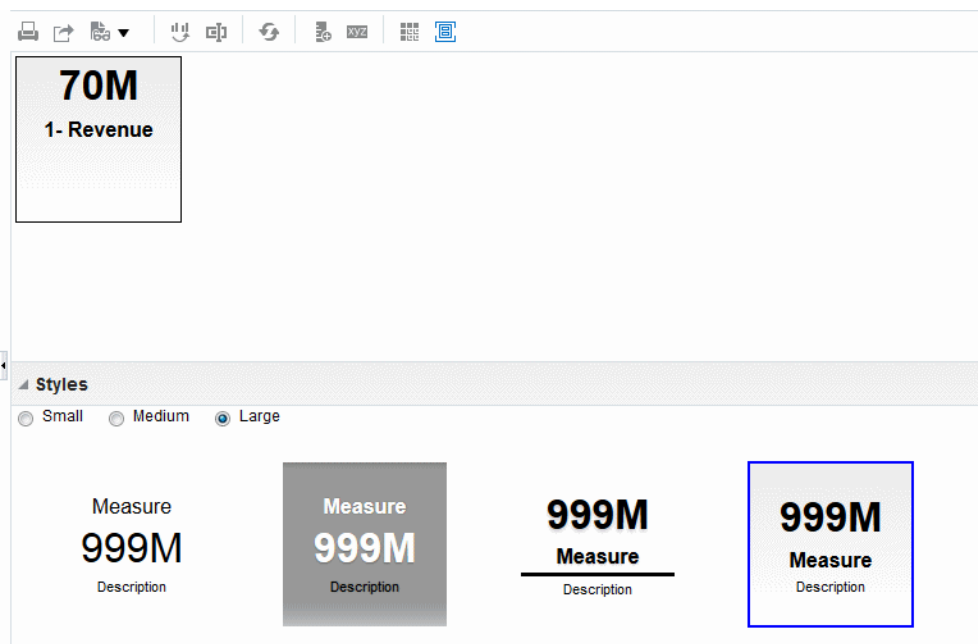
Editing Treemap Views

Treemaps organize hierarchical data by grouping the data into rectangles (known as tiles), and then displaying the tiles based on the size of one measure and the color of the second measure. Figure 4–19 shows an example of a treemap view on a dashboard

page. This treemap shows the correlation of revenue and the average order size. The size of each tile measures the revenue of each product and the color of each tile measures the average order size of each product.

Figure 4–19   Example of a Treemap View on a Dashboard
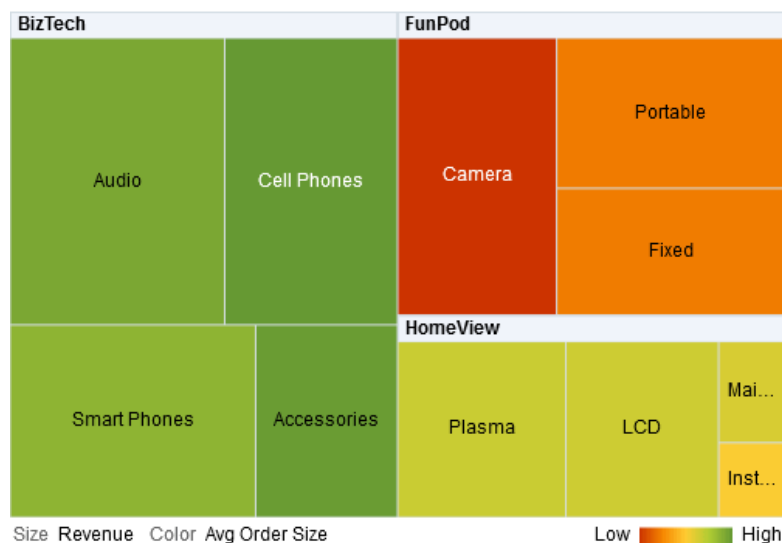
Understanding Treemap Views

By default, the first measure of the analysis in the Criteria tab is selected as the Size By measure, and the second measure is selected as the Color By measure. If there is only one measure in the analysis, this measure is the default for both Size By and Color By options. Additionally, the Style element defaults to Percentile Binning with "quartile" as the value for the number of bins. See the "Treemap Properties dialog" for additional information.

Treemaps have the following characteristics:

- Colored tiles are formed by the grouping and intersection of the columns placed in the Prompts, Sections, Group By, Size By, and Color By drop targets. See "Additional Components Common to Treemap Views" and "Drop Target Guidelines for Treemaps" for additional information.

- Levels of data are displayed within a predefined, rectangular-shaped, confined space for two measures.

- Attribute and hierarchical columns are supported. Skip-level hierarchies are not supported in the Group By area of treemap.

- Tiles are displayed as percentile bins or as a continuous color. See "Additional Components Common to Treemap Views" for additional information.

- A legend (that can be hidden) displays below the treemap and contains:
  - Two measures (those selected in the Size By and Color By lists) and their corresponding labels.
  - Number of specified bins (for example, quartile), color coded and labeled, or a gradient bar that is displayed as a continuous color fill and is labeled "low" to "high."

- First Group By dimension is displayed as the group (header) label.

- The order of the Group By dimensions implies the nesting order within the treemap. The last dimension in the Group By is the lowest level and this dimension name is displayed as the tile label. If the label is too long to fit on the tile, it is truncated. Full values for the labels display in the tooltip.

- A "transparent" diagonal pattern of stripes is displayed for null values.

- This is available in read-only mode on mobile devices.

The Treemap editor is composed of three panes or areas available for you to use in customizing the treemap view. These three panes are arranged vertically (differentiated from tables, pivot tables, and so on that are arranged horizontally). These panes include:

- **Layout pane** — Controls the columns that display as tiles, sections, prompts, and groupings, as well as the formatting for labels and measures. See "Drop Target Guidelines for Treemaps" and "Additional Components Common to Treemap Views" for additional information.

- **Treemap Results pane** — Displays the results of the treemap view and immediately reflects any customizations.

- **Selection Steps pane** — Displays the selection steps in effect for the analysis and treemap. See "Working with Selections of Data" for additional information.

Working with Treemap Views

You can:

- Left-click to drill on the tile or on a group. When drilling in multiple-level hierarchies, all members from the lowest levels display as tiles, and the detail level data replaces the current data. For example, when you drill down on a country name, such as United States, the treemap displays data for the state (or provinces) in that country, but not for the country itself.

- Right-click to display a context menu of actions, such as **Drill**, invoke actions, **Keep Only**, **Remove**, or focus on a specific tile. See "Right-Click Interactions in Views" for additional information.

- Hover the cursor over the group or tile to display a tooltip. The tooltip for the group displays the aggregated measure values at that intersection, the header label, and header value. The tooltip for a tile displays the tile member and the Size By and Color By labels and values.

- Drag and drop an analysis containing a treemap view on to a dashboard (see "Adding Content to Dashboards" for additional information). Once added to a dashboard, you can:
  - Print to a PDF
  - Print to HTML
  - Export to Excel
  - Export to PowerPoint

- Navigate using treemap breadcrumbs. Treemap breadcrumbs are displayed above the treemap view. Use treemap breadcrumbs to traverse back to the original view and to previous levels in the tree. Treemap breadcrumbs:
  - Reflect the contextual drill path

– Return you to the original view, and remove all the contextual drills when you click the up arrow icon. This is the page-level treemap breadcrumb or "home" (up arrow).

– Remove the contextual drills associated with the specific item when clicking a link that is not the "home" link.

■ Edit a treemap view to change the measures, properties, and so on.

To edit a treemap view:

1. Display the "Results tab: Treemap editor." For information, see "Editing Views."

2. To customize or set the properties of a treemap, click the **Treemap View Properties** button on the toolbar. The "Treemap Properties dialog" is displayed, where you can set properties:

   ■ Related to the size of the treemap (see "Treemap Properties dialog: General tab")

   ■ To show or hide the legend (see "Treemap Properties dialog: General tab")

   ■ To control the appearance of the tile, such as background and border colors, and labels (see "Treemap Properties dialog: Style tab")

3. Use the buttons on the toolbar of the editor to perform functions, such as printing or exporting a view (see "Toolbar Buttons Common to All Views") or use a context menu to perform similar functions (see "Right-Click Interactions in Views").

4. In the Layout pane, Under Style, select the **Percentile Binning** or **Continuous Color Fill** options to change the color palette of the view. See "Additional Components Common to Treemap Views" for more detailed information.

   Change the measures and attribute and hierarchal (excluding skip-level) columns to visualize your new data in more meaningful ways by using **Group By**, **Size By**, and **Color By** options.

   See "Treemap Properties dialog" for additional information on tile attributes.

5. Right-click to perform basic view interactions. For information, see "Right-Click Interactions in Views."

Editing Heat Matrix Views

Heat matrices display a two-dimensional depiction of data in which values are represented by a gradient of colors. A simple heat matrix provides an immediate visual summary of information that is well suited for analyzing large amounts of data and identifying outliers. Figure 4–20 shows an example of a heat matrix view on a dashboard page. Each product's revenue is displayed for each quarter. This heat matrix depicts product revenue outliers for each quarter. For example, sales of audio, cell phones, and smart phones were high in the fourth quarter while installation and maintenance sales were low in the first quarter.

Figure 4–20   Example of a Heat Matrix View on a Dashboard
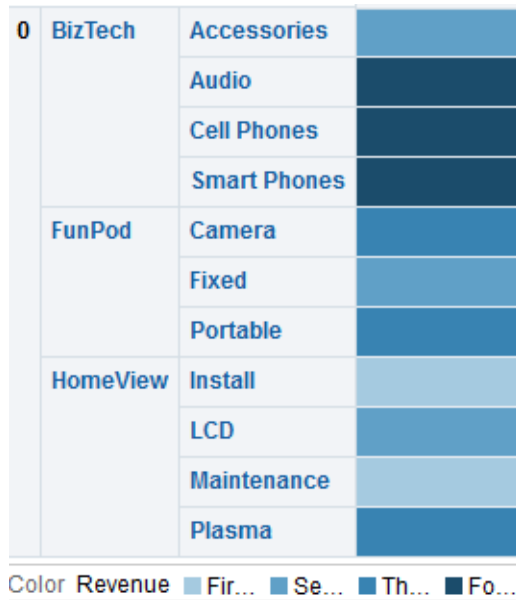
Understanding Heat Matrix Views

By default, the first measure of the analysis in the Criteria tab is selected as the Color By measure, and represents the measure's value. Additionally, the Style element defaults to Percentile Binning with "quartile" as the value for the number of bins. See the "Heat Matrix Properties dialog" for additional information.

Heat matrices have the following characteristics:

- Colored cells are formed by the grouping and intersection of the columns and rows placed in the Prompts, Sections, Rows, Columns, and Color By drop targets. See "Additional Components Common to Heat Matrix Views" and "Drop Target Guidelines for Heat Matrices" for additional information.

- Only one measure is visualized.

- Attribute and hierarchical columns are supported.

- Cells display as percentile bins or as a continuous color. See "Additional Components Common to Heat Matrix Views" for additional information.

- Cells display uniformly, in that each cell has the same width, and each cell has the same height. Cell height and width do not have to be the same.

- A legend (that can be hidden) is displayed below the heat matrix and contains:

    - One measure (selected in the Color By list) and its corresponding label.

    - Number of specified bins (for example, quartile), color-coded and labeled, or a gradient bar that is displayed as a continuous color fill and is labeled "low" to "high."

- A "transparent" diagonal pattern of stripes that is displayed for null values.

The Heat Matrix editor is composed of three panes or areas available for you to use in customizing the heat matrix view. These three panes are arranged vertically (differentiated from tables, pivot tables, and so on that are arranged horizontally). These panes include:

- **Layout pane** — Controls the grouping of cells that is displayed as sections, prompts, rows, and columns, as well as the formatting for labels and measures, and showing or hiding the legend. See "Drop Target Guidelines for Heat Matrices" and "Additional Components Common to Heat Matrix Views" for additional information.

- **Heat Matrix Results pane** — Displays the results of the heat matrix view and immediately reflects any customizations.

- **Selection Steps pane** — Displays the selection steps in effect for the analysis and heat matrix. See "Working with Selections of Data" for additional information.

Working with Heat Matrix Views

You can:

- Left-click to drill on the cell. When drilling in multiple-level hierarchies, all members from the lowest levels are displayed as cells, and the detail level data replaces the current data. For example, when you drill down on a country name, such as United States, the heat matrix displays data for the state (or provinces) in that country, but not for the country itself.

- Right-click on the outer edges to display a context menu of options, such as **Drill**, invoke actions, **Keep Only**, **Remove**, or focus on a specific cell. See "Right-Click Interactions in Views" for additional information.

- Hover the cursor over a cell to display the value, if the **Show Measure Value** option is set to **On Rollover** for the heat matrix. See "Heat Matrix Properties dialog: Titles and Labels tab" to manage this option.

- Drag and drop an analysis containing a heat matrix view on to a dashboard (see "Adding Content to Dashboards" for additional information). Once added to a dashboard, you can:

  - Print to a PDF

  - Print to HTML

  - Export to Excel

  - Refresh

  - Add it to a briefing book

  - Create bookmark links

  - Create prompted links

- Edit a heat matrix view to change the measure, properties, and so on.

- Use master-detail linking, sort, add actions, and freeze headers. Refer to the corresponding content for additional information: "What Is Master-Detail Linking of Views?," "Sorting Data in Views," "What Are Actions?," and "Heat Matrix Properties dialog: General tab."

To edit a heat matrix view:

1. Display the "Results tab: Heat Matrix editor." For information, see "Editing Views."

2. To set the properties of a heat matrix, click the **View Properties** button on the toolbar. The "Heat Matrix Properties dialog" is displayed, where you can set properties:

   - Related to the cell width, content paging, master-detail linking, and null values, or to show or hide the legend (see "Heat Matrix Properties dialog:

General tab")

- To control the appearance of sections, such as the background and border colors, or PDF printing (see "Heat Matrix Properties dialog: General tab")

- Show or hide the measure value on a cell and change the appearance of the titles and labels for prompts, sections, rows, columns, and so on (see "Heat Matrix Properties dialog: Titles and Labels tab")

3. Use the buttons on the toolbar of the editor to perform functions, such as printing or exporting a view (see "Toolbar Buttons Common to All Views").

4. In the Layout pane, select the **Percentile Binning** or **Continuous Color Fill** option to change the color palette of the view. See "Additional Components Common to Heat Matrix Views" for more detailed information.

   Change the measures and attribute and hierarchal columns to visualize your new data in more meaningful ways by using **Rows**, **Columns**, and **Color By** drop targets.

   See "Heat Matrix Properties dialog" for additional information on cell attributes.

5. Right-click to perform basic view interactions. For information, see "Right-Click Menu for Data Views."

Modifying the Layout of Data in Views

Each editor for a data view contains the "Layout pane," except for the map editor. The Layout pane is displayed slightly differently for each view type, such as graphs, performance tiles, and pivot tables. The Layout pane shows how the data in a view is laid out using drop targets. For more information on drop targets, see "Understanding Drop Targets."

You use the Layout pane to modify the way that data is arranged in the view. Specifically, you can:

- Modify the data in the view, as described in "Adding and Rearranging Columns in Views."

- Set properties, as described in "Setting Properties for View Bodies and Drop Targets."

- Add totals, as described in "Adding Totals to Tables and Pivot Tables."

- Display running sums and relative values, as described in "Displaying Running Sums and Relative Values for Measure Columns in Pivot Tables."

- Define section sliders in graphs, gauges, and funnels, as described in "Defining Section Sliders in Graphs, Gauges, and Funnels."

- Add legends to graphs by selecting the **Show In Legend** box in the Layout pane.

Understanding Drop Targets

In the Layout pane, the columns in a data view are displayed in drop targets. Drop targets indicate where a column can be inserted, moved to, or dropped. They represent a valid position for a column.

You use drop targets to modify the way data is arranged in a data view by dragging and dropping columns to different targets within the view.

> **Note:** The Layout pane for the following views differ significantly:
>
> - Heat Matrix views: See "Drop Target Guidelines for Heat Matrices" for exceptions to the information provided here about drop targets.
>
> - Performance Tile views. See "Drop Target Guidelines for Performance Tiles" for exceptions to the information provided here about drop targets.
>
> - Treemap views. See "Drop Target Guidelines for Treemaps" for exceptions to the information provided here about drop targets.
>
> - Trellis views. See "Drop Target Guidelines for Trellises" for exceptions to the information provided here about drop targets.

A data view can contain one or more of the following drop targets, depending on the type of view:

- ***<view-type>* Prompts** — Provides an interactive result set that enables users to select the data that they want to view. The values from the columns that are displayed in this drop target are used as the initial criteria. In a view, these values are displayed in a drop-down list for selection, which is often referred to as the "page edge."

- **Sections** — Populates the areas that divide the view into sections. If you select the **Display as Slider** option in this drop target, then the values of the columns that are dropped in the Sections drop target are displayed as a section slider rather than as unique views.

- ***<view-type>* area** — Simulates the plot area or the body of the view itself and assists you in seeing what the view looks like.

  For tables, this area contains the **Columns and Measures** drop target, which contains all the columns in the view. In tables, all measures are treated as columns.

  For all other data views, this area contains the following drop targets:

  – **Measures drop target** — Populates the part of a view that contains summary data. Depending on the type of view, this area might include a single **Measures** drop target (for example, for pivot tables) or might contain sub-drop targets (for example, the **Bars (Y1-Axis)** and the **Lines (Y2-Axis)** for line-bar graphs). You drag and drop measure columns to these drop targets.

  – **Other drop targets** — Used to summarize the columns in the measure drop target or targets. You generally drag and drop attribute and hierarchical columns to these drop targets.

  The other drop targets that are displayed in a view depend on the type of view as described in Table 4–10.

Table 4–10   Other Drop Targets in Data Views

View	Drop Target or Targets
Pivot table	Includes these drop targets: - **Columns** — Shows a column in a column orientation. Pivot tables can contain multiple columns. - **Rows** — Shows a column in a row orientation. Pivot tables can contain multiple rows.

Table 4–10   (Cont.) Other Drop Targets in Data Views

View	Drop Target or Targets
Gauge	**Rows** — Shows the columns that are displayed in the gauges.
Bar, line, area, line-bar, time series line, pareto, scatter, or bubble graph	Includes these sub-drop targets within the main drop target (Bars, Line, Area, Bars & Lines, Line, Points or Bubbles). Target names differ depending on graph type. For example, Group By is Bubbles for bubble graphs and Points for scatter graphs. ■ **Group By** — Clusters the axis labels into groups. For example in a vertical bar graph whose criteria includes the Region, District, and Dollars column, if this drop target contains the Regions column, then the data is grouped by region on the horizontal axis. ■ **Vary Color By** — (Not enabled for pareto.) Shows each column value or column value combination in a different color.
Radar graph	**Radar Sections** — Shows column values as points on each line along a radius of the circle.
Pie graph	Includes these drop targets: ■ **Pies** — Shows each column value or column value combination as a separate pie. ■ **Slices** — Shows each column value or column value combination as a separate slice of the pie.
Waterfall graph	Includes this drop target: ■ **Group By** — Clusters the axis labels into groups. Attribute and hierarchical columns are placed in the Group By area. ■ If you are using a measure hierarchy, a generic measure column is placed in the Bars drop target and the measure dimension is placed in the Group By drop target. (Measure hierarchies apply to Essbase data sources.) See *Metadata Repository Builder's Guide for Oracle Business Intelligence Enterprise Edition* for additional information on measure dimensions and measure hierarchies.
Funnel graph	**Stage** — Shows each column value as a stage in the funnel.

Table 4–10   (Cont.) Other Drop Targets in Data Views

View	Drop Target or Targets
Trellis	Includes these drop targets: ■ **Columns** — Shows a column in a column orientation. Trellises can contain multiple columns. ■ **Rows** — Shows a column in a row orientation. Trellises can contain multiple rows. Includes these sub-drop targets within the main drop target **Visualization** for simple trellis views: ■ **Group By** — Clusters the measures into groups. ■ **Color By** — Shows each measure in a different color, for example, in a vertical bar graph of a trellis, all the bars for Revenue are blue while the bars showing Billed Quantity are red. In a Scatter graph, use this drop target to vary the points by color. In a Bubble graph, use this drop target to vary the bubbles by color. ■ **Bar Axis** — In a Line-Bar graph comparing revenue and billed quantity by region, shows one of two measures, such as Revenue. ■ **Line Axis** — In a Line-Bar graph comparing revenue and billed quantity by region, shows one of two measures, such as Billed Quantity. ■ **Pies** — In a Pie graph, adding a dimension here creates multiple pies. ■ **Slices** — In a Pie graph, shows measures as slices of varying colors within pies. ■ **Points** — In a Scatter graph, shows dimensions as points. Each dimension member is shown as one point. ■ **Horizontal Axis** — The measure values control the horizontal position of the members. In a Scatter graph, you can drop one measure in this target. In a Bubble graph, each measure in this drop target is shown as one bubble. ■ **Vertical Axis** — In a Scatter graph, shows one of two measures, such as a point. In a Bubble graph, shows one of three measures as a bubble. ■ **Bubbles** — In a Bubbles graph, shows measures as bubbles of varying size. ■ **Size** — In a Bubble graph, shows one of three measures as the size of a bubble. Includes these sub-drop targets within the main drop target **Visualization** for advanced trellis views: ■ **Areas** — In a Spark Area microchart, shows columns displayed as areas. ■ **Bars** — In a Spark Bar microchart, shows columns displayed as bars. ■ **Lines** — In a Spark Line microchart, shows columns displayed as lines.
Performance Tile	Includes this drop target: ■ **Measure** — Shows the specific value of the column that displays on the tile. See "Drop Target Guidelines for Performance Tiles" for additional information.

Table 4–10   (Cont.) Other Drop Targets in Data Views

View	Drop Target or Targets
Treemap	Includes these drop targets: ■ **Group By** — Represents the top level of hierarchical data that is sliced to produce or describe a container of aggregated values. The aggregated values display as rectangular tiles. ■ **Size By** — Represents the distribution of the tiles within their parent. The size of the children are always equal to the size of their parent. ■ **Color By** — Represents a distribution of values across all of the tiles at the same level.
Heat Matrix	Includes these drop targets: ■ **Rows** — Shows a column in a row orientation. Heat matrices can contain multiple rows. ■ **Columns** — Shows a column in a column orientation. Heat matrices can contain multiple columns. ■ **Color By** — Represents the measure value. The higher the value, the denser the cell color.

■ **Excluded** — Excludes columns from the view results but leaves the columns as part of the analysis. See "Columns in the Excluded Drop Target" for more information.

In addition, each *<view-type>* area, except for the Table area, the Waterfall Graph area, Pareto Graph area, Treemap area, Heat Matrix area, and the Trellis (Simple) area, contains the Measure Labels element. The Measure Labels element represents the labels for all the Measures columns in the drop targets in the Measures area. You can modify how measure labels are shown in a view by dragging it from one drop target and dropping it in another. For example, in a vertical bar graph, you can show each measure label in a different color by dragging and dropping the Measure Labels element to the Vary Color By drop target.

In pivot tables, you can also edit the format of measure labels or hide them.

Columns in the Excluded Drop Target A column in the Excluded drop target is not included in the view results but still remains as part of the analysis. A column can be placed in the Excluded drop target after views have been created for the analysis in various ways. A general rule is that a column is placed in the Excluded drop target for a view if it is not added explicitly to one or all views.

Some of the ways in which a column is placed in the Excluded drop target are as follows:

■ You select the **Exclude column** option from the right-click menu in a view, such as a table or pivot table.

■ You select a column from the Subject Areas pane to add to views in an analysis as described in the following scenarios:

  – Criteria tab — If you add a column from the Subject Areas pane to the Selected Columns pane after displaying the analysis results and the **Exclude from existing views, but display in new views** option is selected for the **Display of Columns Added in the Criteria tab** property in the "Analysis Properties dialog: Data tab," then the column is placed in the Excluded drop target of the existing views' Layout pane but included in any new views that you add.

- Results tab — The behavior might differ depending on whether you add columns to a view editor or to the Compound Layout:

    * View Editor — If you add a column from the Subject Areas pane to a view, then you place the column in that view. The column is placed in the Excluded drop target for all other views in the analysis.

    * Compound Layout — If you double-click a column in the Subject Areas pane, then you place the column in a default drop target of the Layout pane for all existing views in the current Compound Layout. The column is placed in the Excluded drop target for all other views in the analysis.

        If you drag and drop a column from the Subject Areas pane to a tabular view, then you place the column in the drop target for that view. The column is placed in the Excluded drop target for all other views in the analysis.

If you want a column that is in the Excluded drop target to be displayed in a view, then you can move it. Display the Layout pane for the view, and drag and drop the column from the Excluded drop target to the desired one.

Excluding columns differs from removing columns. You can use the **Remove Column** option from the **More Options** button in the Layout pane for a view to remove a column entirely from the analysis.

Aggregation and the Excluded Drop Target In a pivot table or graph that includes columns in the Excluded drop target, an aggregation rule is applied to aggregate measures in the data body of the view to a single value. For example, suppose that you have the following columns in the Selected Columns pane:

```
Region   City    Dollars
East       NY    1000
East      Boston  500
```

If the City column is placed in the Excluded drop target, then the view typically displays the following:

```
East   1500
```

The aggregation rule is applied to aggregate 1,000 and 500 into 1,500. In a pivot table or graph, the aggregation rule that is specified in the "Edit Column Formula dialog" applies. For a pivot table, you can select a specific aggregation rule using the More Options menu in the Layout pane.

Suppose that you wanted the table, pivot table, or graph to show the following values:

```
East   1000
East    500
```

To achieve this aggregation, include both Region and City columns in the view layout, but hide the City column using its "Column Properties dialog: Column Format tab."

Drop Target Guidelines for Graphs and Funnel Graphs The following restrictions and guidelines apply to dragging columns from one drop target and dropping them in another in graphs and funnel graphs:

- A bubble graph requires at least three measures. Plot one measure on the horizontal axis, another measure on the vertical axis, and a third measure on the bubble size axis.

- In a bubble, line-bar, scatter, or funnel graph, you cannot drag and drop measure labels.

- A pareto graph can have only one measure.

  If you drop another measure on the Measures drop target, then the measures are swapped; that is, the existing measure is replaced by the newly dropped measure and is moved automatically to the Excluded drop target.

- A time series line graph requires a single date or date-time data column to be selected on the horizontal axis. It has a single vertical axis, but supports multiple data series.

- A scatter graph requires at least two measures. For example, you can plot one measure column on the horizontal axis and another measure column on the vertical axis. These measures are plotted for values on the Group By axis.

- A funnel graph uses two measures but only one is required. If you do not select a second measure, then the first measure is used for the second measure. If you have selected two measures and then select a new measure, then the new measure replaces the measure currently in the Actual Measures drop target.

- A stacked bar graph requires at least two measures to allow comparison of values.

- For graphs in master-detail relationships, if you want to hide the slider that is created to accommodate detail columns, in the Sections drop target, deselect the **Display as Slider** check box.

Drop Target Guidelines for Trellises The following guidelines apply to working with drop targets in trellises:

- **Expanding Drop Targets in Trellises** — The Layout Pane of the trellis editor is different in that it is vertical rather than horizontal. When drop targets contain more data than can be shown within this more narrow Layout Pane, the drop target containers expand on hover. That is, when you hover the mouse over an overfilled drop target, you see the complete selection of measures and columns, and you can move and reorder even the measures and columns that were not visible before the hover. The chosen item appears with a slight transparency as you drag it.

- **Placement of Measures** — The following are considerations to keep in mind as you work with measure columns in trellis views:

  - Measures can be reordered within the measures drop targets by dragging left or right.

  - In simple trellis views, measure columns can be placed only on the measure edge of Color By or Group By.

  - In some simple trellis visualizations (scatter graphs, bubble graphs, and line-bar graphs), you can swap measures. If you drag an existing measure from one axis and drop it in the target for another axis, the two measures' positions in the view are swapped.

  - Scatter graphs, bubble graphs, and line-bar graphs allow a single measure per axis, as follows:

    - Scatter graph drop targets: Horizontal Axis, Vertical Axis

    - Bubble graph drop targets: Horizontal Axis, Vertical Axis, Size

    - Line-bar graph drop targets: Bar Axis, Line Axis

- In advanced trellis views, measures comprise the innermost column headers of the trellis.

- When moving measures from the Color By drop target to or from the Group By drop target:

  - Dragging a single measure moves all the measures along with it. (This is known as *sticky* behavior.)

  - Dragging a new measure into the view moves all existing measures to wherever you place the new measure.

- To place a measure on the non-measure edge of a visualization, or in the Rows target or Columns target, you must first convert the measure to an attribute column. You do this in the "Edit Column Formula dialog: Column Formula tab."

- Attribute columns can be dragged out of the Measures drop target without causing the drop target or the measures inside it to move with the attributes.

Drop Target Guidelines for Performance Tiles

The Layout pane for performance tiles is composed of two areas: **Measure** drop target and **Labels** area. These two areas allow performance tiles to communicate status through simple formatting and by focusing your attention on the simple, need-to-know facts presented prominently on the tile.

The following guidelines apply to working with these two areas in performance tile views:

Measure drop target

- By default, the first measure in the analysis on the Criteria tab is selected as the performance tile measure. You can select a different measure from the Measure list, drag and drop the measure onto the Measure drop-target, or you can double-click a new measure from the subject area to add the measure to the Measure list.

- When you hover the cursor over the name of the measure in the Layout pane, the folder name displays.

- You can edit the format for a measure column by clicking the **Format Tile** button. Use this button to display the "Column Properties dialog: Style tab."

  > **Note:** If the measure is deleted from the Criteria tab, the tile will continue to display. The display on the tile will be **Measure not defined**.

Labels area

- *Name:* By default, the measure name is displayed on the tile.

  - You select the **Use measure name** check box to automatically associate the measure name (if available) with the label.

  - You can edit the format of the label name for the measure by clicking the **Format Tile** button. Use this button to display the "Column Properties dialog: Style tab." If the label name is too long, it is truncated with an ellipsis (for example, Performanc. . .).

- *Description:*

- You select the **Use measure description** check box to automatically associate the column description (if available) with the label.

- Click in the label **Description** text box to describe the tile. The number of lines for the text varies according to the size of the tile. For example, a small tile may only accommodate one line, whereas a large tile may accommodate three. A very small tile many not have room for any text. If the description cannot accommodate all of the text, it is truncated with an ellipsis (for example, Quarterly sales foreca . . .).

- You can edit the format for the label description of the label name by clicking the **Format Tile** button. Use this button to display the "Column Properties dialog: Style tab."

Note: Performance tile views do not contain the **Excluded** drop target.

Presentation variables are not supported for the Labels area.

Drop Target Guidelines for Treemaps

The Layout pane for treemaps is composed of six drop-target areas: **Prompts**, **Sections**, **Group By**, **Size By**, **Color By**, and **Excluded**.

You use the Layout pane areas to visualize treemaps, which are constrained, hierarchical data. You can see trends and anomalies in large quantities of data and study individual values as well.

The following guidelines apply to working with these drop targets in treemap views:

- **Prompts** — Select an attribute or hierarchical column (excluding ragged and skip-level) by which to filter the treemap. You can drag and drop one or more columns from the Group By or Sections area or from the Subject Areas pane to the Prompts area.

- **Sections** — Select an attribute or hierarchical column (excluding ragged and skip-level) by which to section the treemap. For example, region that is grouped by year may be the container to display a treemap that is sized by revenue and colored by year-ago revenue. You can drag and drop one or more columns from the Group By or Prompts area or from the Subject Areas pane to the Sections area.

- **Group By** — Represents the top level of the hierarchical data that is sliced to produce or describe a container of aggregated values. The aggregated values display as tiles.

  - The group area creates a header or group for the measure columns that are specified in the Size By and Color By areas. If more than one column of data is represented in the treemap, a title bar is shown for the grouping. For example, region that is grouped by year may be the container to display a treemap that is sized by revenue and colored by year-ago revenue. Region displays in the title bar.

  - All attribute and hierarchical columns defined on the Criteria tab are initially displayed in the Group By area in the order in which they were added to the Criteria tab. Skip-level hierarchies are not supported in the Group By area of the treemap.

  - You can drag one or more columns from the Subject Areas pane to the Group By drop target.

- Note that if you add an attribute or hierarchical column to the treemap view after displaying the analysis results, the new column is added as a subordinate column to the Group By drop target if the **Display in existing views and new views** option is selected for the display of **Columns Added in the Criteria tab** property in the "Analysis Properties dialog: Data tab."

- **Size By** — Represents the distribution of the tiles within their parent. The size of the children is always equal to the size of the parent.

  - Each rectangle's area is the aggregated value for the associated measure based on the applied filters (for example, prompted or filtered by region).

  - The first measure added in the Criteria tab is displayed as the Size By measure.

  - You can select a measure from the **Size By** list. This list initially contains all measures added to the analysis in the Criteria tab.

  - You can drag and drop a measure column from the Subject Areas pane to the Size By drop target. The current Size By measure is replaced with the new measure, and the treemap redraws to reflect the new measure. The new measure column is also placed in the Color By list for selection.

  - If you add a measure column to the treemap view by double-clicking after displaying the analysis results, the new measure is placed into both the Size By and Color By lists and made available for selection.

  - If you remove the Size By measure column in the Criteria tab, you receive the following error message: "Insufficient number of measures. This view requires a Size By measure."

- **Color By** — Represents a distribution of values across all of the tiles at the same level and adds additional scope to the analysis providing a "qualitative" perspective to the treemap.

  - The second measure added in the Criteria tab is displayed as the Color By measure.

  - You can select a measure from the **Color By** list. This list initially contains all measures added to the analysis in the Criteria tab.

  - You can drag and drop a measure column from the Subject Areas pane to the Color By drop target. The current Color By measure is replaced with the new measure, and the treemap redraws to reflect the new measure. The new measure column is also placed in the Size By list for selection.

  - If you remove the Color By measure column in the Criteria tab, the Size By measure is displayed as the new Color By measure.

    The Color By drop target is divided into two options:

    * **Style** — Select the style for the treemap. Style contains two options: Percentile Binning and Continuous Color Fill. If you select Percentile Binning as an option, then you can enter the number of bins, choose a color palette, and enter a custom label for your bins. If you select Continuous Color Fill, the treemap tiles display as a gradient color scheme.

    * **Color** — Select the color palette for the treemap. To reverse the order of the colors displayed in the Color drop down list from, click the arrows to the right of the Color list.

■ **Excluded** — Contains columns that do not participate in the treemap view. See "Understanding Drop Targets" for additional information.

Drop Target Guidelines for Heat Matrices

The Layout pane for heat matrices is composed of six drop-target areas: **Prompts**, **Sections**, **Rows**, **Columns**, **Color By**, and **Excluded**.

You use the Layout pane areas to visualize heat matrices. You can see anomalies in large quantities of data and study individual values as well.

The following guidelines apply to working with these drop targets in heat matrix views:

■ **Prompts** — Select an attribute or hierarchical column by which to filter the heat matrix. The Prompts area is initially empty. You can drag and drop one or more columns from the Sections, Rows, or Columns area or from the Subject Areas pane to the Prompts area.

■ **Sections** — Select an attribute or hierarchical column by which to section the heat matrix. The Sections area is initially empty. You can drag and drop one or more columns from the Prompts, Rows, or Columns area or from the Subject Areas pane to the Sections area.

■ **Rows** — Represents a column displayed in row alignment.

  – All attribute and hierarchical columns defined on the Criteria tab are initially displayed in the Rows area in the order in which they were added to the Criteria tab.

  – You can drag one or more attribute or hierarchical columns from the Subject Areas pane to the Rows drop target, or you can double-click one or more attribute or hierarchical columns to include in the Rows drop target. You can also drag and drop one or more attribute or hierarchical column from the Columns, Prompts, or Sections areas.

  – Note that if you add an attribute or hierarchical column to the heat matrix view after displaying the analysis results, the new column is added as a subordinate column to the Rows drop target.

■ **Columns** — Represents a column displayed in column alignment.

  – The Columns drop target is initially empty.

  – You can drag one or more attribute or hierarchical column from the Subject Areas pane to the Columns drop target. You can also drag and drop one or more attribute or hierarchical column from the Rows, Prompts, or Sections areas.

■ **Color By** — Represents the measure value for the grouping and intersection of the row and column.

  – The first measure added in the Criteria tab is displayed as the Color By measure.

  – You can select a measure from the **Color By** list. This list initially contains all measures added to the analysis in the Criteria tab.

  – You can drag and drop a measure column from the Subject Areas pane to the Color By drop target. The current Color By measure is replaced with the new measure, and the heat matrix redraws to reflect the new measure.

> **Note:** If you add a measure column to the heat matrix view after displaying the analysis results, then the new column replaces the existing column in the visualization and in the Color By drop target.

– If you remove the Color By measure column in the Criteria tab, it is removed from the Color By list. The new measure value for the Color By list defaults to the last measure value added to the analysis.

The Color By drop target is divided into two options:

* **Style** — Select the style for the heat matrix. Style contains two options: **Percentile Binning** and **Continuous Color Fill**. If you select Percentile Binning as an option, then you can enter the number of bins, choose a color palette, and enter a custom label for your bins. If you select Continuous Color Fill, the heat matrix tiles display as a gradient color scheme.

* **Color** — Select the color palette for the heat matrix.

■ **Excluded** — Contains columns that do not participate in the heat matrix view. See "Understanding Drop Targets" for additional information.

Adding and Rearranging Columns in Views

Using the view editor and the Layout pane, you can modify and change the order of columns in the following ways:

■ Drag and drop columns in tables and pivot tables to the desired positions in the editor using the handles and drop targets. For example, if you have two columns in the Rows section of a pivot table, reverse the order of the columns by dragging and dropping the first column after the second one. In a table, you can drag and drop columns, but you cannot stack columns, as you can in a pivot table.

You can also drag and drop columns in this way in the Compound Layout.

> **Note:** If you have deselected **Move Columns** in the "Analysis Properties dialog: Interactions tab," you cannot move a column in a view at runtime.

■ Drag and drop columns in the Layout pane. A target is active and ready for the "drop" when it appears highlighted. When you hover the mouse pointer over a column in the Layout pane, the cursor state changes from the pointer to a move cursor when you can "grab" the column and move it over a drop target. For example, you can move a column in a pivot table from the Rows drop target to the Sections target to create a unique pivot table for each value in the column. For details of dragging and dropping columns in the Layout pane of the trellis editor, see "Drop Target Guidelines for Trellises."

For details of dragging and dropping columns in the Layout pane of the Treemap editor, see "Drop Target Guidelines for Treemaps."

For details of dragging and dropping columns in the Layout pane of the Heat Matrix editor, see "Drop Target Guidelines for Heat Matrices."

For more information on drop targets, see the "Layout pane."

- Add a column to a graph or gauge. To do so, drag the column from the Subject Areas tab to the appropriate location in the view editor or to a drop target in the Layout pane.

- Remove columns in the Layout pane. For example, you can remove a column in a view by selecting **Remove Column** from the **More Options** button. Removing columns differs from excluding columns, which is described in "Understanding Drop Targets."

This list provides only a partial summary of where dragging and dropping can occur. You can drag and drop columns and catalog objects whenever you see the "Subject Areas pane" and "Catalog pane." You can also drag and drop items in views on dashboards. See "Columns in the Excluded Drop Target" for more information.

Setting Properties for View Bodies and Drop Targets

In the Layout pane, you can click the **Properties** button to display a dialog in which you specify properties for the view body (such as Pivot Table) or for a drop target (such as Sections). For example, you can specify whether to display headings, set background color, and insert page breaks.

To modify view body or drop target properties:

1. In the view editor, display the Layout pane and click the **Properties** button beside the view body (for tables and pivot tables) or drop target name.

   The Properties dialog for the view body or drop target is displayed.

2. Complete the appropriate fields and click **OK**.

Adding Totals to Tables and Pivot Tables In the Layout pane, you can add totals for columns in tables and pivot tables. You can position the totals at various locations in the view. You can add totals for columns that are displayed on the various edges. For each measure, the total uses the aggregation rule for that measure. The default aggregation rule for a measure column is specified in the Oracle BI repository, or by the original author of the analysis.

If you specify a total in the Rows or Columns drop target of a pivot table, then the totals that are displayed are the result of the columns that are specified in the Measures drop target. Total values are not displayed on the Columns or Rows edges of the pivot table but rather in the data in the center of the pivot table.

To add totals to a view:

1. Display the "Layout pane" for the view.

2. To add grand totals to the entire view:

   - For a table, in the Columns and Measures drop target, click the **Totals** button, then click the location such as **Before**.

   - For a pivot table, in the Rows or the Columns drop target, click the **Totals** button, then click the location such as **After**.

3. To turn on and off the totals that apply to all the values in the drop target, click the **Totals** button beside the drop target name, such as Sections. Then select the location for the total, such as **Before** the data items. A totals area is added to the view.

Displaying Running Sums and Relative Values for Measure Columns in Pivot Tables

You can use the Layout pane to display running sums or the relative value of measure columns in pivot tables, as described in the following sections.

Displaying Running Sums for Measure Columns in Pivot Tables In a pivot table, you can display numeric measures as running sums, where each consecutive cell for the measure displays the total of all previous cells for that measure. This option is a display feature only that has no effect on actual pivot table results.

Typically, running sums are displayed for duplicated attribute columns or for measure columns for which the option to show data as a percentage of the column has been selected, with the last value being 100 percent. Running sums apply to all totals. The running sum for each level of detail is computed separately.

Column headings are not affected when the running sum option is selected. You can format the column heading if you want it to indicate that the running sum option is in effect.

The following usage rules are in effect for running sums:

- A running sum is incompatible with the SQL RSUM function (the effect would be a running sum of the running sum).

- All running sums are reset with each new section. A running sum does not reset at a break within a section or continued across sections.

- If a measure does not display in a single column or in a single row, then the measure is summed left to right and then top to bottom. (The lower right cell contains the grand total.) A running sum does not reset with each row or column.

- You cannot specify rolling minimums, maximums, and averages in the Layout pane. You can include these if administrators create formulas for them in the metadata repository.

- Where the measure label is located determines a running sum's direction. For example, if your measure label is located on a row edge, then it will run the sum horizontally.

  If a measure label is located on a row's edge and runs the sum horizontally and values are present in all columns, then the sum is calculated correctly. However, if some values are missing ("sparse data") and the sum runs horizontally, then the sum is not calculated correctly.

To display a measure as a running sum:

1. In the Layout pane for the pivot table, in the Measures area, click the **More Options** button for the row or column to be summed and select **Display as Running Sum**.

Displaying Relative Values for Measure Columns in Pivot Tables In a pivot table, you can dynamically convert a stored or calculated measure into a percent or an index. This shows the relative value of the item, compared to the total, without the need to explicitly create a calculated item for it. You can view the measure as a percentage between 0.00 and 100.00, or as an index between 0 and 1.

For example, if you are using a pivot table to examine sales by product, then you can duplicate the sales measure and view it as a percentage of the total. This enables you to see the actual sales, and the percentage of sales, that each product accounts for.

To show an item as a relative value:

1. In the Layout pane for the pivot table, click the **More Options** button for the item you want to show as a relative value.

> **Note:** The following step is optional. When you duplicate the measure column in the pivot table, you can see both the total for the measure and its relative value. This eliminates the need to add the column twice on the Criteria tab to see the total and its relative value in the pivot table.

2. To duplicate the measure column, select **Duplicate Layer**.

The measure is displayed a second time in the pivot table, with the same name.

3. Click the **More Options** button, select **Show Data As**, select **Percent of** or **Index of**, then select the appropriate option.

> **Note:** The **Show Data As** option is available only for items that are stored or calculated measures.

4. To rename the new column, click the **More Options** button, select **Format Headings** and in the Edit Format dialog, enter a value in the **Caption** field.

Defining Section Sliders in Graphs, Gauges, and Funnels

A section slider displays members of one or more attribute or hierarchical columns as values on a rectangular bar and provides mechanisms to select a value. You use a section slider to limit the data that is shown in a graph, gauge or funnel.

Figure 4–21 shows an example of a section slider. It displays the members of the Product Type column. Using this slider, for example, you can limit the data that is shown in a graph, gauge, or funnel to a particular product type, such as Cell Phones.

Figure 4–21   Example of a Section Slider
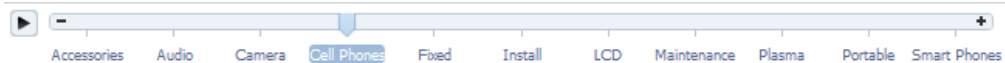
A section slider consists of the following components:

- **Slider bar** — Displays the members of one or more attribute or hierarchical columns as values along a rectangular bar.

> **Note:** The administrator configures the maximum number of values that can be displayed on the slider bar. However, you can set a maximum lower than the system maximum by setting the **Maximum number of section slider values** field in the "Section Properties dialog."

- **Slider thumb** — Indicates the current value of the section slider. The thumb in Figure 4–21 indicates that the current value is Cell Phones. You can drag the thumb to the desired value.

- **Decrease button** — Moves the slider thumb to the value to the left of the current value. For example, in Figure 4–21, clicking the **Decrease** button (the second button from the left on the slider) moves the slider thumb to the value Camera.

- **Increase button** — Moves the slider thumb to the right of the current value. For example, in Figure 4–21, clicking the **Increase** button (the right-most button on the slider) moves the slider thumb to the value Fixed.

- **Play button** — Sequentially moves the thumb through the slider values. For example, in Figure 4–21, clicking the **Play** button (the left-most button on the slider) moves the slider thumb to the value Fixed and then to Install, and so on. After being clicked, the **Play** button changes to a **Pause** button to allow you to stop on a particular value.

As the thumb moves through the slider values, the minimum and maximum values of the axes are based on data across all slider sections and remain the same. The exception to this is in pareto graphs, where the axes are plotted from 0% to 100%.

To define a section slider in a graph, gauge, or funnel:

1. Open the analysis that contains the graph. gauge, or funnel in which you want to define a section slider.

2. Click the "Analysis editor: Results tab."

3. Click the **Edit View** toolbar button in the graph, gauge, or funnel view.

    The "Results tab: Graph editor," "Results tab: Gauge editor", or "Results tab: Funnel editor," is displayed.

4. For each column to be displayed on the section slider, in the "Layout pane" of the Graph, Gauge, or Funnel editor, drag and drop the column to the Sections drop target.

5. Select **Display as Slider**.

6. Close the editor and examine the slider on the Results tab.

7. Click the **Save Analysis** toolbar button to save your changes.

Modifying Values and Performing Write Back

Users of a dashboard page or an analysis might have the ability to modify the data that they see in a table. This ability is often referred to as "write back." Users can update a value in the view that is written back to the record in the data source or is used in other views in the analysis.

For example, you can create an analysis that has Sales Quota Amount defined as a write back field, Sales Amount as a field from the data warehouse, and Percentage of Quota as a calculated field (Sales Amount/Sales Quota Amount). When viewing the analysis a user can modify the Sales Quota Amount and the Percentage of Quota field recalculates appropriately.

> **Note:** If a logged-on user is already viewing a dashboard that contains an analysis where data has been modified using write back, the data is not automatically refreshed in the dashboard. To see the updated data, the user must manually refresh the dashboard.

About Modifying Values and Various Types of Users

The ability to modify values affects the following types of users:

- Administrators of the repository configure the columns in the repository to allow for write back.

■ Administrators set privileges for write back and prepare a write-back template, and administrators and content designers configure for write back from table views in dashboards and analyses.

■ End users modify records in table views.

Process for Write Back

The following list describes the steps in the process of write back:

1. As the content designer, you work with the administrator of the repository to assess the reporting needs in the organization and make a list of write-back columns needed and the analyses in which they should be displayed.

   Hierarchical columns do not support the write-back capability but attribute columns, measure columns, and double columns do support the write-back capability. For double columns, you can write back to the display column. No automatic translation of the code column is provided.

2. The administrator of the repository configures the Oracle BI Server and the columns that should be available for write back, as described in *Metadata Repository Builder's Guide for Oracle Business Intelligence Enterprise Edition*.

3. The administrator performs the following tasks:

   a. Prepares a file of SQL code to use as the "template" for write back.

   b. Grants appropriate privileges for setting up and using write back. For example, the administrator gives you the privileges to set up views in which users can modify values.

   For information on the write-back template and on privileges, see "Configuring for Write Back in Analyses and Dashboards" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

4. As the content designer, you enable one or more columns for write back, as described in "Adding the Write-Back Capability to a Column."

5. As the content designer, you enable a table view for write back, as described in "Adding the Write-Back Capability to a Table View."

6. As the content designer, you provide users with information on working with write back, as described in "Modifying Data in a Table View in a Dashboard Page or Analysis."

7. Users modify the values in views as appropriate.

Adding the Write-Back Capability to a Column

To enable the write-back capability for a column, administrators and content designers use the Write Back tab on the Column Properties dialog. Correct privileges must be set, and the attribute, measure, or double column must be set as writeable in the repository. Ensure that the column relates to the write-back template that the administrator prepared. All the table views that include that column can display it as available for write back.

To enable the write-back capability for a column:

1. Open the analysis for editing in the Criteria tab.

2. Click the **Options** button beside a column on which you want to enable write back and select **Column Properties**.

The "Column Properties dialog" is displayed.

3. Click the Write Back tab.

   If the column has been enabled for write-back in the repository, then the **Enable Write Back** box is available.

4. Click the **Enable Write Back** box.

   Additional options for write-back are displayed.

5. In **Text Field Width** box, specify the width of the column.

6. Click **OK** to close the Column Properties dialog.

Adding the Write-Back Capability to a Table View

To enable the write-back capability for a table view, use the Write Back tab of the Table Properties dialog.

To enable the write-back capability for a table view:

1. In the Analysis editor, open the table view for editing.

2. Click the **View Properties** toolbar button.

   The "Table Properties dialog" is displayed.

3. Click the Write Back tab.

4. Ensure that the **Enable Write Back** box is selected.

5. Select the **Template Name** box, then type the name of the template to employ for writing back values.

   Check with the administrator for the appropriate template name.

6. Click **OK**.

About the Modes for Write Back in Views

If you enable write back in a view and accept the system defaults, then a user has two modes in which to work with values:

■ View mode: In this mode, a user views values. The user lacks the ability to modify values, before clicking the **Update** button to enter Edit mode.

Note: If a logged-on user is already viewing a dashboard that contains an analysis where data has been modified using write back, the data is not automatically refreshed in the dashboard. To see the updated data, the user must manually refresh the dashboard.

■ Edit mode: In this mode, a user modifies values. To enter Edit mode, the user clicks the **Update** button on the view, when it is available. When in Edit mode, the user enters data in columns and can click the following buttons:

   – **Revert:** Changes back to the original values any modifications that the user has made but has not yet written back to the data source. Keeps the user in Edit mode.

   – **Apply:** Writes back to the data source any changes that the user has made and refreshes the view to display the most current data based on those changes. Keeps the user in Edit mode.

– **Done:** Writes back to the data source any changes that the user has made, refreshes the view to display the most current data based on those changes, and returns the user to View mode.

You can modify the labels for these buttons using the options in the Write Back tab of the Properties dialog for the view. You can also use the **Toggle Table Mode** box to indicate that users do not toggle between View and Edit mode. Instead, they remain always in Edit mode. When toggling is disabled, the **Update** button is not displayed on the view.

Interactions in Views

You can specify which interactions are available when users:

- Click in a data view. See "Click Interactions in Views."

- Right-click in a graph, heat matrix, pivot table, treemap, table, or trellis view at runtime. See "Right-Click Menu for Data Views."

Click Interactions in Views

You can specify which interactions are available when users click (that is, left-click) in a data view. The following types of interactions are available:

- **None** — Specifies that nothing happens when users click the column heading or a value. This option turns off drilling for attribute columns; it does not turn off drilling for hierarchical columns.

- **Drill** — Enables users to drill down to more detailed information. See "Drilling in Views."

- **Action Links** — Enables users to click a hot spot in a data view and then select an action link to execute an action, such as navigating to a saved analysis or invoking an Enterprise Java Bean (EJB). See Chapter 11, "Working with Actions."

- **Send Master-Detail Events** — Sends master -detail events in a master-detail relationship. See "What Is Master-Detail Linking of Views?" and "Linking Views in Master-Detail Relationships."

You specify which left-click interactions are available at the criteria level using the "Column Properties dialog: Interaction tab." These left-click interactions take effect in all data views.

> **Note:** You specify runtime interactions for views (for example, sort or move) by using the "Analysis Properties dialog: Interactions tab."

Right-Click Interactions in Views

You can specify which interactions are available when users right-click in a graph, heat matrix, pivot table, table, treemap, or trellis view at runtime. For example, you can right-click to **Sort** or **Drill**. See "Right-Click Menu for Data Views" for additional information. Not all right-click interactions are available for each view type at runtime.

> **Note:** Right-click interactions on graphs are supported only for HTML5 graphs, beginning with Oracle Business Intelligence Enterprise Edition 12*c* Release 1 (12.2.1).

You specify which right-click interactions are available at the analysis level using the "Analysis Properties dialog: Interactions tab." These right-click interactions take effect in graph, heat matrix, pivot table, table, treemap, and trellis views at runtime.

Note: Most right-click interactions are not available for graphs in trellis views (Simple Trellis and Advanced Trellis). You can, however, include actions links as right-click interactions for graphs in trellis views. In addition, right-click on text is allowed, meaning the user can right-click on text in a trellis view in the same manner as in a pivot table view. This includes data cells in an advanced trellis that have Visualization set to Text.

Best Practice: Include the selection steps view when using right-click interactions to track which steps and constraints have been applied. See "Working with Selections of Data" for additional information.

Drilling in Views

If the administrator has configured columns for drilling in the subject area, then you can allow users to drill in data in gauges, graphs, heat matrices, maps, pivot tables, tables, treemaps, and trellises. Drilling is a way to navigate through data in views quickly and easily. This section provides the following information on drilling:

- "In Which Columns Can I Drill?"
- "How Do I Allow Drilling in Columns?"
- "What are the Effects of Drilling on Filters and Selection Steps?"
- "Related Topics"

In Which Columns Can I Drill?

You can drill in attribute columns and hierarchical columns. For information on drilling in columns, see "About Drilling in Results."

How Do I Allow Drilling in Columns?

As the content designer, you specify whether users can drill in particular columns in views on dashboards. You control whether drilling is allowed in particular columns by specifying options in the "Column Properties dialog: Interaction tab."

A primary interaction governs what you can do against a column, for example, drill, send master-detail, and so on. If drilling is not set as the primary interaction of a particular column (that is, **Drill** has not been specified as the value for the **Column Heading: Primary Interaction** or **Value: Primary Interaction** box in the "Column Properties dialog: Interaction tab"), then you can allow drilling as a right-click interaction in graph, heat matrix, table, and pivot table views at runtime. To do so, you select the **Drill (when not a primary interaction)** option in the "Analysis Properties dialog: Interactions tab."

What are the Effects of Drilling on Filters and Selection Steps?

Drilling in columns affects their filters and selection steps as described in the following list. For more information, see Chapter 6, "Filtering and Selecting Data for Analyses."

- **Hierarchical columns:** No steps are added to the selection when you expand or collapse members in a hierarchical column. That is, the expanding and collapsing does not change the selection of data for the column.

    For example, suppose that you create a pivot table in which you select 2008 as the only member in the Time dimension, and you arrange the data so that this one Time member is the column header in the pivot table. You can expand to show quarters in 2008 and then the months in the last quarter. At this point the pivot table has child members for 2008, Q1 2008, Q2 2008, Q3 2008, Q4 2008, October 2008, November 2008, and December 2008. If you display the Selection Steps pane, however, you see that the selection for the Time dimension still contains only the 2008 member.

    Expanding and collapsing in a hierarchical column affects only that particular view. No other views are affected.

- **Attribute columns:** You can drill down from the row heading or column heading or from a member in an attribute column. Drilling on a heading adds the lower level to the view. Drilling on a member adds the lower level and affects both filters and selection steps:

    - Drilling on a member adds a filter for the current member, thereby limiting the results. For example, if you drill on the Game Station member in a table that includes the P1 Product column, you add the E1 Sales Rep Name column, which adds a filter that specifies that P1 Product equals Game Station.

    - Drilling on a member adds the lower-level column to the analysis and updates the column in the Selection Steps pane without providing a step update during design.

Related Topics

See the following topics that are related to drilling:

- For information on drilling in maps, see "Drilling in Map Views."

- For information on configuring for drilling in views in dashboards, see "Adding Content to Dashboards."

- For information on configuring hierarchical columns for drilling, see *Metadata Repository Builder's Guide for Oracle Business Intelligence Enterprise Edition*.

Sorting Data in Views

When you create an analysis, you can specify sorting for the results that are displayed in funnels, gauges, graphs, heat matrices, pivot tables, tables, and trellises.

Common Sort Functionality

Some sort functionality is common to graphs, heat matrices, pivot tables, tables, and trellises.

Graphs, heat matrices, pivot tables, tables, and trellises reflect the sorting that you specify in the Selected Columns pane of the Criteria tab for attribute columns and hierarchical columns. Use the Sorting menu options that are available from the

Options button for a column. These sorting options provide the ability to sort by a single column or by multiple columns, each in either ascending or descending order. By creating sorts for multiple columns, you can specify multiple level sorts such as second-level and third-level sorts of the data. These sort levels are indicated with numbers and a sort icon for the column in the Criteria tab.

The options that you specify on the Criteria tab serve as the initial sorting state of the analysis. You can modify the sort later when the analysis is used.

When you sort items in a hierarchical column, you always sort within the parent. That is, children are never sorted outside of their parent. The children are displayed below the parent in the proper sort order; the parent is not sorted within its children.

If you include totals in a view, then those values are not sorted. They remain in the location in which you placed them, regardless of sorting.

If you sort an attribute column or hierarchical column that includes a group, then that group is always displayed at the bottom of the list. If there are multiple groups, then the groups are listed in the order in which their corresponding steps are specified in the Selection Steps pane.

Sorting Data

Sorting allows you to sort rows and columns of a view, either from lowest to highest data values, or from highest to lowest. You can also return the order to the order in the data source by clearing all sorts. You can specify alphanumeric sorts on the row and column edges of heat matrix, pivot table, table, and trellis views.

You make sorting specifications in various ways, including those in the following list:

- In the Selected Columns pane of the Criteria tab, click the **Options** button beside the column and select the appropriate sort option from the menu. For more information on the sorting options menu, see "Sorting Options Menu."

- Right-click in a heat matrix, pivot table, table, or trellis, select **Sort** or **Sort Column** (whichever is available). If you select **Sort**, the "Sort dialog" is displayed, where you choose the sorting options. If you select **Sort Column**, you then select the appropriate sorting option from the menu (see "Sorting Options Menu" for additional information).

- Right-click in a graph view on a data marker (such as a bar, line, or slice depending on the graph type), a legend item, a group-level (X axis) item, or a Prompts label or Sections label, select **Sort**, and then select the appropriate sort options in the "Sort dialog." For an example of sorting in a graph, see "Sorting in Graphs by Using the Right-Click Menu."

  Note: If a pivot table is created by using the **Graph Pivoted Results** button, the right-click menu option is not available for the graph. See "Toolbar Buttons and Box Specific to Pivot Table, Table, and Trellis Views" for additional information.

- Hover the mouse pointer over the area to the right of the column name in the header of a heat matrix, pivot table, table, or trellis view, and then click either the upward-facing triangle (**Sort Ascending**) or the downward-facing triangle (**Sort Descending**) for that column. These sort specifications override those that you make with the right-click menu.

If you see a shaded-in sort button in the column header or the row header, then you know that the column contains a primary sort. You can add a second-level or third-level sort by hovering over another innermost column header or row header and clicking the appropriate sort button or clicking the right-mouse button.

Any sorting options that you specify in a view override those that were made in the Selected Columns pane.

> **Notes:** If you have deselected **Sort Columns** in the "Analysis Properties dialog: Interactions tab," you cannot sort a column in a view at runtime.
>
> The locale of the user is not taken into consideration for a sort applied directly in a pivot table. Instead, a binary sort is done. If you want the user's locale to be considered, apply the sort in the Criteria tab.

Clearing Sorts

You can use various methods to clear sorts:

- For sorts that have been applied in the Selected Columns pane, click **Clear All Sorts in All Columns**. The sort specifications that you made in the Selected Columns pane are removed. Sorts that you specified in a view remain.

- For sorts that have been applied from the Prompts label or Sections label in a graph, heat matrix, pivot table, table, or trellis view, hover the mouse pointer over the Prompts label or Sections label, right-click and then select **Sort**. Within the "Sort dialog," click the **Clear All Sorts in Edge** button from each sort area, and then click **OK**.

- For sorts that have been applied directly in a heat matrix, pivot table, table, or trellis:

  - Click a sort button in an unsorted column to remove the primary sort from the column to which it now applies and apply it to the column whose button you just clicked.

  - Select the **Clear All Sorts in View** option from the right-mouse menu.

- For sorts that have been applied in a heat matrix view, hover the mouse pointer over the outer edge, column label, or row label, right-click and then select **Sort**. Within the "Sort dialog," click the **Clear All Sorts in Edge** button from each sort area, and then click **OK**.

- For sorts that have been applied in a graph view, select any data marker, legend item, group-level (X axis) label, right-click and then select **Sort**. Within the "Sort dialog," click the **Clear All Sorts in Edge** button from each sort area, and then click **OK**.

Sorting in Tables and Pivot Tables

Pivot tables always sort each edge from outer to inner layer by default. This differs from previous releases (prior to 11*g*) that used a tabular sort, determined by the sorts specified on the criteria columns, as the default sort for pivot tables.

Figure 4–22   Sorting Example: Tables and Pivot Tables

Example 1: Sorting with a Single Column on Each Edge

Suppose that you have a pivot table with Time Hierarchy on the column edge and Offices Hierarchy on the row edge; both are hierarchical columns. 1 - Revenue in dollars is the measure that is shown in the pivot table. You can sort the Offices Hierarchy by the 1 - Revenue for a particular year as highest revenue to lowest revenue, or lowest to highest, or no sorting at all.

Figure 4–23 shows an example of sorting Offices Hierarchy by 1 - Revenue for year 2010, in ascending order. The Corporate Total parent is always displayed above its children. The values for other years might not be sorted numerically, because only year 2010 was selected.

Figure 4–23   Sorting Example: Offices Hierarchy for Year 2010

Figure 4–24 shows an example of sorting the Time Hierarchy by the 1 - Revenue for Corporate Total. The years are re-arranged in the order 2011, 2010, 2012. In 2011, Corporate Total had its lowest value; and in 2010 and 2012, it had its highest value.

Figure 4–24   Sorting Example: Time Hierarchy by Revenue
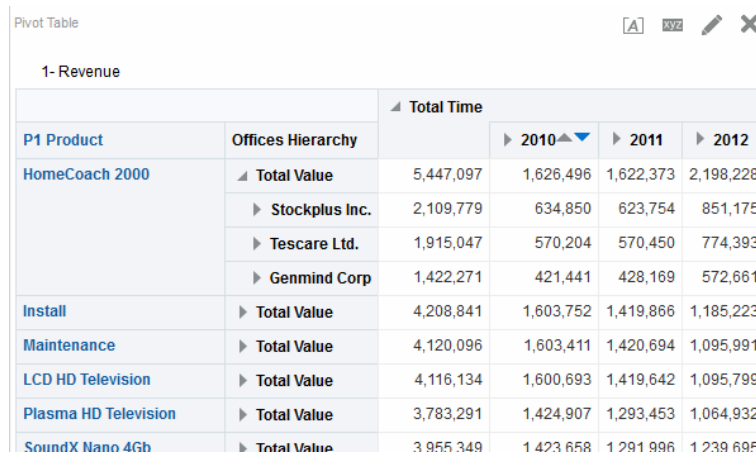
Example 2: Sorting with Two Columns on the Row Edge

Suppose that you have a pivot table with the Time Hierarchy on the column edge and P1 Products and the Offices Hierarchy on the row edge, with Products outside Offices. 1 - Revenue in dollars is the measure that is shown in the pivot table. You can sort the row edge by the 1 - Revenue for 2010 in descending order. The Offices are sorted as in Example 1, but the Products are not sorted, because they are in the outermost layer. See Figure 4–25.

Figure 4–25   Sorting Example: Two Columns on Row Edge

Example 3: Sorting with Two Measures on the Column Edge

Suppose that you have a pivot table with the Time Hierarchy on the column edge and the Offices Hierarchy on the row edge. Both 1 - Revenue and 2 - Billed Quantity are the measures in the pivot table as shown in Figure 4–26. If you try to sort the years by the leaf-node for GenMind Corp using the left facing triangle (**Sort Ascending**), then the first measure on the column edge (reading left to right) is chosen as the one on which to sort. If 1 - Revenue is the first measure on the edge, then the pivot table is sorted as shown in Figure 4–27.

Figure 4–26   Sorting Example: Sorting with Two Measure on the Column Edge - Before Sorting

Figure 4–27   Sorting Example: Sorting with Two Measures on Column Edge - After Sorting

If the measures are on the row edge and you sort by a year, then the top-most measure is used for sorting.

If you sort using the Sort right-click interaction, in pivot tables, tables, or trellises, then options that allow you to select which measure to use in the sort are displayed. See "Sorting Options Menu" for additional information.

Figure 4–28   Sorting a Measure by Using the Right-Click Interaction

Sorting in Graphs by Using the Right-Click Menu

You can right-click in a funnel, gauge, or graph view on a data marker (such as a bar, line, or slice depending on the graph type), a legend item, a group-level (X axis) item,

or a Prompts label or Sections label. You select **Sort**, and then select the appropriate sort options in the "Sort dialog."

Suppose that you have a vertical bar graph with two measures, 1 - Revenue and 2 - Billed Quantity, and these measures are grouped by T05 Per Name Year and prompted by D50 Region. Suppose that you want to sort the bar graph by revenue in ascending order.

Figure 4–29 shows an example of the Sort dialog, where 1 - Revenue is selected as the **Sort by Column** and "Low to High" (or ascending) is selected as the **Order**.

Figure 4–29   Sorting Example: Selecting a Sort Column and Sort Order in the Sort Dialog
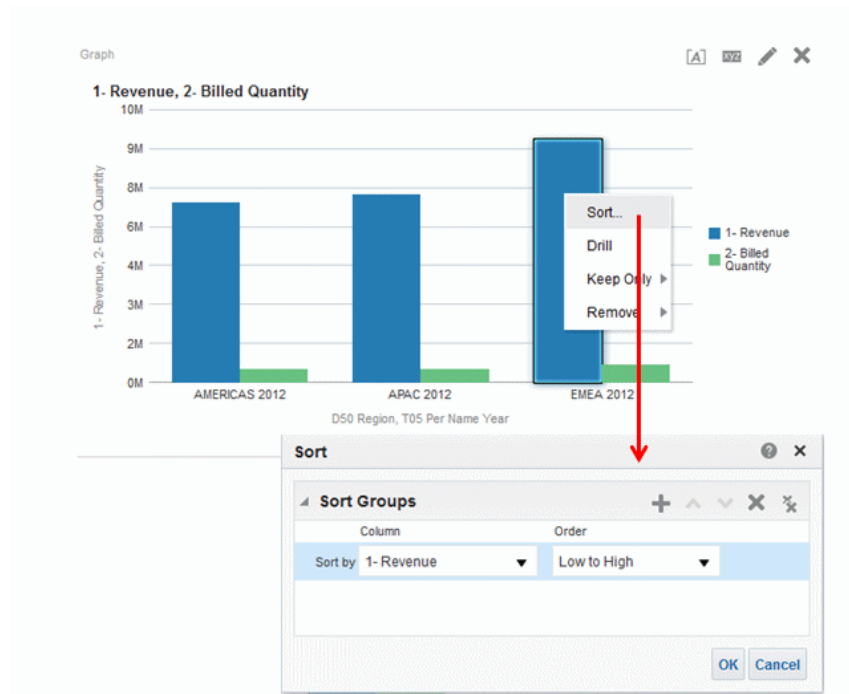
Figure 4–30 shows the results of sorting a vertical bar graph with two measures, 1 - Revenue and 2 - Billed Quantity. These measures are grouped by T05 Per Name Year, prompted by D50 Region, and then sorted by 1 - Revenue in "Low to High" sequence.

Figure 4–30   Sorting Example: Results of Selecting a Sort Column and Sort Order in the Sort Dialog
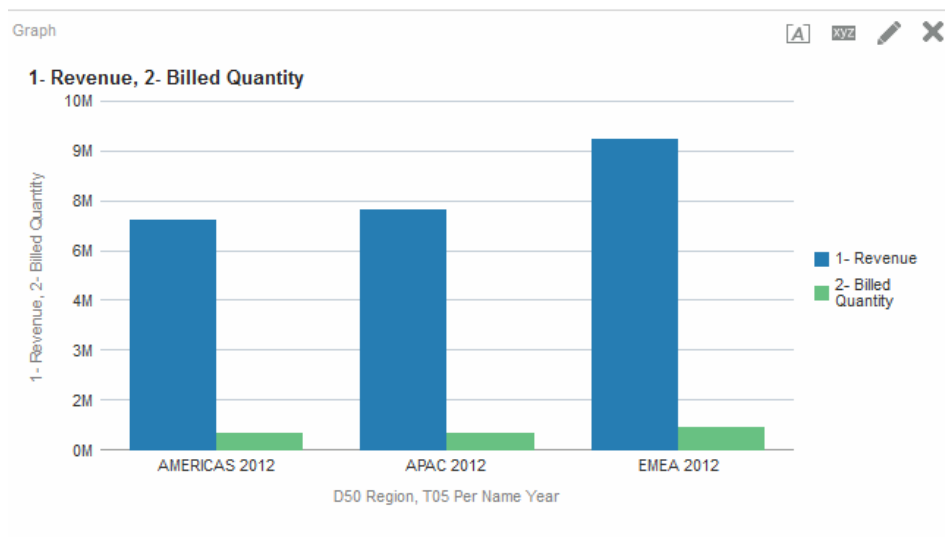
Resizing Rows and Columns in Table Views, Pivot Table Views, and Advanced Trellis Views

You can resize the row and column edges of table views, pivot table views, and advanced trellis views that are set up to use scrolling as the method to browse data.

You set up a table, pivot table, or advanced trellis to use scrolling as the method to browse data in its property dialog, that is, the "Table Properties dialog: Style tab," "Pivot Table Properties dialog," or "Trellis Properties dialog: General tab," respectively.

Note that resizing of rows and columns:

- Is not persisted. For example, if you leave a table and then display it again, the resizing will be lost.

- Is ignored if you export the table, pivot table, or advanced trellis to PDF.

To resize a row or column edge in a table view, pivot table view or advanced trellis view:

1. Hover the mouse pointer over the border of the column or row edge. A resize cursor is displayed.

2. Click and hold the mouse button down. A dotted line is displayed.

3. Drag the dotted line to the desired size and release the mouse button.

Saving Views

You can save a view that you are working with at any time. To save a view, you must save the analysis.

To save a view:

1. If you want to save a view:

   - In a new analysis or in an existing analysis, click the **Save Analysis** toolbar button in the "Analysis editor."

■ In an existing analysis that you must save as another name, click the **Save As** toolbar button in the "Analysis editor."

If this is the first time that you are saving the analysis, or you are saving an existing analysis as another name, then the "Save As dialog" is displayed where you specify the information for saving the analysis.

Renaming Views or Compound Layouts

If you have created a view or compound layout, then you can rename the view or compound layout to make them more meaningful to your end users.

To rename a view or compound layout:

1. If you want to rename:

   ■ A view, on the toolbar of the view's editor, click the **Rename View** button.

   ■ A compound layout, in the "Analysis editor: Results tab" toolbar, click the **Rename Compound Layout** button.

   The "Rename View dialog" is displayed.

2. Enter the new name for the view or compound layout.

3. Click **OK**.

Rearranging Views

You can use your mouse to rearrange a view (for example, title, legend, table, or graph) within a compound layout.

To rearrange a view:

1. Place the cursor just inside the top edge of the view to be rearranged.

2. Click and hold the left mouse button (if configured) on the view.

   The view is displayed as a transparent movable object.

3. Use the mouse to drag the view to the required position.

   A view can be rearranged as follows:

   ■ At the boundary of a view.

   Each view has four boundaries (upper, lower, left or right), and can be arranged alongside the boundaries of other views in an analysis. You can drag and drop a view to display it next to the boundary of another view.

   ■ At the outer boundary of the compound layout.

   Each compound layout contains one or more views arranged in either a square or a rectangle. The compound layout has four boundaries (upper, lower, left and right). You can drag and drop a view to the outer boundary of an compound layout. This action displays the view across the entire length or breadth of the compound layout.

4. Release the mouse button.

   The view is rearranged in the compound layout in the position that is indicated by the blue bar.

5. Repeat the previous steps to rearrange further views.

Printing Views

You can print views using HTML or Adobe PDF (Portable Document Format). Adobe Reader 6.0 or greater is required to print using Adobe PDF.

You can also specify PDF and print options, including adding headers and footers. For more information on printing, see "Changing Print and Export Options for Views."

> **Note:** The HTML method of printing relies on the print handling capabilities of your browser. If you do not get the results you want, then choose PDF to open and then print the analysis.

You can print:

- A single view from the view's editor
- An assemblage of views that are displayed in the "Compound Layout"

To print a single view or an assemblage of views:

1. If you want to print:
   - A single view, on the toolbar of the view's editor, click the **Print this analysis** button.
   - The assemblage of views displayed in the Compound Layout, in the "Analysis editor: Results tab" toolbar, click the **Print this analysis** button.

2. Select **Printable HTML** or **Printable PDF**.
   - For HTML, a new window shows the view or views to print.

     From the File menu, select **Print**.
   - For PDF, an Adobe PDF window shows the view or views to print.

     Use the options that are available in the Adobe PDF window to save or print the file.

> **Note:** To print gauges that do not fit in a standard page size (8.27 x 11.69 inches), you must split the gauges.

Changing Print and Export Options for Views

To change print and export options:

1. In the "Analysis editor: Results tab" toolbar, click the **Print& Export Options** button.

   The "Print & Export Options dialog" is displayed.

2. Specify the appropriate options in the dialog, and click **OK**.

Previewing How Views Are Displayed on a Dashboard

You can preview views to see how they are displayed on a dashboard. You can preview:

- A single view from the view's editor
- An assemblage of views displayed in the "Compound Layout"

To preview a view:

1. If you want to preview:

   - A single view, on the toolbar of the view's editor, click the **Show how results will look on a Dashboard** button.

   - The assemblage of views that are displayed in the Compound Layout, in the "Analysis editor: Results tab" toolbar, click the **Show how results will look on a Dashboard** button.

   > **Note:** If the **Show how results will look on a Dashboard** button is not available, then the administrator has suppressed its display.

   The dashboard preview is displayed in a new window. Any prompts are displayed and applied in the preview.

Removing Views

You can remove a view from:

- A compound layout.

  Removing a view from a compound layout removes it only from the compound layout, not from the analysis.

- An analysis.

  Removing a view from an analysis removes the view from the analysis and from any compound layout to which it had been added.

To remove a view:

1. If you want to remove a view from:

   - A compound layout, in the view in the "Compound Layout," click the **Remove View from Compound Layout** button.

   - An analysis, in the "Views pane," select the view and then click the **Remove View from Analysis** toolbar button.

Refreshing the Results in Views

When you are working with views that show results data, such as the table and pivot table, you can refresh the results of the current analysis. Refreshing results is useful if you make a change such as adding a filter that limits results and you want to see the effects of your change.

To refresh the results of the current analysis:

1. In the "Analysis editor: Results tab" toolbar, click the **Refresh the results of the current analysis** button.

Customizing Views for Delivery to Agent Users

Delivery content is automatically formatted based on the destinations that you specify in the "Agent editor: Destinations tab." You can manually control which view or views are sent to a particular destination by including them in a compound layout. For example, you might want to create a view that contains mostly text and add that view

to a compound layout, if you plan to deliver it to a mobile phone. In previous releases (prior to 11*g*), this functionality was referred to as "specialized views."

To control which compound layout is sent to a particular destination:

1. For the appropriate analysis, create and save the view to use for delivered content.

2. On the toolbar of the "Analysis editor: Results tab," click the **Create Compound Layout** button.

3. Add the view that you created to the compound layout.

4. On the toolbar of the "Analysis editor: Results tab," click the **Edit Analysis Properties** button.

5. In the **View for Text Delivery** box, select the compound layout to which you added the view.

6. Click **OK**.

What Is Master-Detail Linking of Views?

Master-detail linking of views enables you to establish a relationship between two or more views such that one view, called the master view, drives data changes in one or more other views, called detail views.

For example, suppose you have the following two views:

- A table that shows Dollars by Region

- A graph that shows Dollars by Brand with Region on a section slider

Using the master-detail linking functionality, you can link the two views so that when you click a particular Region in the table, the Region on the section slider of the graph as well as the data in the graph changes to reflect the Region that was clicked on the table. For example in Figure 4–31, clicking APAC in the table in the D50 Region column, positions the thumb in the section slider on APAC and updates the data in the graph to the data for APAC.

Figure 4–31   Master-Detail Linking of Views
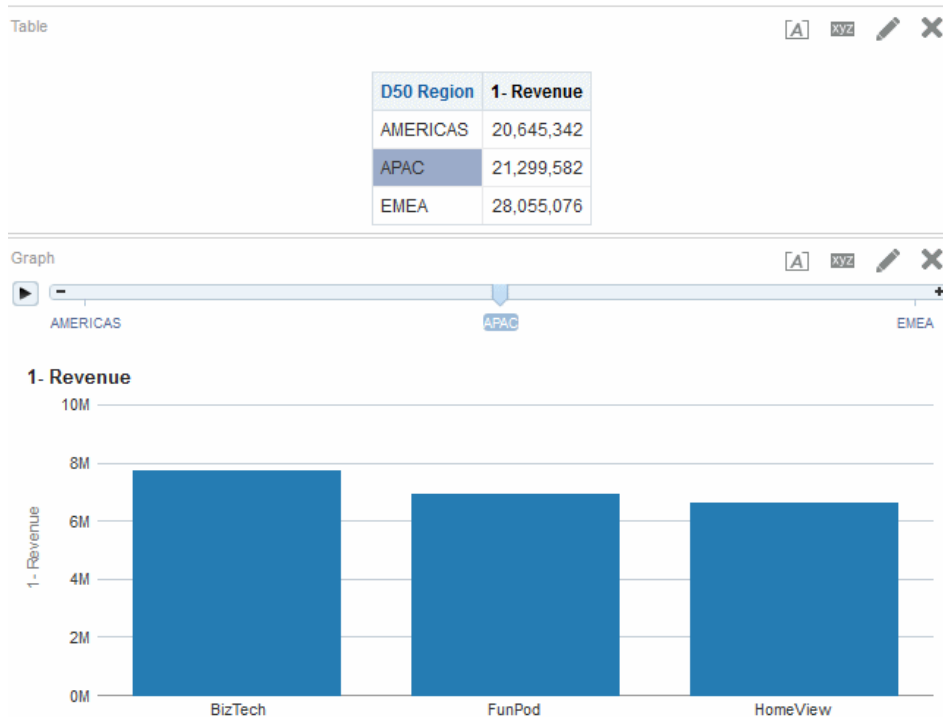
What Are Master Views?

A master view drives data changes in one or more detail views. A view becomes a master when you set up the interaction of a column in the view to send master-detail events on designated channels. This column is known as the master column.

The master column is the column whose values when clicked send a master-detail event, which passes information to update the data in a detail view.

The following types of views can be master views:

- Funnel graph

- Gauge

- Graph

- Heat matrix

- Map

- Pivot table

- Table

- Trellis (only the outer edges, not the inner visualizations)

A master view can be in the same analysis as the detail view or in a different analysis. A master view can update data in one or more detail views.

Master-detail events that are configured on the columns that reside on the row or column edge (that is, the legend or group labels) of a graph or gauge are exposed from the corresponding data item of the view (when clicked) along with any such event set up on the measure that corresponds to the data item.

What Types of Columns Can Be Master Columns

Any type of column — hierarchical, attribute, or measure — can be a master column. However, the master column cannot be displayed on the page edge or the section slider in the master view. It must be displayed in the body of the view.

> **Note:** While hierarchical columns are supported as master columns, if a user clicks a hierarchy level, then a change takes effect in the detail view only if the level is expanded there as well.

What Information Do Master-Detail Events Pass?

When a master-detail event is raised, it passes the definition of the cell (or item) in the master view that was clicked. The specific information it passes depends on the type of column:

- For an attribute column, it passes the clicked value and the contextual information to the left and above the axis member.

  For example, in Figure 4–32, if the attribute column D51 Area is the master column, and you click Central (highlighted in blue), then the master-detail event information passed is D50 Region = AMERICAS and D51 Area = Central.

Figure 4–32   Master-Detail Event Information for an Attribute Column

- For a measure column, it passes all the contextual information for the data value.

  For example, in Figure 4–33, if the measure column 1 - Revenue is the master column, and you click 1,113,286 (highlighted in blue), then the master-detail event information passed is D50 Region = AMERICAS, D51 Area = Central, and T05 Per Name Year = 2012.

Figure 4–33   Master-Detail Event Information for a Measure Column

The master-detail event information defines the position of a page edge or a section slider in a detail view.

What Are Channels?

A channel links a master view to a detail view. It is the vehicle that carries master-detail events from the master view to the detail view. The same channel must be used for both the master view and the detail view in a master-detail relationship, for example, Channel1. Note that the channel name is case sensitive.

What Are Detail Views?

A detail view is a view that listens for and responds to master-detail events sent by a master view on a specified channel. A view becomes a detail view, when you set up the view to listen to master-detail events.

A detail view includes one or more columns whose values are changed directly by the information passed by a master-detail event. These columns are known as detail columns. A detail column must:

- Be on the page edge or the section slider of the detail view. Whether a detail column is displayed on the page edge or a section slider, depends on the type of view:
  - For pivot tables and tables, it must be on the page edge
  - For graphs and gauges, it can be on the page edge, or on the section slider

> **Note:**   If a detail column is on a section slider and a page edge is present, the detail column is not updated by the information in the master-detail event. For example, if the information in the event is D50 Region=AMERICAS and T05 Per Name Year=2009, and the page edge of the detail view has Region and the section slider has Years, then only the Region is updated.

- Match a column in the master view

When a detail view contains multiple detail columns, it is listening for and responding to master-detail events on multiple channels.

The following types of views can be detail views:

- Funnel graph

- Gauge

- Graph

- Heat matrix

- Map

- Pivot table

- Table

- Trellis (only the outer edges, not the inner visualizations)

A detail view:

- Can listen for master-detail events from multiple master views

- Can be in the same analysis as the master view or in a different analysis

- Cannot act as a master to another view

How Does Master-Detail Linking of Views Work?

When a master view and a detail view are linked and a user clicks a cell (or item) in the master column, a master-detail event is generated on the designated channel and the master-detail event information is passed to the detail view.

The detail view (which is listening on the designated channel for master-detail events) receives the event and the master-detail event information. It reviews the master-detail event information to determine which column in this information matches the detail column. When it finds a match, it takes the column values in the master-detail event information, updates the detail column, and then refreshes the entire detail view.

> **Note:** If a master column is on a section slider, then any detail view that is not visible initially in the browser is not updated and refreshed until the view becomes visible when you scroll down. For more information on section sliders, see "Defining Section Sliders in Graphs, Gauges, and Funnels."

For an example of how master-detail linking of views works, see "Example of a Table and Graph Linked in a Master-Detail Relationship."

Linking Views in Master-Detail Relationships

To link views in master-detail relationships, you must define the master view and the detail view.

For more information on master-detail linking, see "What Is Master-Detail Linking of Views?"

Defining the Master View

To define a view as a master view:

1. Create or edit the analysis whose view (or views) you want to define as the master view.

2. For the column that is to be the master column, in the "Analysis editor: Criteria tab," click the **Options** button and then select **Column Properties**. The "Column Properties dialog" is displayed.

> **Note:** You can also click the **More Options** button in the Layout pane and then select **Column Properties** to display the "Column Properties dialog."

3. Click the "Column Properties dialog: Interaction tab."

4. In the **Primary Interaction** box in the **Value** area, select **Send Master-Detail Events**. The **Specify channel** field is displayed.

5. In the **Specify channel** field, enter a name for the channel on which the master view sends master-detail events. You can use any appropriate name, for example, Sales Analysis Channel, Channel 1, or channel 1.

6. Add the view to use as a master view. Note that any view that you add that includes the master column can be used as a master view.

7. Click **OK**.

Defining the Detail View

To define a view as a detail view:

1. Create or edit the analysis whose view you want to define as the detail view.

2. Create the view that is to be the detail view, for example, a graph.

3. Edit the view.

4. Click the view's Property button on the toolbar of the view's editor. For example for a graph, click the **Graph Properties** toolbar button in the Graph Editor. The view's property dialog is displayed, for example, for a graph, the "Graph Properties dialog."

5. In the "Gauge Properties dialog: General tab" (for a gauge), the "Graph Properties dialog: General tab" (for graph or funnel graph), the "Heat Matrix Properties dialog: General tab" (for a heat matrix), the "Map Properties dialog: Interaction tab" (for a map), the "Pivot Table Properties dialog" (for a pivot table), or the "Table Properties dialog: Style tab" (for a table), select the **Listen to Master-Detail Events** box.

> **Note:** If the map view cannot find the detail feature with the master value, a warning message, "No data to display for ID: *nnn*" is displayed.

6. In the **Event Channels** field, enter the name of the channel on which the detail view is to listen for master-detail events. The name must match (including case) the name of the channel on which the master view sends master-detail events. (For more information on the channel in the master view, see "Defining the Master

View."

7. Click **OK**.

8. In the "Layout pane," drag the column (or columns) to be the detail column (or columns) to either the Prompts drop target or the Sections drop target as follows:

   ■ If the detail view is a pivot table or table, then drag the column or columns to the Prompts drop target.

   ■ If the detail view is a graph or a gauge, then drag the column or columns to the Prompts drop target or to the Sections drop target, whichever you prefer, unless the graph or gauge has a column on the Prompts drop target. Then, you must drag the column or columns to the Prompts drop target.

   > **Note:** You must drag and drop all detail columns to the same drop target. You cannot have some on the Prompts drop target and some on the Section drop target.

   For more information on drop targets, see "Understanding Drop Targets."

9. (Optional) If you dragged and dropped one or more detail columns to the Sections drop target, then select the **Display as Slider** box.

   > **Note:** With graphs, to listen for master-detail events, the detail column must go into the Sections drop target, which then creates a slider in the analysis or dashboard. In graph views that are part of master-detail relationships, if you want to simplify the appearance of an analysis or dashboard, do not select the **Display as Slider** box. In this way, you can choose to not display the slider that is created to accommodate a detail column.

Example of a Table and Graph Linked in a Master-Detail Relationship

In this example, a table, Regional Sales Master View, is linked to a graph, Regional Sales View Detail View, in a master-detail relationship.

About the Regional Sales Master View

The analysis for the master view contains the D50 Region and 1 - Revenue columns. The 1 - Revenue column is set up as the master column as shown in Figure 4–34. The view that was added to be the master view is a table.

Figure 4–34   Example of Defining a Master View
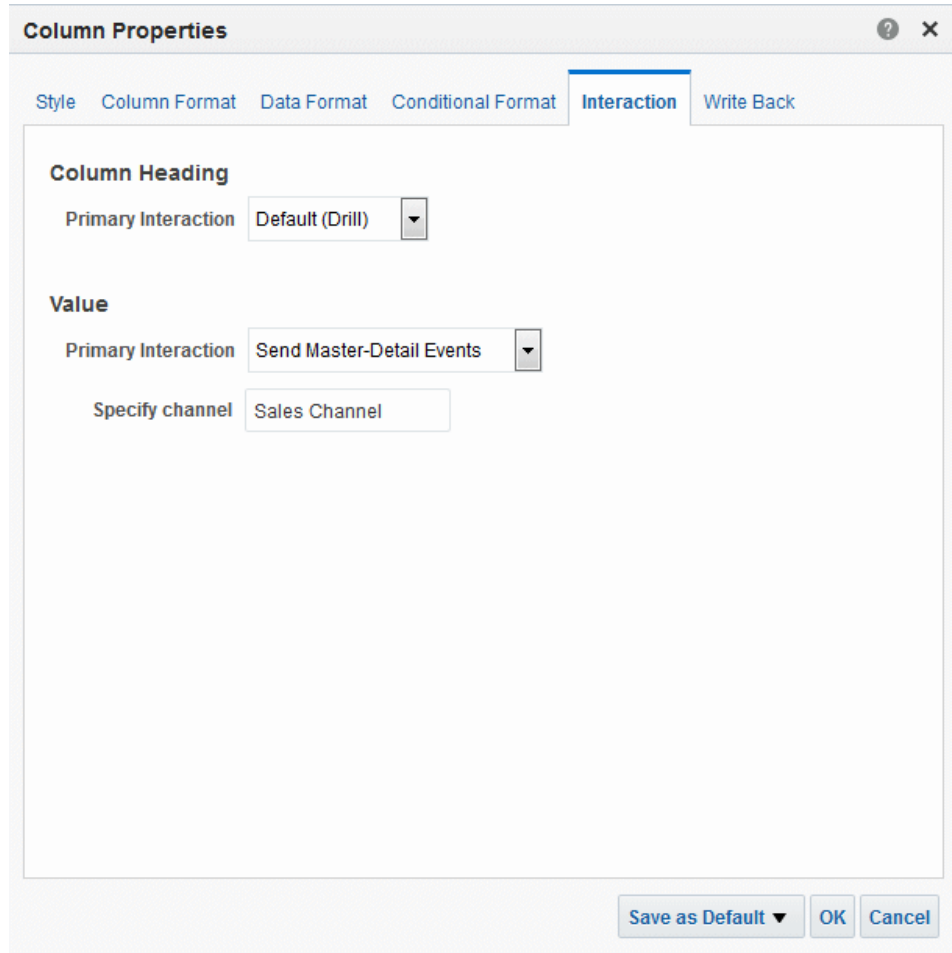
About the Regional Sales Detail View

The analysis for the detail view contains the D50 Region, P4 Brand, and 1 - Revenue columns. The view that was added to be the detail view is a horizontal bar graph and is set up to listen for master-detail events on Sales Channel, as shown in Figure 4–35.

Figure 4–35   Setting up to Listen to Master -Detail Events
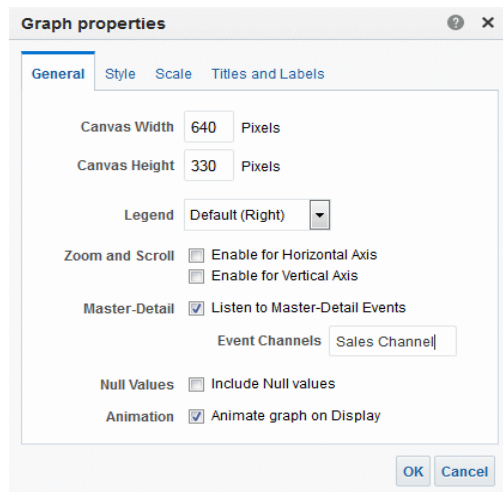
The D50 Region column is set up to be the detail column. This was done by dragging and dropping the D50 Region column to the Graph Prompts drop target in the Layout pane as shown in Figure 4–36. (Notice that the D50 Region column is then displayed on the page edge in the table.)

How the Master-Detail Linking Works for Regional Sales Master View and Regional Sales Detail View

When a user clicks on the cell that contains the revenue for the AMERICAS region in Regional Sales Master View, the view sends a master-detail event on Sales Channel and passes the master-detail event information of D50 Region = AMERICAS.

Regional Sales Detail View, which is listening on Sales Channel, receives and reviews the master-detail event information. It determines that the D50 Region column matches a column on its page edge, updates the page edge to AMERICAS, and refreshes the entire view as shown in Figure 4–36.

Figure 4–36   Master-Detail Relationship: Regional Sales Master View and Regional Sales Detail View

5
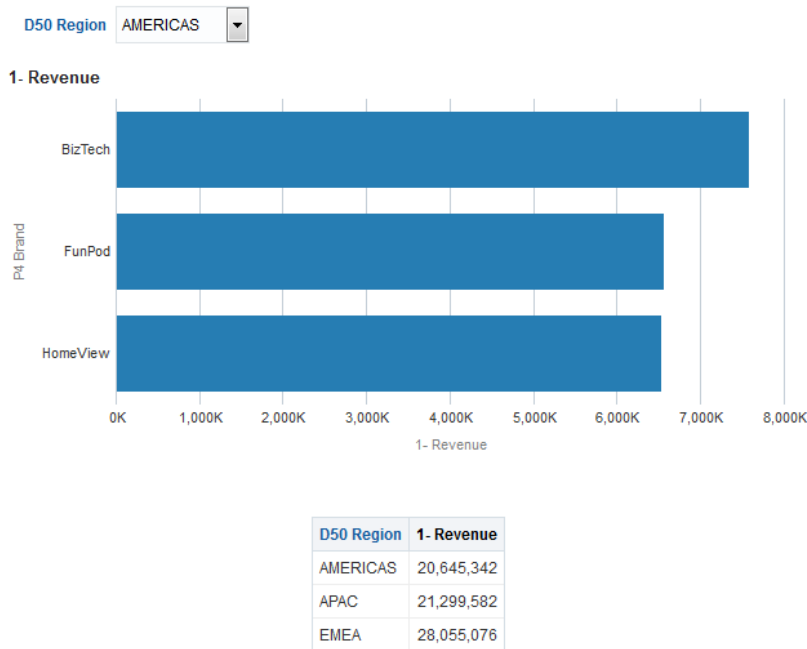
Building and Using Dashboards

This chapter describes building and using dashboards in Oracle Business Intelligence Enterprise Edition. It also explains how to work with saved customizations, create dashboard template pages, publish dashboards, create links to dashboard pages, and work with briefing books.

This chapter includes the following sections:

- What Are Dashboards?
- Who Creates and Edits Dashboards?
- What Is the Dashboard Builder?
- What Controls the Look-and-Feel of a Dashboard?
- About the ALTA Style
- Creating Dashboards
- Editing Dashboards
- Adding Oracle BI Publisher Reports to Dashboard Pages
- Changing the Properties of a Dashboard and its Pages
- Changing the Properties of Objects Added to Dashboard Pages
- Delaying the Execution of Dashboard Pages
- About Creating Custom Layouts for Printing and Exporting Dashboard Pages
- Creating Custom Layouts for Printing and Exporting Dashboard Pages
- Editing, Replacing, or Removing Custom Layouts
- Deleting Objects on Dashboard Pages
- Deleting Dashboard Pages
- Saving Dashboards by Other Names and in Other Locations
- Opening and Using Dashboards
- What Are Saved Customizations for Dashboard Pages?
- Saving Customizations
- Applying Saved Customizations
- Editing Saved Customizations
- Clearing Your Current Customization
- About Dashboard Template Pages for New Users

- Creating Dashboard Template Pages for New Users
- Publishing Dashboard Pages
- About Creating Links to Dashboard Pages
- Creating Links to Dashboard Pages
- Working with Briefing Books

What Are Dashboards?

Dashboards provide personalized views of corporate and external information. A dashboard consists of one or more pages.

Pages can display anything that you can access or open with a web browser, including the following:

- The results of analyses

  The results of an analysis is the output returned from the Oracle BI Server that matches the analysis criteria. It can be shown in various views, such as a table, graph, and gauge. Users can examine and analyze results, print as PDF or HTML, save as PDF, or export them to a spreadsheet.

- Alerts from agents

- Action links and action link menus

- Images

- Text

- Views of folders in the Oracle BI Presentation Catalog

- Links to web sites

- Links to documents

- Embedded content (such as web pages or documents)

- Oracle BI Publisher reports

- KPI contribution wheels

When you open a dashboard, the content of the dashboard is displayed in one or more dashboard pages. Dashboard pages are identified by tabs across the top of the dashboard. A toolbar at the top right contains buttons that let you:

- Edit the dashboard, if you have the appropriate permissions and privileges.

  For more information on the Dashboard Builder, see "What Is the Dashboard Builder?"

- Display various options for working with a "Dashboard page," such as printing the current page. See "Opening and Using Dashboards."

Who Creates and Edits Dashboards?

The ability to create dashboards is controlled by the Manage Dashboard privilege, which is managed by the administrator.

Dashboard editing, which is performed in the "Dashboard builder," is allowed for users with the appropriate permissions and privileges to the dashboard and to objects that can be added to a dashboard page. For more information, see "Assigning Permissions." For information about administering privileges, see "Managing

Presentation Services Privileges" in *Security Guide for Oracle Business Intelligence Enterprise Edition*.

What Is the Dashboard Builder?

The Dashboard builder lets you add dashboard pages to a dashboard and edit the pages in a dashboard. You can add objects to and control the layout of dashboard pages.

Pages contain the columns and sections that hold the content of a dashboard. Every dashboard has at least one page, which can be empty. Dashboard pages are identified by tabs across the top of the dashboard. Multiple pages are used to organize content. For example, you might have one page to store results from analyses that you refer to every day, another that contains links to the web sites of your suppliers, and one that links to your corporate intranet.

The objects that you can add to a dashboard page include:

■ **Dashboard objects** — Items that are used only in a dashboard. Examples of dashboard objects are sections to hold content, action links, and embedded content that is displayed in a frame in a dashboard. See Table D–2, " List of Dashboard Objects".

■ **Catalog objects** — Objects that you or someone else has saved to the Oracle BI Presentation Catalog (for example, analyses, prompts, and so on) and for which you have the appropriate permissions.

In a dashboard, the results of an analysis can be shown in various views, such as a table, graph, and gauge. (The results of an analysis are the output that is returned from the Oracle BI Server that matches the analysis criteria.) Users can examine and analyze results, save or print them, or export them to a spreadsheet.

What Controls the Look-and-Feel of a Dashboard?

The look-and-feel of a dashboard is highly customizable and controlled by skins and styles.

■ **Skins** — Skins define the visible graphic features and control the way that the Oracle BI EE user interface is displayed, such as background colors, corporate logos, and style sheets. Skins can be automatically assigned to users when they log on. Administrators can customize the default skin and create new skins.

■ **Styles** — Styles control the appearance of a dashboard and its various views. In other words styles control how the results are formatted for display, such as the color of text and links, the font and size of text, the borders in tables, and the colors and attributes of graphs.

Styles and skins are organized into folders that contain Cascading Style Sheets (files with a .css extension). Cascading style sheets provide control over any object within Oracle Business Intelligence. Administrators can customize style sheets and create new style sheets. You can override some elements in style sheets, such as table borders and text size, when you format results in the Results tab.

You can specify a style for a particular dashboard on the "Dashboard Properties dialog" in the General Properties area using the Styles list.

■ **Cosmetic formatting** — Cosmetic formatting affects the visual appearance of data in columns and hierarchy levels, views, and columns and sections on dashboard pages. For more information, see "What is Cosmetic Formatting?" and "Applying Formatting to Dashboard Pages."

About the ALTA Style

Oracle BI EE 11*g* is shipped with several styles, including ALTA. This style provides a clean, consistent appearance across Oracle Business Intelligence products and presents crisp visual trends, such as light colors and small gradients and border sizes.

For additional information about ALTA, see "Customizing the Oracle BI Web User Interface" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

> **Note:** Oracle recommends using ALTA as a starting point, if you are planning to create a new custom style.

Creating Dashboards

You use the "Dashboard builder" to create (and edit) dashboards. For more information on dashboards, see "What Are Dashboards?"

To create a dashboard:

1. In the global header, click **New**, then select **Dashboard**.

   The "New Dashboard dialog" is displayed.

2. In the dialog, enter a name and description for the dashboard.

3. Select the location for the dashboard.

   > **Note:** If you save the dashboard in the Dashboards subfolder directly under /Shared Folders/*first level subfolder*, then the dashboard is listed in the **Dashboard** menu in the global header. If you save it in a Dashboards subfolder at any other level (such as /Shared Folders/Sales/Eastern), then it is not listed.
   >
   > If you choose a folder in the Dashboards subfolder directly under /Shared Folders/*first level subfolder* in which no dashboards have been saved, then a new "Dashboards" folder is automatically created in that folder in which to save the new dashboard. For example, if you choose a folder named /Shared Folders/Sales in which no dashboards have been saved, a new Dashboards folder is automatically created and the Location entry changes to /Shared Folders/Sales/Dashboards. (A new "Dashboards" folder is not automatically created if you choose a folder at any other level.)

4. Specify whether you want to add content to the new dashboard now or later.

5. Click **OK**.

   If you specified to add content:

   Now, then the new dashboard, which contains one blank page, is displayed in the "Dashboard builder" for editing.

   Later, then an empty dashboard is created (but not displayed) to which you can add content later.

Editing Dashboards

You can edit dashboards to which you have appropriate permissions and privileges.

To edit a dashboard:

1. In the global header, click **Catalog** to display the "Catalog page."

2. Navigate to the dashboard to edit and click the **Edit** link.

   The dashboard is displayed in the "Dashboard builder."

3. Perform one or more of the following tasks, as needed:

   - Add a dashboard page. See "Adding New Pages to Dashboards."

   - Delete a dashboard page. See "Deleting Dashboard Pages."

   - Add content. See "Adding Content to Dashboards."

   - Use the options available on the **Tools** toolbar button of the Dashboard builder to:

     – Set dashboard and dashboard page properties.

     – Specify settings for printing and exporting a dashboard page.

     – Set the report links for a dashboard page.

     – Specify whether to allow users to create personal saved customizations on the page.

     – Publish the page to a shared dashboard location so that you can share the page with others. See "Publishing Dashboard Pages."

     – Set advanced page properties so that you can set the navigation parameters for the dashboard page or the dashboard. See "Setting Advanced Page Properties."

     For more information about these options, see "Dashboard builder."

4. Perform one of the following steps at any time:

   - To preview the dashboard page, click the **Preview** toolbar button.

   - To save your changes, click the **Save** toolbar button.

   - To exit the Dashboard builder and return to the Dashboard, click **Run**.

Adding New Pages to Dashboards

You can add new pages to dashboards.

To add a new page to a dashboard:

1. Edit the dashboard. For information, see "Editing Dashboards."

2. Click the **Add Dashboard Page** toolbar button in the Dashboard builder.

   The "Add Dashboard Page dialog" is displayed.

3. In the dialog, enter a name and description for the page, and click **OK**.

   The page is displayed as a new tab in the "Dashboard builder."

4. Click the **Save** toolbar button.

After you add a new page, you can add content to it. See "Adding Content to Dashboards."

Adding Content to Dashboards

You can add the following content to dashboards:

- Dashboard objects, including objects that let you lay out the content, such as columns and sections, as well as objects such as text, folders, action links, and so on. Table D–2 lists and describes the dashboard objects that you can include on a dashboard page.

- Objects that you or someone else has saved to the Oracle BI Presentation Catalog and for which you have the appropriate permissions, such as analyses, prompts, and so on.

> **Note:** Dashboard modification is reserved for users with the appropriate permissions and privileges.

To add content to a dashboard:

1. Edit the dashboard. For information, see "Editing Dashboards."

2. Add the objects to include on the page. To add an object, select it from the "Dashboard Objects pane" or the "Catalog pane," and then drag and drop the object to the "Page Layout area."

   For information on dragging and dropping objects, see "Dragging and Dropping Objects to the Page Layout Area in the Dashboard Builder."

   > **Tip:** To locate an object in the Catalog pane, you can browse either by the catalog folder in which the object is stored or by the dashboard on which the object is displayed.

   For information on adding Oracle BI Publisher reports, see "Adding Oracle BI Publisher Reports to Dashboard Pages."

   When you drag and drop a scorecard object to the Page Layout area, the "Dimension Pinnings dialog" might be displayed, where you pin (or set) values for KPI dimensions that are associated with the scorecard object. For more information about pinning, see "What Are Dimensions and Pinned Dimension Values?"

3. Set the properties of each object, as appropriate. To do so, hover the mouse pointer over the object in the Page Layout area to display the object's toolbar and click the **Properties** button.

   What is displayed depends on the type of object. For some objects, a properties dialog is displayed. For other objects, a menu of options is displayed. For more information, see "Properties Buttons for Objects."

4. Click the **Save** toolbar button.

> **Note:** Adding a performance tile to a dashboard performs in the same manner as adding any other view, including prompt behavior. Drag and drop the analysis containing the performance tile view from the catalog into a column, save the dashboard, and run it to view the tile.
>
> To ensure that a group of performance tiles are tightly spaced, place each performance tile in a dashboard section or column and then assign a fixed size to the section or column to prevent the tiles from spreading out.

Dragging and Dropping Objects to the Page Layout Area in the Dashboard Builder

When you drag and drop objects to the "Page Layout area" of the "Dashboard builder," keep in mind the following:

- As you drag an object in the Page Layout area, a blue bar is displayed to indicated the drop location relative to another object. When you hover over a valid target in which to drop the object, the border of the target container changes to orange.

- When you drop an object that does not have a name to the Page Layout area, it is assigned a default name, such as Section 1, Link 1, and so on. You can rename some objects to assign meaningful, descriptive names.

- When you hover the mouse pointer over an object that has been dropped to the Page Layout area, it is highlighted with an orange border and its toolbar is displayed.

- Columns are used to align content, while sections within columns hold the actual content. If you drag and drop an object to an empty Page Layout area, or drag and drop an object to a column without first adding a section to hold it, then the proper containers for it are created automatically. For example, if you drag and drop a section to an empty Page Layout area, a column is created automatically. If you drag and drop an analysis, then both the column and section are created automatically.

- When you drag and drop an analysis to the Page Layout area, the compound view is shown by default. If you want to show another view, then click the **Properties** button for the analysis, select **Show View**, and select the view that you want.

- When you drag a second object to a section, you can drop it either horizontally or vertically within the section, which sets the layout for the section. Additional objects that you drag and drop have that layout. To change the layout after it has been set, you can use the **Horizontal Layout** and **Vertical Layout** buttons on the section toolbar.

- If you drag a section from one column into another column, then any content in that section is also included.

Setting Advanced Page Properties

You can set advanced page properties to specify incoming navigation parameters you want to set on the current dashboard page. This enables you to control how parameters associated with the navigation actions are applied. For example, if a navigation link includes a prompt value, then you can choose the context of the incoming navigation link to be applied to all pages associated with a dashboard or limit the scope of the context of incoming navigation link to the landing page.

To set advanced page properties:

1. Edit the dashboard. For information, see "Editing Dashboards."

2. Navigate to the page for which you want to set scope of the incoming navigation parameters.

3. Click **Tools** and then select **Advanced Page Properties**.

   The Advanced Page Properties dialog is displayed.

4. Determine the navigation type you use to access the dashboard or dashboard page. The options are:

   - Prompted URL

   - Go URL

   - Navigate to BI Content

5. Perform one of the following actions:

   a. To set the incoming navigation parameters and context so that when you access this dashboard page the scope of the passed parameters and context is restricted to the landing page, select **Page**.

   b. To set the incoming navigation parameters for the dashboard, select **Dashboard**.

6. Repeat for all navigation types associated with the dashboard.

7. Click **OK**.

Adding Oracle BI Publisher Reports to Dashboard Pages

This section describes how to add Oracle BI Publisher reports to dashboard pages. It contains the following topics:

- "How Do Oracle BI Publisher Reports and Dashboard Pages Interact?"

- "Adding Reports to Dashboard Pages"

- "Using Prompts with Parameterized Reports"

Note: If you use Microsoft's Internet Explorer browser version 7, then you might experience problems viewing BI Publisher reports that are embedded in analyses or dashboards, depending on the privacy settings of the browser. When you display the page from Oracle BI EE in the browser, you might find that the BI Publisher report is missing. This problem is encountered on browsers with a medium-level of privacy and popups blocked. To work around this problem, use a different browser than Internet Explorer version 7, or view the report in BI Publisher rather than in Oracle BI EE, or reduce the privacy setting of the browser.

How Do Oracle BI Publisher Reports and Dashboard Pages Interact?

This section contains the following topics:

- "About Oracle BI Publisher and Dashboard Pages"

- "About Adding Reports to Dashboard Pages"

About Oracle BI Publisher and Dashboard Pages

This section contains the following topics:

- "Interacting with Reports on Dashboard Pages"
- "About Briefing Books and Printing BI Publisher Reports"

For general information on BI Publisher, see "Integration of Oracle BI EE with Oracle BI Publisher."

Interacting with Reports on Dashboard Pages You can run, view, and interact with a BI Publisher report on a dashboard page. When included on a dashboard page, the BI Publisher report can include a toolbar that can offer options for selecting a layout template, changing the BI Publisher report's output format, exporting the BI Publisher report, sending the BI Publisher report to an available destination (for example, printer, fax, email, or FTP), scheduling the BI Publisher report, and analyzing the data.

About Briefing Books and Printing BI Publisher Reports If you plan to print a dashboard page that contains a BI Publisher report or to include the page in a briefing book, then you must keep the following points in mind:

- If you print the briefing book as PDF and if the output format of the BI Publisher report is PDF, then the BI Publisher report is printed after the other objects on the page. If you print a dashboard page that contains a BI Publisher report as PDF, but the dashboard page is not part of a briefing book, then the BI Publisher report is not printed.

- If you print the dashboard page or briefing book as MHTML, then the BI Publisher report is not printed.

About Adding Reports to Dashboard Pages

You can add one or more existing reports to a dashboard page. The advantage is that you can share reports with other users and schedule the dashboard pages using agents. An agent sends the entire dashboard to the user, including all data pages that the report references.

When configuring an agent for a dashboard page that contains a BI Publisher report, ensure that the following criteria are met:

- The output format of the BI Publisher report must be PDF.

- The agent must be set to deliver PDF.

You can add reports to a dashboard page as embedded content and as a link. Embedded means that the report is displayed directly on the dashboard page. The link opens the report in BI Publisher within Oracle BI EE.

If you modify the report in BI Publisher and save your changes, then refresh the dashboard page to see the modifications.

Adding Reports to Dashboard Pages

To add a report to a dashboard page:

1. Edit the dashboard. For information, see "Editing Dashboards."

2. Navigate to the page to which you want to add a report.

3. Select a report in one of the following ways:

- Select the report from the Catalog pane and drag and drop it into a section on the dashboard page.

- To add a report from a dashboard page, select the report from the folder that contains its dashboard in the Catalog pane.

4. Set the properties of the object. To do so, hover the mouse pointer over the object in the Page Layout area to display the object's toolbar, and click the **Properties** button.

   The "BI Publisher Report Properties dialog" is displayed.

5. Complete the fields in the properties dialog as appropriate.

6. Click **OK**.

7. Click **Save**.

8. If required, add a prompt to the dashboard page to filter the results of an embedded parameterized report, as described in "Using Prompts with Parameterized Reports."

9. Optionally, schedule the dashboard with an agent, as described in Chapter 9, "Delivering Content."

Using Prompts with Parameterized Reports

You can use prompts to filter the results of embedded parameterized BI Publisher reports to show only results that match the prompt criteria.

The BI Publisher report can be either of the following:

- A BI Publisher report that receives its data from an Oracle BI EE analysis. For this report, you must have the report columns to filter on set to "Is Prompted" in the analysis. This type of report supports the full range of prompt expressions.

- A BI Publisher report that was created using a direct connection to a subject area. For more information on creating a report using a direct connection to a subject area, see "Creating Reports Using a Direct Connection to a Subject Area" in *Report Designer's Guide for Oracle Business Intelligence Publisher*.

To use prompts with parameterized reports:

1. In BI Publisher, open the report and locate the parameters that it uses. Set a default value for each required parameter so that the report displays correctly without user interaction.

2. Create a new column prompt for each parameter by following these steps:

   a. In the global header, click **New**, then **Dashboard Prompt**.

   b. Select either the subject area that includes the columns from the report or a subject area whose columns closely match those in the report.

   c. In the "Definition pane," click the **New** button, select **Column Prompt**, then select a column to use for the prompt. If the BI Publisher report was created using a direct connection to a subject area, make sure that you select the same column that you selected in the BI Publisher report.

   For more information on creating prompts, see Chapter 7, "Prompting in Dashboards and Analyses."

3. Complete the "New Prompt: Column dialog" and click **OK**. Verify the following settings:

- Set the Operator field to **is equal to/is in**.

- Define a presentation variable with the exact same name as the parameter from the report. When using variable names in prompts, ensure that you spell them correctly and adhere to case-sensitivity. Make the data type of the parameter match the data type of the column, if they are not based on the same database column.

- If the BI Publisher report was created using a direct connection to a subject area, specify the value of the variable using the following format:

  ```
  "Subject Area Name"."Folder Name"."Column Name"
  ```

  For example:

  ```
  "Sample Sales Lite"."Time"."Per Name Year"
  ```

  If the column is in a nested folder, list all folders. For example:

  ```
  "Sample Sales Lite"."Time"."More Time Objects"."Day of Week"
  ```

4. Click the **Save Prompt** toolbar button to save the prompt to the catalog in a shared folder.

5. Navigate to the dashboard that contains the parameterized report and click the **Edit Dashboard** toolbar button.

   The "Dashboard builder" is displayed.

6. In the Catalog pane, navigate to the folder that contains the prompt to add.

7. Drag and drop the prompt into the section on the dashboard page that contains the report.

8. Click the **Save** toolbar button.

Changing the Properties of a Dashboard and its Pages

You can change the properties of a dashboard and its pages. Specifically, you can:

- Change the style (or appearance) and description of the dashboard.

- Add hidden named prompts to the dashboard and to its pages.

- Specify which links (**Analyze**, **Edit**, **Refresh**, **Print**, **Export**, **Add to Briefing Book**, and **Copy**) are to be included with analyses at the dashboard level. Note that you can set these links at the dashboard page level and the analysis level, which override the links that you set at the dashboard level. For more information, see "Report Links dialog."

- Rename, hide, reorder, set permissions for, and delete pages.

- Specify which accounts can save shared customizations and which accounts can assign default customizations for pages, and set account permissions.

- Specify whether the **Add to Briefing Book** option is to be included in the Page Options menu for pages.

- Specify whether the execution of a dashboard page is to be delayed. For more information, see "Delaying the Execution of Dashboard Pages."

To change the properties of a dashboard and its pages:

1. Edit the dashboard. For information, see "Editing Dashboards."

2. Click the **Tools** toolbar button and select **Dashboard Properties**.

   The "Dashboard Properties dialog" is displayed.

3. Make the property changes that you want and click **OK**.

4. Click the **Save** toolbar button.

Changing the Properties of Objects Added to Dashboard Pages

You can change the properties of objects that have been added to a dashboard page from the "Dashboard Objects pane" and from the "Catalog pane."

To change the properties of an object on a dashboard page:

1. Edit the dashboard. For information, see "Editing Dashboards."

2. Navigate to the page that contains the object.

3. Hover the mouse pointer over the object in the Page Layout area to display the object's toolbar and click the **Properties** button.

   What is displayed depends on the type of object. For some objects, a properties dialog is displayed. For other objects, a menu of options is displayed. For more information on the properties that you can change, see "Properties Buttons for Objects."

4. Make the property changes that you want.

5. Click the **Save** toolbar button.

Delaying the Execution of Dashboard Pages

You can delay the execution of dashboard pages, if allowed at your organization. This is helpful, for example, if you want to:

- Enhance performance by generating queries only when actual data is needed

- Allow end users to specify prompt values (rather than use default prompt values) before analyses content is displayed on a dashboard page

When the execution of a dashboard page is delayed, the actual content of analyses is not loaded. Instead:

- A message is displayed at the top of the page, which indicates that the page is not fully loaded. It also instructs the end user to select prompt values and click the **Continue** button. Clicking **Continue** reloads the content on the page using the prompt values the end user specifies. If the end user does not specify any prompt values, then default prompt values are used.

- Static information about the objects that were not loaded is displayed, including the object name, an icon representing the object view, the view name, and the object description (if available).

- On the Page Options menu (displayed from the **Page Options** button on the Dashboard page toolbar), all options except the **Edit Dashboard** option, are disabled.

- The **Apply** button on dashboard prompts is not displayed. Instead any prompt values will be applied automatically when the end user clicks the **Continue** button.

Note that while the content of analyses is not loaded on the dashboard page, other objects (such as dashboard prompts, embedded content, text, and so on), are loaded.

Oracle BI EE remembers whether the execution of a page was delayed. When a user visits the same page again in the same context, it will load the entire page (rather than delay the execution), if the page had previously been loaded.

To delay the execution of a dashboard page:

1. Edit the dashboard. For information, see "Editing Dashboards."

2. Click the **Tools** toolbar button and select **Dashboard Properties**.

   The "Dashboard Properties dialog" is displayed.

3. Locate the page in the Dashboard Pages area and select the **Prompt before Opening** box.

   Note: The administrator can control the display of the **Prompt before Opening** box. For information, see "Manually Changing Presentation Setting Defaults" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

   ---

4. Click **OK**.

5. Click the **Save** toolbar button.

About Creating Custom Layouts for Printing and Exporting Dashboard Pages

You can create custom layouts for printing and exporting dashboard pages, if allowed at your organization:

- Custom print layouts allow your end users to produce high-quality printed dashboard content. For more information on printing dashboard pages, see "Printing Dashboard Pages."

- Custom export layouts allow your end users to export dashboard content customized for Excel. For more information on exporting dashboard pages, see "About Exporting Dashboards and Dashboard Pages."

When you create a custom layout:

- The dashboard page is exported to BI Publisher and the following items are generated automatically:

  – A BI Publisher Report with a layout based on the exported dashboard layout

  – A data model to retrieve data for the dashboard page components

- BI Publisher Report Editor opens in a new browser window with the autogenerated layout displayed as a thumbnail. The report editor allows you to edit or delete the layout, or add a new layout.

Once you have saved the custom layouts in BI Publisher, they are available for that dashboard page and appear in the Custom Print & Export Layouts area of the "Print & Export Options dialog."

You then make the custom layouts that you have created available to end users (on the Print menu or Export to Excel menu of a dashboard page) by selecting them in the Custom Print & Export Layouts area of the Print & Export Options dialog.

You then make the custom layouts that you have created available to end users using the following options in the Custom Print & Export Layouts area of the Print & Export Options dialog:

- **PDF** — Selecting this option makes the custom layout available in the Print menu of a dashboard page.

- **Excel** — Selecting this option makes the custom layout available in the Export to Excel menu of a dashboard page.

  Note: The default table heading format in Excel is Wrap Text. To change the Wrap settings for the table heading, perform the following actions:

  1. In the Title, click **Edit View**.

  2. To the right of the Title field, click **Title.**

     The Format Title page is displayed.

  3. Deselect **Wrap Text**, and click **OK**.

  Note that the analysis and dashboard font size is in pixels while the Excel font size is in points. Therefore, when you export to Excel from an analysis or dashboard, the font size decreases to 75% of the analysis or dashboard font size.

  > **Note:** If you delete the data model or the layout manually from the Oracle BI Presentation Catalog, then the associated BI Publisher report will no longer work and the custom layouts will no longer be available. If you delete an analysis, then the data model and layout will be available but will fail when run.

  > **Note:** As you create custom layouts, be aware that some customizations and some views may not be supported in BI Publisher. Among some of the items that are not supported are hierarchical columns, performance tiles, map views, trellis views, and dashboard prompts. If an item is not supported, it will be removed from the layout and a message will be displayed as to the reason it is unsupported.

For how to create a custom layout, see "Creating Custom Layouts for Printing and Exporting Dashboard Pages."

Items Not Supported When Using Custom Print Layouts

The following items are not supported in BI Publisher when using a custom print layout to print a dashboard page:

- Column Selector views.

- Create Segment views.

- Create Target List views.

- Funnel graph views.

- Legend views.

- Logical SQL views.

- Map views.

- Narrative views.

- Performance Tile views.

- Ticker views.

- Trellis views, including microcharts.

- View Selector views.

- These types of gauge views:

  – Bulb.

  – Vertical Bar.

  – Horizontal Bar.

- These types of graph views:

  – Pie graphs with multiple measures; instead a separate pie is displayed for each measure.

  – Time Series Line graphs.

  – Scatter graphs.

  – Waterfall graphs.

- These graph settings in the Graph Properties dialog:

  – In the General tab: **Zoom and Scroll**.

  – In the Style tab: conditional formatting settings.

  – In the Scale tab: all settings.

  – In the Titles and Labels tab, the following formatting settings:

    * **Truncate** in the "Font Format: Item dialog: Display Options tab" for the graph title and axis titles.

    * **Treat Numbers As**, **Negative Format**, and **Use 1000's Separator** in the "Format: Item dialog: Number Format tab" for vertical axis labels and data markers and **Decimal Places** in the Format *Item* dialog: Number Format tab for vertical axis labels.

    * **Label Orientation** in the Format: *Item* dialog: Display Options tab for vertical axis labels and horizontal axis labels and **Abbreviate** in the Format: *Item* dialog: Display Options tab for vertical axis labels.

- Hierarchical columns.

- Dashboard column formatting.

- Dashboard prompts.

- Pivot table or table prompts.

- Prompt edge on a view.

- Dashboard columns that have been frozen.

  You use the Freeze Column option in the Column Properties menu to freeze a column at an edge (top or left) of a dashboard layout. For more information, see "Properties Buttons for Objects."

- A fixed size specified for a dashboard column or section.

You specify a fixed size by setting the **Size** option in the Additional Formatting Options area of the "Section Properties dialog" and the "Column Properties dialog.".

- Fixed headers of rows and columns in a table or pivot table.

  You specify fixed headers by selecting **Fixed headers with scrolling content** as the method to use to browse data. For more information, see "Table Properties dialog: Style tab," "Pivot Table Properties dialog," and "Trellis Properties dialog: General tab."

- The grouping functionality for bubble graphs (achieved by the Bubbles drop target), scatter graphs (achieved by the Points drop target), and pie graphs (achieved by the Pies drop target).

You also need to be aware of the following expected object behavior in BI Publisher: pivot tables are expanded.

Creating Custom Layouts for Printing and Exporting Dashboard Pages

You can create custom layouts for printing and exporting dashboard pages For more information about creating custom layouts, see "About Creating Custom Layouts for Printing and Exporting Dashboard Pages."

To create one or more custom layouts for printing and exporting a dashboard page:

1. Edit the dashboard that contains the dashboard page for which you want to create a custom layout. For information, see "Editing Dashboards."

2. Navigate to the dashboard page.

3. Click the **Tools** button and select **Print & Export Options**. The "Print & Export Options dialog" is displayed.

4. Click the **Custom Print & Export Layouts** button and select **Create Layouts**. BI Publisher Report Editor opens (in a new browser window) with the autogenerated layout displayed as a thumbnail.

   > **Note:** The administrator can control the display of the **Custom Print & Export Layouts** component. For information, see "Enabling the Ability to Export Dashboard Pages to Oracle BI Publisher" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

5. In BI Publisher:

   a. Edit the layout as desired and save it.

   b. Create additional layouts, as desired.

   c. Exit BI Publisher.

6. If you want to make custom layouts available to end users for the dashboard page, display the Print & Export Options dialog by clicking the **Tools** button and select **Print & Export Options**.

7. For each custom layout in the Custom Print & Export Layouts area that you want to make available, select:

   - **PDF** to make the layout available in the Print menu of a dashboard page.

   - **Excel** to make the custom layout available in the Export to Excel menu of a dashboard page.

8. Click **OK**.

9. Save the dashboard.

Editing, Replacing, or Removing Custom Layouts

You can edit, replace, or remove custom layouts that you have created. For example, you might want to remove a custom print layout if the dashboard page to which the layout is associated has changed.

To edit, replace, or remove a custom layout:

1. Edit the dashboard that contains the page for which you want to edit, replace, or remove a custom layout. For information, see "Editing Dashboards."

2. Navigate to the dashboard page.

3. Click the **Tools** button and select **Print & Export Options**. The "Print & Export Options dialog" is displayed.

4. Click the **Custom Print & Export Layouts** button and select one of the following options:

   - **Create and Edit Layouts** — A warning is displayed to report that existing layouts may not work properly if the dashboard page has been modified. Respond to the warning as follows:

     – Select **Keep existing layouts** to keep the existing layouts. BI Publisher Report Editor opens, where you can edit the layouts.

     – Select **Remove existing layouts and create new layouts** to remove the existing layouts and create new ones. BI Publisher Report Editor opens, where you can create new layouts.

   - **Replace Layouts** — A warning is displayed to report that the existing layouts will be replaced. Confirm that you want to replace the existing layouts. If you click **OK**, then the existing data model and BI Publisher report are deleted and new ones autogenerated, and BI Publisher Report Editor opens, where you can create new layouts.

   - **Remove Layouts** — A warning is displayed. Confirm that you want to remove all existing layouts. If you click **OK**, then all layouts (as well as the associated BI Publisher report and data model) are removed.

5. When you have finished editing, replacing, or removing custom layouts, click **OK** in the Print & Export Options dialog to close it.

6. Save the dashboard.

Deleting Objects on Dashboard Pages

If you add an object that you later decide that you do not want, then you can delete it. Keep the following points in mind when deleting objects:

- When you delete an object that contains other objects, such as a column or section, you also delete all objects in that container.

- When you delete a column, other columns on the page might resize automatically to maintain column alignment.

- For objects that are saved in the catalog, the object is deleted from the dashboard page only. It is not deleted from the catalog. (Users with the appropriate permissions can edit the contents of the catalog. For information, see Chapter 14,

"Managing Objects in the Oracle BI Presentation Catalog.")

To delete an object on a dashboard page:

1. Edit the dashboard. For information, see "Editing Dashboards."

2. Navigate to the page that contains the object to delete.

3. Hover the mouse pointer over the object in the Page Layout area to display the object's toolbar and click the **Delete** button.

Deleting Dashboard Pages

You can delete:

- The current dashboard page
- One or more dashboard pages from the "Dashboard Properties dialog"

Deleting The Current Dashboard Page

To delete the current dashboard page:

1. Edit the dashboard. For information, see "Editing Dashboards."

2. Navigate to the page to delete.

3. Click the **Delete Current Page** toolbar button.

4. Confirm the deletion.

Deleting One or More Dashboard Pages

To delete one or more dashboard pages:

1. Edit the dashboard. For information, see "Editing Dashboards."

2. Click the **Tools** toolbar button and select **Dashboard Properties**.

   The "Dashboard Properties dialog" is displayed.

3. For each page to delete:

   a. In the **Dashboard Pages** area, select the page.

   b. Click **Delete** in the Dashboard Pages toolbar.

   c. Confirm the deletion.

4. Click **OK**.

Saving Dashboards by Other Names and in Other Locations

You can save a dashboard:

- By another name

  The new name for the dashboard must not exist in the destination folder, otherwise, the save operation fails.

- Anywhere in the Oracle BI Presentation Catalog

  If you save the dashboard in the Dashboards subfolder directly under /Shared Folders/*first level subfolder*, then the dashboard is listed in the **Dashboard** menu in the global header. If you save it in a Dashboards subfolder at any other level (such as /Shared Folders/Sales/Eastern), then it is not listed. The dashboard is also not

listed if you save it in a subfolder under the Dashboards subfolder, such as /Shared Folders/Sales/Dashboards/Eastern.

If you choose a folder in the Dashboards subfolder directly under /Shared Folders/*first level subfolder* in which no dashboards have been saved, then a new "Dashboards" folder is automatically created in that folder in which to save the new dashboard. For example, if you choose a folder named /Shared Folders/Sales in which no dashboards have been saved, a new Dashboards folder is automatically created and the Location entry changes to /Shared Folders/Sales/Dashboards. (A new "Dashboards" folder is not automatically created if you choose a folder at any other level.)

To save a dashboard by another name or in another location:

1. Edit the dashboard. For information, see "Editing Dashboards."

2. Click the **Save Dashboard As** toolbar button to display a dialog, where you specify the save criteria.

Opening and Using Dashboards

To open and use a dashboard:

1. In the global header, click **Catalog** to display the "Catalog page."

2. Navigate to the dashboard to open and click the **Open** link.

   The dashboard is opened to the first "Dashboard page." If no content has been added, then an empty dashboard page notification message is displayed.

3. (optional) Perform any of the following tasks:

   - Display the dashboard in the "Dashboard builder" for editing.

   - Navigate among dashboard pages by clicking the page tabs.

   - Print a page.

     For information, see "About Briefing Books and Printing BI Publisher Reports."

   - Refresh a page.

     Perform this task to ensure that the refresh operation bypasses saved information in the Oracle BI Presentation Services cache and is issued to the Oracle BI Server for processing.

     When you select a specific dashboard or analysis, Presentation Services checks its cache to determine if the identical results have recently been requested. If so, Presentation Services returns the most recent results, thereby avoiding unnecessary processing by the BI Server and the back-end database. If not, the analysis is issued to the BI Server for processing. You cannot force the analysis past the BI Server's cache.

     Administrators can configure cache settings that control what is cached and for how long. For information, see "Managing Performance Tuning and Query Caching" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

   - Add a page to a briefing book.

     For information, see "Adding Content to New or Existing Briefing Books."

   - Create a bookmark link or a prompted link to the page.

For information, see "About Creating Links to Dashboard Pages" and "Creating Links to Dashboard Pages."

- Apply saved customizations.

   For information, see "What Are Saved Customizations for Dashboard Pages?" and "Applying Saved Customizations."

- Edit saved customizations.

   For information, see "What Are Saved Customizations for Dashboard Pages?" and "Editing Saved Customizations."

- Save the current customizations.

   For information, see "What Are Saved Customizations for Dashboard Pages?" and "Saving Customizations."

- Clear the current customizations.

   For information, see "What Are Saved Customizations for Dashboard Pages?" and "Clearing Your Current Customization."

For information on keyboard shortcuts that you can use in a dashboard, see "Keyboard Shortcuts for Oracle BI EE and Oracle BI Publisher."

What Are Saved Customizations for Dashboard Pages?

Saved customizations allow users to save and view later dashboard pages in their current state with their most frequently used or favorite choices for items such as filters, prompts, column sorts, drills in analyses, and section expansion and collapse. By saving customizations, users need not make these choices manually each time that they access the dashboard page.

Users with the appropriate permissions and dashboard access rights can perform the following activities:

- Save various combinations of choices as saved customizations, for their personal use or use by others.

- Specify a saved customization as the default customization for a dashboard page, for their personal use or use by others.

- Switch between their saved customizations.

For information on using saved customizations, see "Applying Saved Customizations" and "Clearing Your Current Customization."

For information on saving customizations and editing saved customizations, see "Saving Customizations" and "Editing Saved Customizations."

Example Scenarios for Creating and Using Saved Customizations

This section describes two example scenarios that describe the creation and use of saved customizations.

Scenario 1: Saved Customizations Created by a Group for Use by Others

An IT group in a consumer goods company builds a master dashboard that contains the content that various product groups need to view. The dashboard contains filters and prompts from which members of the product groups would ordinarily make customizations to view relevant results.

The master dashboard contains two analyses, one that shows sales for the east, west, north, and south regions, and another that shows all products shipped in those regions. The analysis for sales by region contains a prompt that allows users to select their particular region. The analysis for all products shipped contains a filter that allows users to select their products.

An IT consultant customizes the view for the Fizzy Brands product group for each region. The consultant first selects the east region and the Fizzy Brand products from the filters and prompts on the dashboard, and then saves these choices as a customization that can be shared by other users. The consultant then assigns this customization as the default view customization to members of the east region group that sells Fizzy Brand products. The consultant repeats this process for the west, north, and south regions.

When a Fizzy Brands sales representative for the western region signs in to Oracle Business Intelligence and views the dashboard, the representative initially views sales and shipment information based on the region and product choices assigned as the default view customization for that group. All sales representatives in that group who would typically make identical choices for region and product no longer have to do so.

Scenario 2: Saved Customizations Created for Use by an Individual User

A business user's dashboard contains two reports, one that shows sales for all regions, and another that shows all products shipped. Each report contains a prompt, allowing the user to select a particular region and product. The user selects the eastern region and the Fizzy Brands product. The dashboard refreshes to show the user this view of the data. The user saves this view as a customization, indicates that the customization is for personal use, and that it is the default customization the user wants to see when viewing the dashboard. Then, this user creates additional combinations of the product and region sets in which the user is most interested, and saves them for later retrieval. The user can also access customizations that were saved by the IT group as shared customizations. To view sales in the western region for Fizzy Brands, the user clicks the **Page Options** button, selects **Apply Saved Customizations**, and selects the view named Dollar Sales, Western Region, Fizzy Brands. The dashboard refreshes with the new view of the data.

Saving Customizations

You can save customization for use by you or by others. You can also specify whether the customization is to be the default customization for a dashboard page, for you or for others. For more information on customizations, see "What Are Saved Customizations for Dashboard Pages?"

To save a customization:

1. Open the dashboard in which you want to save a customization. For information, see "Opening and Using Dashboards."

2. Navigate to the page on which you want to save a customization.

3. Make your customizations.

4. Click the **Page Options** toolbar button on the dashboard page and select **Save Current Customization**.

   The "Save Current Customization dialog" is displayed.

5. Enter a descriptive name for the customization.

6. Specify for whom the customization is to be saved:

- To save the customization for your personal use, select **Me**.

- To save the customization for use by others, select **Others** and then click **Set Permissions** to display the "Saved Customization Permissions and Defaults dialog," where you specify the accounts that have permission to use the customization and whether the customization is to be the default customization for the accounts.

7. Optionally, to assign this customization as your default customization, select **Make this my default for this page**.

8. Click **OK**.

Applying Saved Customizations

You can apply customizations that you have saved for your own personal use or that have been saved by someone else for your use. For more information on customizations, see "What Are Saved Customizations for Dashboard Pages?"

To apply a saved customization:

1. Open the dashboard in which you want to apply a saved customization. For information, see "Opening and Using Dashboards."

2. Navigate to the page that contains the customization to apply.

3. Click the **Page Options** toolbar button and select **Apply Saved Customization**.

   Your personal saved customizations, if any, are shown at the beginning of the list. Shared saved customizations are listed next. Your current default customization is shown in bold type.

4. Click a saved customization in the list to apply it to the dashboard page.

Editing Saved Customizations

You can rename customizations, change which customization to use as your default, change permissions for those customizations that have been shared with others, and delete customizations. For more information on customizations, see "What Are Saved Customizations for Dashboard Pages?"

To edit saved customizations:

1. Open the dashboard in which you want to edit a customization. For information, see "Opening and Using Dashboards."

2. Navigate to the page that contains the customization to edit.

3. Click the **Page Options** toolbar button on the dashboard page and select **Edit Saved Customizations**.

   The "Edit Saved Customizations dialog" is displayed.

4. Rename customizations, change which customization to use as your default, change permissions for those customizations that have been shared with others, and delete customizations, as appropriate.

5. Click **OK**.

Clearing Your Current Customization

You can clear your current customization if you decide the choices for items such as filters, prompts, column sorts, drills in analyses, and section expansion and collapse are not what you want. For more information on customizations, see "What Are Saved Customizations for Dashboard Pages?"

To clear your current customization:

1. Click the **Page Options** toolbar button on the dashboard page and select **Clear My Customization**.

   The current customization is cleared.

About Dashboard Template Pages for New Users

Dashboard template pages are dashboard pages that are used to populate the personal dashboards (My Dashboard) of new users on their initial login. This allows users to see one or more dashboard pages with content rather than an empty dashboard when they first log in. It also gives users a starting point to build their own dashboard pages.

How Dashboard Template Pages Work

You create dashboard template pages for your users in dashboards that have a designated name (by default the designated name is "default") and that you save in subfolders of /Shared Folders. When a new user logs in for the first time, Oracle BI EE searches for dashboard template pages in all dashboards that have the designated name, copies all dashboard template pages to which the user has permission to the user's My Dashboard folder, and displays them in the user's My Dashboard.

If a user has permissions to dashboard template pages in multiple dashboards, then Oracle BI EE copies all template pages from those dashboards to the user's My Dashboard folder and displays them alphabetically by name in the user's My Dashboard. If two pages have the same name, then the name of one of the pages is prefixed with the name of the folder in which the dashboard was saved.

Where Oracle BI EE Searches for Dashboard Template Pages

By default, Oracle BI EE searches for dashboard template pages in all dashboards that are named "default" and that have been saved in subfolders of /Shared Folders. (It searches only subfolders under /Shared Folders (for example, /Shared Folders/Finance) and not the entire hierarchy (for example, not /Shared Folders/Finance/Div1.)

If your organization has designated a name other than "default" for the name of dashboards that contain dashboard template pages, then Oracle BI EE searches for dashboard template pages in dashboards with that name (for example, "Templates") rather than "default" in subfolders of /Shared Folders.

To designate a name other than "default" for the name of dashboards that contain dashboard template pages, your administrator must set the DefaultName element in the instanceconfig.xml file. For information, see "Manually Changing Presentation Settings" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

How Users Can Work with Dashboard Template Pages

Users can use dashboard template pages:

- As a starting point to build their own dashboard pages.

  Users can change any of the content on these dashboard template pages. Any changes that they make to the content are made to their local copies of the dashboard template pages in their My Dashboard folders, and not to the original dashboard template pages.

- As examples of additional pages that they might want to build.

If users delete a dashboard template page from their My Dashboard, then they cannot repopulate My Dashboard with the page. However, if users delete their entire My Dashboard, when they log in again or navigate to My Dashboard again, their My Dashboard is recreated with all the latest dashboard template pages.

Creating Dashboard Template Pages for New Users

You can create dashboard template pages for users so that they see one or more dashboard pages with content rather than an empty dashboard when they first log in. For more information on dashboard template pages, see "About Dashboard Template Pages for New Users."

To create dashboard template pages:

1. Create one or more dashboards to contain the dashboard template pages. For each dashboard, specify the following:

   - In the **Name** field, enter "default" unless your organization has designated another name for the name of dashboards that contain dashboard template pages, in which case, enter the name your organization has designated.

   - In the **Location** box, select a Dashboard folder in a subfolder of /Shared Folders, for example /Shared Folders/Finance/Dashboards.

   For information, see "Creating Dashboards."

2. Create one or more dashboard pages and add content to the pages. See "Adding New Pages to Dashboards" and "Adding Content to Dashboards."

   Note: Users have access only to content to which they have appropriate permissions.

   ---

3. Assign permissions on the dashboard to allow read access for all users whose My Dashboard you want to populate with the dashboard pages. For information, see "Assigning Permissions."

   Note: If you later change the dashboard content or the permissions to the dashboard, then the changes take effect only for new users on first login, not for users whose My Dashboard has been populated with the dashboard template pages.

Publishing Dashboard Pages

You can publish a dashboard page to a shared dashboard location so that you can share the page with others.

When you publish a dashboard page:

- Personal content (such as analyses, prompts, and so on) is copied to a destination location that you specify and references updated as appropriate.

- References to shared content are retained.

- If you have made changes to the page but have not saved them, then the unsaved changes are published along with the saved changes.

- Ensure that other users who might display the published dashboard page have the appropriate privileges for the objects on the page. For example, if the page contains a BI Publisher report, then users must have the appropriate privilege to see that report.

To publish a dashboard page:

1. Edit the dashboard that contains the page to publish. For information, see "Editing Dashboards."

2. Navigate to the page to publish.

3. Click **Tools** and then select **Publish Page to Dashboard**.

   The "Publish Page to Dashboard dialog" is displayed.

4. In the Dashboard field, specify the name of the destination dashboard.

5. If the Publish Dashboard Page warning is displayed to indicate that content (such as the page, analyses, prompts, and so on) exists in the destination location, then click:

   - **OK** to continue with the publishing operation and replace the existing content.

   - **Cancel** to discontinue the publishing operation and not replace the existing content.

6. Click **OK**.

   The dashboard page is copied to the destination location.

About Creating Links to Dashboard Pages

You can create links to dashboard pages, if allowed at your organization. This lets you, for example, save a link as a bookmark or copy and send a link to other users in email.

There are two types of links that you can create — bookmark links and prompted links. The following sections describes these links:

- "What Are Bookmark Links?"

- "What Are Prompted Links?"

For how to create links to dashboard pages, see "Creating Links to Dashboard Pages."

What Are Bookmark Links?

A bookmark link is a URL that captures the path to a dashboard page and all aspects of the page state, for example:

```
http://localhost/10.1.3.2/saw.dll?Dashboard&_
scid=7ndOC-SjmWo&PortalPath=%2Fusers%2Fadministrator%2F_
portal&Page=p2&PageIdentifier=7fsg0r2sdssvgen4&BookmarkState=r78an1mbj0fj4lmqhdjfn
dvvai
```

After you create a bookmark link, you can:

- Save the link as a bookmark so that you can return to the exact same page content at a later time.

- Copy and send the link to other users who then can view the exact same content that you are viewing, providing they have the same permissions as you and have access to the page.

When you create a bookmark link, the state of a dashboard page is saved in the catalog as a hidden bookmark object for the amount of time that your organization specifies. The default is 30 days. See the administrator for the amount of time that your organization specifies. Because the state of a dashboard page is saved when you create a bookmark link, you can continue to modify the content of the page after you create the link.

What Are Prompted Links?

A prompted link captures the path to a dashboard page and a simplified presentation of the dashboard prompts, for example:

```
<Content Path>&Action=Navigate&col1="Products"."P1  Product"&val1="Bluetooth
Adaptor"&psa1="A - Sample Sales"
```

When you create a prompted link, you can manually or programmatically manipulate the link, such as by adding different values for the prompts. Note that with a prompted link, you cannot capture all aspects of the page state as you can with a bookmark link. This is because you cannot replicate the exact state of non-prompt parameters.

A URL that captures the path to a dashboard page and a simplified presentation of the dashboard prompts can also be manually constructed rather than created by a prompted link. For more information, see *Integrator's Guide for Oracle Business Intelligence Enterprise Edition*.

For more information on manipulating prompted links, see the following topics:

- "Basic Syntax of Prompted Links"

- "Parameters for Prompted Links"

- "Guidelines for Manipulating Prompted Links"

Basic Syntax of Prompted Links

The basic syntax of a prompted link is as follows:

```
<Content Path>&Action=Navigate&col1&op1&val1&col2&op2&val2&var3&op3&val3…
```

where Content Path is any of these base URLs:

```
http://<obiee url path>/saw.dll?Dashboard&PortalPath=<dashboard path>
http://<obiee url path>/saw.dll?Dashboard&PortalPath=<dashboard path>&Page=<page
name>
http://<obiee url path>/saw.dll?PortalGo&path=<analysis or prompt path>
http://<obiee url path>/saw.dll?Go&path=<analysis or prompt path>
```

Parameters for Prompted Links

The parameters that you can use to modify prompted links are as follows:

- **&Action=** — Specifies the action that the prompted link is to take. Valid values are:

- **Navigate** — Navigates to the dashboard page.
- **Print** — Format results for printing to PDF, without paging controls, hot links, and so on.
- **Download** — Downloads the results to Microsoft Excel.

You cannot use **Print** and **Download**, if the viewState argument exists. For more information, see *Integrator's Guide for Oracle Business Intelligence Enterprise Edition*.

- **&col#=** — Identifies the column used in a column prompt.

  Example:

  ```
  &col1="EASTERN REGION"
  ```

- **&var#=** — Identifies the variable used in a variable prompt or a variable that is set by a column prompt.

  The scope of all variables is dashboard page, by default, unless you explicitly reference the variable.

  Example using the default scope controlled by the optional parameter &P1=:

  ```
  &var1="myRegion"
  ```

  Example of explicitly setting to dashboard scope:

  ```
  &var1=dashboard.variables['myRegion']
  ```

  Example of explicitly setting to dashboard page scope:

  ```
  &var1=dashboard.currentPage.variables['myRegion']
  ```

  If you need to set both dashboard scope and dashboard page scope, include both variables in the URL.

  You cannot set a session variable with this parameter. You can, however, override a session variable by using setting a request variable. For example, you can override the NQ_SESSION.REGION_VAR by setting this request variable:

  ```
  &var1=requestVariables['REGION_VAR']
  ```

- These value parameters:
  - **&val#=** — Specifies the value of a prompt.

    Example:

    ```
    &val1="EASTERN REGION"
    ```

  - **&valgrp#=** — Sets the value of a prompt to a custom group's catalog path.

    Example:

    ```
    &valgrp1="/shared/folder/myCustomGroup"
    ```

  - **&valsv#=** — Sets the value of a prompt to a server variable.

    Example:

    ```
    &valsv1="SALESREGION"
    ```

  The val# and valgrp# parameters can co-exist with each other but not with the valsv# parameter. In other words, the prompt can have any combination of val# and valgrp#, but cannot have both valsv# and val#.

- **&cov#=** — Sets the variable of a column prompt that also sets a variable.

  Example:

  ```
  &var1=myRegion&cov1="Markets"."Region"&val1="EASTERN.REGION"+"WESTERN REGION"
  ```

- **&op#=** — (optional) Specifies the operator, for example equal (eq).

  Use the same operators as those for the Go URL. For a list of these operators, see "Navigation Parameters" in *Integrator's Guide for Oracle Business Intelligence Enterprise Edition*.

  Example:

  ```
  &col1="Markets"."Region"&val1="EASTERN REGION"+"WESTERN REGION"&op1=in
  ```

- **&psa#=** — (optional) Identifies a primary subject area for a prompt.

  Use this parameter if a prompt requires that the data types of values be correctly identified by subject area.

  Example:

  ```
  &var1=myRegion&cov1="Markets"."Region"&val1="EASTERN REGION"+"WESTERN
  REGION"&psa1=Paint
  ```

  If a prompted link includes multiple subject areas, specify the prompts that do not identify a subject area first (for example, &psa1="Products"."P1 Products") and those that do identify a subject area last (for example, &psa2="B-Sample Target"."Products"."P1 Products").

- **&formulause#=** — Identifies whether a prompt value is a code value or a display value (in a repository that is configured for the double column feature).

  If you do not use this parameter, it is assumed that the value is a display value.

  Example:

  ```
  &var1=myRegion&cov1="Markets"."Region"&val1="2"+"3"&formulause1=code
  ```

- For prompts that use hierarchical columns:

  - **&hierid#=** — (required) Identifies the hierarchy ID.
  - **&dimid#=** — (required) Identifies the dimension ID.
  - **&tblnm#=** — (required) Identifies the table name.

  Example:

  ```
  &col1="Products"."Products Hierarchy"&hierid1=Products Hierarchy&dimid1=H1
  Products&tblnm1="Products"&val1="*"+"all"&psa1="A -
   Sample Sales"
  ```

  If there are multiple values across multiple levels, you need to expand the syntax of values. For how, see

- **&P1=** — Defines the scope of all prompted link parameters. Valid values are:

  - **dashboard**
  - **dashboardPage** (default if the scope is not provided)
  - **report**

  This parameter affects both filters and variables of the prompted link.

  Example:

```
&P1=dashboard
```

Expanding the Syntax of Values In a prompted link that includes hierarchical columns, if there are multiple values across multiple levels, you need to expand the syntax of values.

To expand the syntax of values:

1. Group values based on their levelID.

2. Put all values belonging to the same level into one array and add the corresponding levelID to the front of each array as follows:

   ```
   "Detail Product"+"7"+"4"
   ```

3. Concatenate each array and separate them with +*.

4. Put the entire concatenated string into a &val#= parameter. For example:

   ```
   &col1="Products"."Products Hierarchy"&hierid1=Products Hierarchy&dimid1=H1
   Products&tblnm1="Products"&val1="LOB"+"Digital"+*"Brand"+"HomeView"+*"Detail
   Product"+"7"+"4"&psa1="A - Sample Sales"
   ```

Guidelines for Manipulating Prompted Links

The guidelines for manipulating prompted links are as follows:

- Use any combination of &col#= and &var#= but number them consecutively starting from 1 to *N*. For example, you could use var1, col2, col3, or you could use col1, var2, or col3.

- Use plus signs (+) to separate values.

- Use these locale-independent formats for date, time, and timestamp:

  For the date format:

  ```
  YYYY-MM-DD
  ```

  For the time format:

  ```
  hh24:mm:ss
  ```

  For the timestamp format (the expected time zone is UTC):

  ```
  YYYY-MM-DD hh24:mm:ss
  ```

- Make sure that you properly encode the URL. Not all browsers or platforms allow unescaped URLs. For example, encode a double quote (") as %22, a whitespace character as %20, and so on.

- Be aware that the URL character length that browsers support varies among browsers. If a URL is longer that the supported length, it will be truncated. The workaround is to use a bookmark link or another browser that supports the longer length.

- Optionally omit the double quotes if there are no white spaces inside the values.

  > **Tip:** To quickly and accurately construct a prompted URL manually, navigate to a dashboard page with the corresponding prompts, apply the desired prompt values, create a prompted link to generate the prompted URL, and then use the URL as a template.

Creating Links to Dashboard Pages

You can create links to dashboard pages, if allowed at your organization. For more information about creating links to dashboard pages, see "About Creating Links to Dashboard Pages."

To create a link to a dashboard page:

1. Open the dashboard in which you want to create a link to a dashboard page. For information, see "Opening and Using Dashboards."

2. Navigate to the page for which you want to create a link.

3. Click the **Page Options** toolbar button on the dashboard page and:

   - To create a bookmark link, select **Create Bookmark Link**.

   - To create a prompted link, select **Create Prompted Link**.

   Note: The administrator can control the display of the **Create Bookmark Link** and **Create Prompted Link** options by settings in the instanceconfig.xml file and by setting privileges. For more information, see "Enabling the Ability to Create Links to Dashboard Pages" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition* and "Managing Presentation Services Privileges" in *Security Guide for Oracle Business Intelligence Enterprise Edition*.

   If you drill in an analysis that has been set to replace the dashboard with the new results (rather than show the new results directly in the dashboard), then the **Create Bookmark Link** option is displayed as a link below the new results rather than as an option on the Page Options menu. (To specify how drilling works in an analysis, you use the **Drill in Place** option on the Properties menu for a section. For more information, see "Properties Buttons for Objects."

   The link is displayed in the Address Bar of the browser. If the link is a:

   - Bookmark link, then you can save it as a bookmark or copy and send it to other users.

   - Prompted link, then you can manually or programmatically manipulate the link. For how, see "What Are Prompted Links?"

Working with Briefing Books

If your organization licensed Oracle BI Briefing Books, then you can work with briefing books.

The following topics explain what briefing books are and how you work with them:

- "What Are Briefing Books?"

- "Adding Content to New or Existing Briefing Books"

- "Editing Briefing Books"

- "Downloading Briefing Books"

- "Adding a List of Briefing Books to a Dashboard Page"

- "Using Agents to Deliver Briefing Books"

What Are Briefing Books?

A briefing book is a collection of static or updatable snapshots of dashboard pages, individual analyses, and BI Publisher reports.

You can:

- Add the content of dashboard pages (including pages that contain BI Publisher reports) or individual analyses to new or existing briefing books. See "Adding Content to New or Existing Briefing Books."

- Edit briefing books to reorder content, delete content, and change the content type, navigation link properties, and content description. See "Editing Briefing Books."

- Download briefing books in PDF or MHTML format for printing and viewing. See "Downloading Briefing Books."

  The PDF version of a briefing book contains an automatically generated table of contents. For information about the table of contents, see "About the Table of Contents in a PDF Version of a Briefing Book."

- Add a list of briefing books to a dashboard page. See "Adding a List of Briefing Books to a Dashboard Page."

- Update, schedule, and deliver briefing books using agents, if your organization licensed Oracle Business Intelligence Delivers. See "Using Agents to Deliver Briefing Books."

About the Table of Contents in a PDF Version of a Briefing Book

The PDF version of a briefing book contains a table of contents that is automatically generated. It contains an entry for each dashboard page, analysis, and report in the briefing book. Each of these entries includes a time stamp and the page number within the PDF file. The time stamp value depends on how the content was saved to the briefing book. If the content was saved as updatable, then the time stamp is current. If the content was saved as a snapshot, then the time stamp is the time of the snapshot.

Indented beneath each entry for a dashboard page are any briefing book links included on that page, up to a maximum of nine links. These entries do not include timestamps. For example:

```
Table of Contents

My Dashboard Page 7/11/2008 9:15:20 AM . . . . . . .1
    Years to Dollars Dashboard . . . . . . . . . .2
```

The administrator can modify the template for the table of contents so that the table of contents that is generated in your briefing books might have a different look.

> **Note:** The table of contents is always generated in English. Other languages are not supported. Therefore, you might want to translate the tables of contents that are generated in briefing books.

For more information about including BI Publisher reports with briefing books, see "About Briefing Books and Printing BI Publisher Reports."

Adding Content to New or Existing Briefing Books

You can add the content of dashboard pages (including pages that contain BI Publisher reports) or individual analyses to briefing books. You can add the content to existing briefing books or to new briefing books that you create.

To add content to a new or existing briefing book:

1. Open the dashboard that contains the content to add to a briefing book. For information, see "Opening and Using Dashboards."

2. Navigate to the page to add or that contains the analysis to add.

3. Perform one of the following actions:

   - To add the contents of the dashboard page to a briefing book, click the **Page Options** toolbar button on the dashboard page and select **Add To Briefing Book**.

     _____

     Note: The **Add to Briefing Book** option is not available on an empty dashboard page or if the **Show Add to Briefing Book** box in the "Dashboard Properties dialog" has not been selected for the page.

     _____

   - To add the results of an individual analysis to a briefing book, locate the analysis on the dashboard and click the **Add to Briefing Book** link.

     _____

     Note: This link is displayed only if the **Add to Briefing Book** option was selected in the Report Links dialog when the analysis was added to the dashboard. For information about setting the **Add to Briefing Book** option, see "Report Links dialog."

     _____

   The "Save Briefing Book Content dialog" is displayed.

4. Click **Browse** to display the "Save As dialog."

5. In the Save As dialog, to save the contents to:

   - A new briefing book, specify the location in which to save the briefing book in the **Save In** field, enter a name for the briefing book in the **Name** field, optionally enter a description in the **Description** field, and click **OK**.

   - An existing briefing book, select the briefing book and click **OK**.

6. In the Save Briefing Book Content dialog, complete the remaining fields as appropriate.

7. Click **OK**.

   The content is added to the briefing book.

Editing Briefing Books

You can edit briefing books to reorder content, delete content, and change the content type, navigation link properties, and content description.

To edit a briefing book:

1. To edit a briefing book:

   - In the catalog, in the global header, click **Catalog** to display the "Catalog page."

■ On a dashboard page, open the dashboard page that contains the briefing book.

2. Navigate to the briefing book to edit and click **Edit**.

The "Edit Briefing Book dialog" is displayed.

3. To change content:

a. Select the content.

b. Click **Edit Page** to display the "Page Properties dialog."

c. Change the content type, the number of navigation links to follow for updatable content, or the content description as needed.

d. Click **OK**.

4. To reorder content, select the content and then drag and drop it to the desired location.

5. To delete content, select the content and click **Delete**.

6. Click **OK**.

Downloading Briefing Books

You can:

■ Download briefing books to your computer in MHTML format and then share them for offline viewing.

■ Download briefing books in PDF format and print them.

The PDF version of a briefing book contains an automatically generated table of contents. For information about the table of contents, see "About the Table of Contents in a PDF Version of a Briefing Book."

To download a briefing book:

1. In the global header, click **Catalog** to display the "Catalog page."

2. Navigate to the briefing book to download.

3. Perform one of the following actions:

■ To download the briefing book in PDF format, click **PDF** and then open or save the file.

Notes: The Adobe Reader application is required to view or print a briefing book PDF file.

BI Publisher reports that are contained in the briefing book are only included in the PDF file if the reports themselves are enabled for PDF output.

The setting of the **Print Rows** list in the "Print & Export Options dialog" for the analysis or dashboard determines whether all rows or only the visible rows of an analysis are shown in the PDF.

■ To download the briefing book in MHTML format, click **Web Archive (.mht)** and then open or save the file.

Downloaded briefing books are saved with an .mht file extension and can be opened in a browser. You can then email or share the briefing book.

Adding a List of Briefing Books to a Dashboard Page

You can add a list of briefing books to a dashboard page.

To add a list of briefing books to a dashboard page:

1. Edit the dashboard. For information, see "Editing Dashboards."

2. Navigate to the page to which you want to add a list of briefing books.

3. From the "Dashboard Objects pane," drag and drop a folder object into a section.

4. Hover the mouse pointer over the folder object in the Page Layout area to display the object's toolbar and click the **Properties** button.

   The "Folder Properties dialog" is displayed.

5. In the **Folder** field, enter the folder that contains the briefing books to list.

6. In the **Expand** box, specify whether to show an expanded view of the folder.

7. In the **Show RSS Link** box, specify whether to add an RSS feed option to the folder.

8. Click **OK** and then click **Save** to save the dashboard.

   The folder is added to the dashboard. On the Dashboard page, to:

   – See a list of the briefing books if the folder is not expanded, click the folder.

   – Edit a briefing book, click its **Edit** link. See "Editing Briefing Books."

   – Download a briefing book in PDF format, click its **PDF** link. See "Downloading Briefing Books."

   – Download a briefing book in MHTML format, click its **Web Archive (.mht)** link. See "Downloading Briefing Books."

Using Agents to Deliver Briefing Books

To use an agent to deliver a briefing book:

1. Create or edit the agent to be used to deliver the briefing book. For information, see "Creating Agents."

2. In the "Agent editor: Delivery Content tab," click **Browse** to select the briefing book.

   When the agent runs, the briefing book is delivered.

6

Filtering and Selecting Data for Analyses

This chapter explains how to construct filters, selection steps, groups, and calculated items in Oracle Business Intelligence Enterprise Edition. It explains how to use these objects to specify the data that is displayed in analyses and dashboards.

This chapter includes the following sections:

- Saving Objects as Inline or Named
- What are Filters and Selection Steps?
- Working with Selections of Data
- Creating Column Filters
- Editing Column Filters
- Working with the EVALUATE_PREDICATE Function
- Applying a Named Filter to an Analysis
- Combining and Grouping Column Filters
- Using a Saved Analysis as a Filter
- Creating and Editing the SQL Statements for a Column Filter in an Analysis
- Working with Calculated Measures
- Working with Groups and Calculated Items

Saving Objects as Inline or Named

This section describes saving objects as inline or named. It contains the following topics:

- "What are Inline or Named Objects?"
- "What is the Folder Structure for Named Objects?"
- "Saving Filters as Inline or Named"
- "Saving Groups and Calculated Items as Inline or Named"

What are Inline or Named Objects?

As you work with certain objects, you can create other objects that are saved with those objects. When you save one object with another, that object is saved "inline." You can save filters, groups, and calculated items inline. For example, you can create a group as part of an analysis. When you save the analysis, the group is saved "inline" or along with the analysis.

In addition to saving these objects inline, you can save them as individual objects with the subject area in the Oracle BI Presentation Catalog. When you save an object on its own, its becomes a "named" object. Named objects provide reusability, because you can create one object and use it multiple times with any analysis, dashboard (for filters), or dashboard page (for filters) that contains the columns that are specified in the named object. When the named object is updated and saved, those updates are immediately applied to all objects where the named object is used.

For example, after you save a group inline with an analysis, you can save the group as its own object in the catalog. You can then apply that named group from the Catalog pane to other analyses.

What is the Folder Structure for Named Objects?

Named filters, groups, and calculated items are generally saved to their related subject area folder. By saving the objects to a subject area folder, you ensure that they are available when you create an analysis for the same subject area.

Named objects saved in the /My Folders folder are available only to you. Objects saved in the /Shared Folders folder are available to other users who have permission to access the folders. If a subject area folder does not exist in your /My Folders folder or within the /Shared Folders folder, then the subject area folder is created automatically. When you save the object, the "Save As dialog" displays a default save path to /My Folders/Subject Area Contents/*<subject area>*. However, the dialog's Folders area continues to display all instances of the subject area folder in the catalog.

Saving Filters as Inline or Named

When you create an inline filter in the Analysis editor: Criteria Tab's "Filters pane," you can optionally save the inline filter as a named filter. Named filters can also be created at the analysis level or as a standalone object from the global header.

A named filter can filter all or some of the analyses that are embedded in a dashboard or analyses that are embedded on the same dashboard page.

Saving Groups and Calculated Items as Inline or Named

You can save groups and calculated item as an inline or named object:

- When you create a group or calculated item while editing and saving a view or while working in the "Compound Layout," the group or calculated item is saved inline with the analysis.

- When you work in the Selection Steps pane:

  – You can save a group or calculated item that is within a step as a named object in the catalog.

  – You can save a set of steps or the resulting members list for a column as a named object. You cannot save a set of steps as a group if one of the steps includes a calculated item.

See "Adding a Group to Another Analysis" for information on adding a saved group to an analysis.

To save a calculated item or group as a named object to the catalog:

1. Display the "Selection Steps pane."

2. Click the link for the calculated item or group, then click **Save Calculated Item As** or **Save Group As** to display the "Save As dialog."

3. Complete the dialog to save the object to the catalog.

To save a set of steps as a group to the catalog:

1. Display the "Selection Steps pane."

2. Click the **Save Selection Steps** button to the far right of the column name.

3. Complete the "Save Selection Steps dialog" to save the group as an object to the catalog.

What are Filters and Selection Steps?

You use both filters and selection steps to limit the results that are displayed when an analysis is run, so that the results answer a particular question. Together with the columns that you select for an analysis, filters and selection steps determine what the results contain. Based on the filters and selection steps, only those results that match the criteria are shown. For example, depending on the industry in which you work, you can use filters and selection steps to learn who are the top ten performers, what are the dollar sales for a particular brand, which are the most profitable customers, and so on.

Another kind of filter, called a prompt, can apply to all items in a dashboard. Prompts can be used to complete selection steps and filters at runtime. For information, see Chapter 7, "Prompting in Dashboards and Analyses."

Oracle BI Enterprise Edition provides the Filters view and Selection Steps view, which you can add to an analysis to display any filters or selection steps applied to the analysis. Adding these views can help the user understand the information displayed in the analysis. For more information about how to add views to an analyses, see Chapter 4, "Adding Views for Display in Dashboards."

How Do Filters and Selection Steps Differ?

Filters and selection steps are applied on a column-level basis and provide two methods for limiting the data in an analysis. A filter is always applied to a column before any selection steps are applied. Steps are applied in their specified order. Filters and selection steps differ in various ways.

Filters

Filters can be applied directly to attribute columns and measure columns. Filters are applied before the query is aggregated and affect the query and thus the resulting values for measures. For example, suppose that you have a list of members in which the aggregate sums to 100. Over time, more members meet the filter criteria and are filtered in, which increases the aggregate sum to 200.

Selection Steps

Selection steps are applied after the query is aggregated and affect only the members displayed, not the resulting aggregate values. For example, suppose that you have a list of hierarchical members in which the aggregate sums to 100. If you remove one of the members using a selection step, then the aggregate sum remains at 100.

You can create selection steps for both attribute columns and hierarchical columns. Selection steps are per column and cannot cross columns. Because attribute columns do not have an aggregate member, the use of selection steps versus filters for attribute columns is not as distinctive as for hierarchical columns. While measure columns are displayed in the Selection Steps pane, you cannot create steps for them so steps do not

affect them. Measures are used to create condition steps for attribute and hierarchical columns, such as Sales greater than $1 million.

Applying Filters to Attribute Columns to Affect Hierarchical Columns

You can use a filter on a related attribute column to affect the display of members in a hierarchical column. For example, suppose a hierarchical column contains the levels Year, Quarter, and Month. Suppose that a filter exists on the attribute column that corresponds to the Year hierarchy level. If you create a filter on Year to limit it to 2008 and 2009, then when the hierarchical column is displayed in a view, only those two years are visible. This functionality depends on the way that the logical columns have been defined in the business layer of the subject area in the Oracle BI Administration Tool.

Working with Selections of Data

As you specify which data members to include in an analysis, you create selections of data from the data source. Each selection specifies the criteria for a set of members for a particular column, such as Product or Geography. Each selection consists of one or more steps. A step is an instruction that affects the selection, such as add Product members whose values contain the text "ABC." The order in which steps are performed affects the selection of data. Each step acts incrementally on the results from previous steps, rather than acting on all the members for that column.

You can view these selection steps in the "Selection Steps pane." Steps are created using the following means:

- When you add a column to an analysis, a selection step is created automatically to start with all members, unless you explicitly add specific members. As you drag and drop column members in the Results tab to add to the analysis, steps are also created automatically. For example, suppose that you drag and drop the FY2007 and FY2008 members from the Year hierarchical column to a pivot table. The selection step "Add FY2007, FY2008" is created.

- As you add groups and calculated items, steps are created automatically.

- When you use right-click interactions (such as **Add Related** or **Keep Only**) to refine the selection of data for a particular hierarchical column or attribute column, steps are created automatically. To remove these selection steps, use right-click interactions such as **Remove Group** or **Remove Calculated Item**. See "Right-Click Interactions in Views" for additional information.

- You can create steps directly using the Selection Steps pane, to refine the selection of data for a particular hierarchical column or attribute column. You can display the Selection Steps pane from various places including the Results tab, the Criteria tab, and some view editors.

Selection steps can be one of the following types:

- Explicit list of members — A step can include a list of members for a column, such as Boston, New York, Kansas, South. For hierarchical columns, the members can be from different hierarchy levels. For attribute columns, the members can be from only that column.

- Condition step — A step can specify that members are selected from a column based on a condition, which can be one of various types including based on measures or on top/bottom values. This member list is dynamic and determined at runtime.

- Based on hierarchy step — A step for hierarchical columns that enables you to select the type of relationship with which to select members. You can select a family relationship (such as children of or parent of), a specific hierarchy level (for level-based hierarchies only), or a level relationship (for level-based hierarchies only).

- Groups and calculated items — A step can include a group or calculated item. Groups and calculated items can be used only with Add steps; they cannot be used in Keep Only or Remove steps.

  For information, see "Working with Groups and Calculated Items."

  > **Note:** When working with selection steps, if you search for members in hierarchical columns that are non-text (for example, date or time), then the search will yield no results.

Creating Selection Steps

You create steps in the "Selection Steps pane," which you can display in various places. The following procedure describes how to create steps in the Results tab.

To create selection steps:

1. Display the "Analysis editor: Results tab."

2. If the Selection Steps pane is not visible, then click the **Show Selection Steps pane** button on the toolbar to display it.

   The pane might also be collapsed at the bottom of the Results tab. Click the plus sign icon to expand it.

3. For the column whose steps you want to define, click the **Then, New Step** link.

4. From the menu, select the option for the step type to create and complete the resulting dialog.

Selection steps are automatically created when you use the right-click interactions (such as **Add Related** or **Keep Only**) to refine the selection of data for a particular hierarchical column or attribute column in a view. See "Right-Click Interactions in Views."

After you add selection steps to the analysis, you can go to the "Analysis editor: Results tab" and add the Selection Step view to the analysis. If you add the Selection Steps view, at runtime the user can view the selection steps that are applied to the analysis. For more information about adding the selection steps view, see "Results tab: Selection Steps editor."

Editing Selection Steps

You can edit existing selection steps, as described in the following procedure.

To edit selection steps:

1. Hover the mouse pointer over the step in the Selection Steps pane and click a button on the resulting toolbar.

   You can perform various tasks such as displaying a dialog for editing the step, deleting the step, or changing the order of the step in the list of steps.

   For a group or calculated item, click its name to display a menu with options for editing and saving.

Saving Selection Steps as a Group Object

If you have created a set of selection steps, then you can save and reuse the set as a group object, as described in "Saving Groups and Calculated Items as Inline or Named."

Working with Selection Steps and Double Columns

If your repository is configured for double columns, then you can create a selection step on a double column. To do so, select the display values for that column and the step is automatically evaluated using the code values that correspond to those display values.

If you use double columns, then use care with the "New Calculated Item dialog." You can include a positional operator in the custom formula for the calculated item, such as $1, which specifies the column from the first row in the data set. When you include a positional operator, the display values cannot be mapped to the code values when evaluating the formula.

For information on double columns, see "Understanding the Double Column Feature."

Creating Column Filters

Use the following procedure to create a named or inline filter. For information about opening a filter for editing, see "Editing Column Filters."

To create a column filter:

Note: If your repository is configured for double columns, and you want to use an operator other than **is equal to / is in**, **is not equal to / is not in**, or **is between** and specify code values rather than display values, then you should explicitly choose the code column rather than the display column.

For information on double columns, see "Understanding the Double Column Feature."

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1. To create a named filter, use the following sub-procedure:

   a. From the Oracle Business Intelligence Home page, locate the global header, hover over the **New** menu, and from the menu select **Filter**. The Select Subject Area dialog is displayed.

   b. From the Select Subject Area dialog, choose the subject area for which you want to create a filter. The "Filter editor" is displayed.

   c. From the "Subject Areas pane," double-click the column for which you want to create the filter. The "New Filter dialog" is displayed.

2. To create an inline filter, use the following sub-procedure:

   a. Either create an analysis or access an existing analysis for which you want to create a filter. Click the Criteria tab.

   b. Locate the "Filters pane" and from the Filters Pane's toolbar, click the **Create a filter for the current Subject Area** button. The analysis' selected columns are displayed in the cascading menu.

c. Select a column name from the menu. Or select the **More Columns** option to access the "Select Column dialog" from which you can select any column from the subject area.

After you selected a column, the "New Filter dialog" is displayed.

> **Note:** If you want to add a filter for a column located in a different subject area, then you must first add that subject area to the analysis by clicking the **Add/Remove Subject Area** button in the "Subject Areas pane."

3. In the **Operator** field, choose an operator for the filter. The operator list from which you can choose is populated based on the type of column that you selected. For more information about each operator, including the **is prompted** and **is based on the results of another analysis** operator options, see "Operators."

4. In the **Value** field, specify one or more values to use when applying the filter or condition. You can:

- Type values, using a semicolon to separate the values.
- Select values from the list or calendar.

  To search for specific values, click **Search** in the list box. The "Select Values dialog" is displayed, where you can search for and select values.

If your repository is configured for double columns, and you are creating the filter on a display column, then by default, you specify display values. However, if your organization allows the display of code values, then you can specify code values rather than display values, but only if you use one of the following operators:

- **is equal to / is in**
- **is not equal to / is not in**
- **is between**

To specify code values, select the **Select by *Code Column*** box and then specify the values.

5. If your repository is configured for double columns, and you are creating the filter on a display column and want to filter on display values rather than code values, then deselect the **Filter by *Code Column*** box.

6. Click the **Add More Options** button to add a SQL expression, Session variable, Repository variable, Presentation variable, or Global variable to the filter. Note that if you are setting the filter's value with a SQL expression or variable, leave the **Value** field blank. For more information on variables, see "Using Variables."

7. Select the **Protect Filter** box to protect the filter's value from being overridden by a matching prompt's value or when the user navigates to another report within the analysis. When you navigate from one report to another report within an analysis, any prompt values that you specified in the first report can be transferred to the second report.

8. To convert the filter to SQL statements, select the **Convert this filter to SQL** box. The "Advanced SQL Filter dialog" is displayed.

> **Note:** *This is a one-way conversion.* After you select the **Convert this filter to SQL** box, you can no longer view and edit the filter in the Edit Filter dialog. After you convert the filter to SQL statements, you can *only* view and edit the filter item as SQL statements in the Advanced SQL Filter dialog.

For more information about this option, see "Creating and Editing the SQL Statements for a Column Filter in an Analysis."

9. When you are finished specifying the filter's criteria, click **OK**.

10. Save the filter in one of the following ways:

   - From the Analysis Editor, you can click **Save Analysis** to save the filter as an inline filter.

   - From the Filter Editor, you can click **Save Filter** to save the filter as a named filter.

   For more information, see "Saving Objects as Inline or Named."

Editing Column Filters

Use the following procedure to open and edit a saved filter. If you edit and save a named filter, the changes that you make to the filter are propagated to wherever the filter is used.

To edit a filter:

1. To open a named filter, use the following sub-procedure:

   a. In the global header, click **Catalog**. The "Catalog page" is displayed.

   b. Navigate to the filter to edit and click the **Edit** link. The "Filter editor" is displayed.

2. To open an inline filter, use the following sub-procedure:

   a. In an analysis, click the Criteria tab.

   b. In the "Filters pane" locate the filter that you want to edit and click its **Edit Filter** button. The "Filter editor" is displayed.

3. Make the desired changes.

4. Save the filter.

Working with the EVALUATE_PREDICATE Function

This section provides the following topics on working with the EVALUATE_PREDICATE function:

- "How Can I Use the EVALUATE_PREDICATE Function with a Filter?"

- "Adding the EVALUATE_PREDICATE Function to an Inline Filter."

For more information about this function, see "EVALUATE_PREDICATE."

How Can I Use the EVALUATE_PREDICATE Function with a Filter?

You can add an EVALUATE_PREDICATE function as an inline filter clause. You *cannot* use this function with hierarchical columns. Use this function when you cannot create the appropriate filter clause with the Oracle BI EE filter operators. This function is intended for database functions with a return type of Boolean, and can be used only for SQL functions. Support for EVALUATE_PREDICATE does not extend across all multidimensional data sources. Also, you cannot use EVALUATE_PREDICATE with XML data sources.

To add an EVALUATE_PREDICATE function as an inline filter clause, you must have been granted the Add EVALUATE_PREDICATE Function privilege by the administrator.

Example

The following is an example of how you can use the EVALUATE_PREDICATE function. This example requests that Products.P4 Brand values be greater than 6 characters. After it is run, this example returns any rows where the length of the data in the P4 Brand column is greater than 6 characters (for example, "BizTech" and "HomeView").

```
SELECT
0 s_0,
"A - Sample Sales"."Products"."P3 LOB s_1,
"A - Sample Sales"."Products"."P4 Brand" s_2,
"A - Sample Sales"."Base Facts"."1- Revenue" s_3
FROM "A - Sample Sales"
Where EVALUATE_PREDICATE('length(%1)>6',"A - Sample Sales"."Products"."P4 Brand").
ORDER BY 1,2,3
```

Adding the EVALUATE_PREDICATE Function to an Inline Filter

Use the following procedure to add the EVALUATE_PREDICATE function to an inline filter. Note that you *cannot* use this function with hierarchical columns. For more information see "How Can I Use the EVALUATE_PREDICATE Function with a Filter?" and "EVALUATE_PREDICATE."

To add the EVALUATE_PREDICATE function to an inline filter:

1. Go to the Analysis Editor's "Filters pane" and click the **More Options** toolbar button, and select the **Add EVALUATE_PREDICATE function** option.

   The "New EVALUATE_PREDICATE Function dialog" is displayed.

2. Enter the function's formula.

   For an example of entering correct syntax, see "How Can I Use the EVALUATE_PREDICATE Function with a Filter?"

3. Click **OK**.

   The EVALUATE_PREDICATE function is displayed in the Filters pane.

Applying a Named Filter to an Analysis

Use the following procedure to apply a named filter to an analysis.

To apply a named filter to an analysis:

1. Create or open the analysis to which you want to add a named filter.

2. Within the Analysis Editor: Criteria tab, locate the "Catalog pane" and navigate to the appropriate folder that holds the named filter. Filters are usually saved within the Subject Area subfolder. For example, Shared Folders/2. Functional Examples/Filters/A - Sample Sales/Demo.

3. Select the named filter and click the **Add More Options** button. The "Apply Saved Filter dialog" is displayed.

4. Specify how you want to add the named filter to the analysis. You can select one or both of the following options:

- Select the **Clear all existing filters before applying** box to remove all existing filters from the analysis before adding the named filter.

- Select the **Apply contents of filter instead of a reference to the filter** box to copy the actual contents of the filter to the analysis. Copying the contents enables you to manipulate the filter criteria without altering the saved filter. When you deselect the **Apply contents of filter instead of a reference to the filter** box, a reference to the filter is added to the analysis. From the analysis, you can view but not alter the named filter's contents.

5. Click **OK**.

The filter is displayed in the Filters Pane.

Combining and Grouping Column Filters

Combining and grouping column filters with AND and OR Boolean operators enables you to create complex filters without requiring you to know SQL statements. Grouping enables you to establish the precedence in which Oracle BI EE filters an analysis.

To combine a column filter with other column filters:

1. Create or open a named filter or analysis that contains an inline filter.

2. If you are working with a named filter, then locate the Saved Filter pane and confirm that the filter contains two or more filter items. If you are working with an inline filter, then locate the Filters Pane and confirm that the filter contains two or more filter items.

After you add the second filter item, the **AND** operator is displayed before the second filter item.

> **Note:** If you want to group filters, then the filter must contain three or more filter items.

3. To change an **AND** operator to an **OR** operator, click the word **AND**. You can toggle between **AND** and **OR** this way. Note the following information:

- The **AND** operator means that the criteria specified in each filter must be met. This is the default method for combining column filters.

- The **OR** operator means that the criteria that is specified in at least one of the column filters must be met.

4. As you add filter items, click **AND** and **OR** operators as necessary to construct the appropriate filter combinations.

5. Save the filter in one of the following ways:

- From the Analysis Editor, you can select **Save Analysis** to save the filter as an inline filter.

- From the Filter Editor, you can select **Save Filter** to save the filter as a named filter.

For more information, see "Saving Objects as Inline or Named."

Using a Saved Analysis as a Filter

You can create a filter based on the values that are returned by another analysis. Any saved analysis that returns a column of values can be used to filter the matching column in an analysis.

To create a filter based on the results of another saved analysis:

1. Create or open a named filter or analysis that contains an inline filter.

2. If you are working with a named filter, then locate the Saved Filter pane and from the "Subject Areas pane," select the column for which you want to create a filter.

   If you are working with an inline filter, then locate the Filters Pane, and from the Filters Pane toolbar, click the **Create a filter for the current Subject Area** button and select the column for which you want to create the filter.

   The "New Filter dialog" is displayed.

3. In the **Operator** field, select **is based on the results of another analysis**.

   The **Saved Analysis**, **Relationship**, and **Use values in Column** fields are displayed.

4. In the **Saved Analysis** field, either enter the complete path to the saved analysis or click the **Browse** button to locate the analysis upon which to base the filter.

   The column names from the saved analysis are displayed in the **Use Values in Column** drop-down list.

5. Select a column name from the **Use Values in Column** field, and in the **Relationship** field, select the appropriate relationship between the results and the column to be filtered.

6. Click **OK**.

Creating and Editing the SQL Statements for a Column Filter in an Analysis

You can create and edit the logical SQL WHERE clause to be used as a filter. While generally not necessary, this feature is available for users who want advanced filtering capability. For descriptions of SQL clauses, see Appendix C, "Logical SQL Reference."

> **Note:** After you convert a filter to SQL statements, you can view and edit the filter item as SQL statements in the Advanced SQL Filter dialog, only. You can no longer view and edit the filter in the Edit Filter dialog.

To create and edit the SQL syntax of a column filter:

1. Create or open a named filter or an analysis that contains an inline filter.

2. If you are working with a named filter, then locate the Saved Filter pane and from the "Subject Areas pane," select the column for which you want to create a filter.

If you are working with an inline filter, then locate the Filters Pane, and from the Filters Pane toolbar, click the **Create a filter for the current Subject Area** button and select the column for which you want to create the filter.

The "New Filter dialog" is displayed.

3. Specify the filter's criteria and select **Convert this filter to SQL**.

4. Click **OK**.

The "Advanced SQL Filter dialog" is displayed.

5. Enter your modifications in the **SQL** field, and click **OK**. Not that after you convert the filter to a SQL statement, you can no longer view and edit the filter in the Edit Filter dialog.

Working with Calculated Measures

Calculated measures are derived from other measures and created by using formulas.

To create a calculated measure:

1. Perform one of the following actions:

- To create a calculated measure for data views that contain columns within the Compound Layout, click the **New Calculated Measure** button on the "Analysis editor: Results tab."

- To create a calculated measure for a specific data view within the Compound Layout, edit the specific data view, and then click the **New Calculated Measure** button on the "Results tab: Data View editor."

  > **Note:** You cannot add calculated measures to direct database queries or combined requests.

2. Complete the "New Calculated Measure dialog." See "Editing the Formula for a Column" for information about column formulas.

3. Click the **OK** button.

To edit a calculated measure:

You can edit a calculated measure from the "Analysis editor: Criteria tab."

1. In the Criteria tab, click the **Options** button to the right of the column name for the calculated measure.

2. Modify the columns as needed.

- Specify the sort order for columns. (You cannot specify the sort order for hierarchy levels.) For more information, see "Sorting Data in Views."

- Edit formulas for attribute columns and measure columns, including customizing headings, and specifying the aggregation rule. (You cannot customize headings, specify the aggregation rule, or edit the formulas for hierarchical columns or for hierarchy levels.) For more information, see "Editing the Formula for a Column."

- Edit column properties to control the formatting and interaction of columns and hierarchy levels. For more information on applying formatting, see

"Applying Formatting to a Column."

Working with Groups and Calculated Items

You can create a group or calculated item as a way to display data in a heat matrix, table, pivot table, trellis, or graph. Groups and calculated items allow you to add new "members" to a column, when those members do not exist in the data source. These members are also known as "custom members."

- A group is a static list of members that you select or a static or dynamic list that is generated by selection steps. A group is represented as a member. You can drill in a group that was created for a hierarchical column but not in one that was created for an attribute column.

  A group uses the existing aggregation function of the measure column with which it is displayed. The aggregation is performed up from the lowest detail level in the Oracle BI Server, but no values are double-counted.

- A calculated item is a computation between members, which is represented as a single member that cannot be drilled. When you create a calculated item, you add a new member in which you have selected how to aggregate the item, such as Sum or Average or a custom formula. The calculation is performed at the aggregated level, not at the lowest detail level.

Both groups and calculated items become selection steps for the entire analysis when you select the **All Views** option while creating the group or calculated item. Therefore, they apply to all views for that analysis. These groups and calculated items can be saved as inline or named objects. For information, see "Saving Objects as Inline or Named."

If you create a group or calculated item for a specific view by selecting the **Current View** option, the group or calculated item only applies to the specific active view.

What are Groups?

A group (also known as a "saved selection" in other products) is a user-defined member of a column. A group can be a list of members or a set of selection steps that can be executed to generate a list of members. All the members must be from the same attribute column or hierarchical column, and in a hierarchical column, members can be from different hierarchy levels. Groups are always displayed at the bottom of the column list in the order in which they were added (as shown in the Selection Steps pane). Groups can contain members or other groups. You can create a custom group and add the custom group to a column within a view.

You can save a group to the catalog and reuse it. For example, you can apply a group to analysis and dashboard column prompts or variable prompts. If a group is applied to a prompt, then the prompt presents either the group as a choice list option or members of the group as choice list options to the user at runtime. See "Overriding a Selection Step With a Column Prompt" for information on overriding selection steps with prompts when the user selects groups or column members.

What are Calculated Items?

A calculated item is a calculation between members, which is represented as a single member. A calculated item enables you to override the default aggregation rule that is specified in the Oracle BI repository, and for an existing analysis, the aggregation rule chosen by the designer. You can define a calculated item using a custom formula

(which is the default) or by combining selected members with a function (for example, SUM).

A calculated item is a user-defined member of a column. A calculated item can contain members or other calculated items. Calculated items are always displayed at the bottom of the column list in the order in which they were added (as shown in the Selection Steps pane). You can save a calculated item to the catalog and reuse it.

A calculated item is useful when you want to view and manipulate a set of members as a single entity. For example, you might define calculated items for the following:

- Key accounts in a geographic region

- High-end products

- Non-standard time periods, such as the first three weeks in September

You can create calculated items for columns in various places. Calculations differ from the default aggregation rules that are applied to measures, as described in "Adding Totals to Tables and Pivot Tables." Internally, calculated items are processed as SQL SELECT statements, and the indicated functions are performed on the result set. For more information about SQL functions, see Appendix C, "Logical SQL Reference."

Creating Groups and Calculated Items

Use the following procedure to create a calculated item or group.

To create a calculated item or group:

1. Perform one of the following actions:

   - Click the button to create a calculated item or group.

     The button is available in multiple locations. The following list provides a few of these locations:

     – On the toolbar of the view editor, click the **New Calculated Item** button or the **New Group** button. The new calculated item or group will be created for all views.

     – In the Layout pane, in the *<view-type>* Rows or Columns area, click the **More Options** button to the right of a column name, then select **New Calculated Item**. You can choose to add this calculated item or group to the current view or to all views.

   - Click the **Then, New Step** link in the "Selection Steps pane."

   - In a heat matrix, table, pivot table, or trellis (on an outside edge), select the column or column header, member, group or calculated item to include, then right-click and select **Create Group** or **Create Calculated Item**. See "Right-Click Interactions in Views."

2. Complete the appropriate dialog, either "New Calculated Item dialog" or "New Group dialog."

3. Consider the following when adding a calculated item or group:

   - From within the Compound Layout:

     – If you are using the right-click menu, then select either the **Current View** or **All Views** option button to add the group or calculated item to the specific active view or to all views in the Compound Layout.

     – If you are using the toolbar buttons or Selection pane, then the group or calculated item will be added to **All Views** in the Compound Layout.

- From within a view editor, then select either the **Current View** or **All Views** option button to add the group or calculated item to the specific active view or to all views in the Compound Layout.

- From within the Pivot Table or Table editors by using the **More Options** button, then select either the **Current View** or **All Views** option button to add the group or calculated item to the specific active view or to all views in the Compound Layout.

> **Note:**   If you add a calculated item or group to a view within a dashboard by using the right-click menu, the calculated item or group will only be added to the **Current View**.
>
> If you add a group or calculated item by using the **All Views** option button, any new view that you add will also have the group or calculated item added to it.
>
> If you add a group or calculated item by using the **Current View** option button, any new view that you add will not have the group or calculated item added to it.

4. When the calculated item or group is complete, click **OK**.

   If any errors are detected, then a message is displayed. Correct the error and click **OK** again.

> **Note:**   You might encounter an error when using groups when Oracle OLAP is the data source for the analysis. If the group is included in a view and an error message is displayed, then the problem is likely that a measure column in that analysis uses an external aggregation.
>
> Check with the administrator about implementing one of the following possible solutions:
>
> - Explicitly specify the aggregation rule for the measure in the repository.
>
> - Create the appropriate group of values as a dimension member in the Oracle OLAP analytic workspace.

Editing Groups and Calculated Items

You can edit groups and calculated items in various ways:

- In the "Selection Steps pane," click the link for the calculated item or group, then click **Edit** to display the appropriate dialog.

- If you have saved the object to the catalog, then select the object in the Catalog pane and click **Edit** to display the appropriate dialog.

- In a heat matrix, table, pivot table, or trellis (on an outside edge), right-click the group or calculated item and select **Edit Group** or **Edit Calculated Item**.

The value of a group or calculated item might be affected by filters and selection steps, as described in the following list:

- Filters — A group or calculated item is evaluated using only those members that have not been removed using filters. For example, if you have a calculated item for

SUM(EAST + WEST) but WEST is removed through a filter, then only the EAST sum is included for the calculated item. If all members have been removed, then a null value is returned, which shows as an empty cell in a heat matrix, table, pivot table, or trellis.

- Selection steps — When you create selection steps, you can add a group or a calculated item in a step. Subsequent Keep Only or Remove steps might reference members that were included in the group or calculated item.

  – A group list is affected by members that are kept or removed in subsequent steps, but the group outline value remains the same. For example, suppose the MyNewYork group contains Albany and Buffalo and its value is 100. Suppose Albany is removed in a later step. The value of the MyNewYork group remains at 100, but Albany is no longer listed with the group.

  – A calculated item is not affected by members that are kept or removed in subsequent steps.

If you remove a group or calculated item from all views that was created by using the **Current View** option button, the group or calculated item remains and will not be added to any new view that you subsequently add.

If you remove a group or calculated item from all views that was created by using the **All Views** option button, the group or calculated item remains and will be added to any new view that you subsequently add.

Consider the following if you are removing a group or calculated item by using the right-click menu:

- From a view within a dashboard page — The calculated item or group will be removed only from the current view.

- From a view within a view editor — The calculated item or group will be removed only from all views.

Adding a Group to Another Analysis

You can add a group to the same column on which it was created in another analysis. The group can be either a list of members or a set of selection steps. For information on these groups, see "Saving Selection Steps as a Group Object."

The following procedure describes how to add the group using the Results tab, but you can do so anywhere that the Catalog pane is displayed. You can also add a group using the following means:

- In the Edit Member Step dialog, select **Start with Group or Calculated Item** in the **Action** box, then select the group from the Catalog pane in the Available list.

- In the Selection Steps pane, click **Then, New Step** for the appropriate column, select **Add Groups or Calculated Items**, select **Select Existing Groups and Calculated Items**, and select the group in the resulting dialog.

To add a group to another analysis using the Catalog pane:

1. On the Results tab, display an analysis that contains the same column to which you want to apply the selections from a group.

2. Locate the Catalog pane and navigate to the appropriate folder that holds the saved group.

3. Select the group and click the **Add More Options** button on the toolbar of the Catalog pane.

4. Select one of the following:

- **Add** to add the group itself, which generates an outline value for the group. In the heat matrix, table, pivot table, or trellis, you see the group name, which can be expanded to see its member values. (Default)

- **Add Members** to add only the groups members to the analysis. You do not see the outline value.

The group or its members are included as an "Add" step on the Selection Steps pane. You can reorder the steps as appropriate.

Nesting Groups and Calculated Items

As you work with groups and calculated items, you might want to "nest" them; that is, create a group within a group, for example. The following list provides various scenarios for nesting groups and calculated items:

- Groups can be nested; that is, they can include other groups. Nested groups are "flattened." For example, suppose that the my_favorite_countries group includes the my_favorite_cities group. When you display and expand the my_favorite_countries group in a table, you do not see the my_favorite_cities group. Instead, you see the member values of the my_favorite_cities group.

- Calculated items can be nested; that is, they can include other calculated items.

- Groups cannot contain calculated items nor can calculated items contain groups.

- When you work with selection steps:

  – You can save selection steps that include groups or calculated items as either a series of steps whose results are generated at runtime or as results that are static and are redisplayed each time.

  – You can apply a group that is a saved selection of steps, using the Catalog pane. If you do so when the saved selection contains a step for a calculated item, then you can only add the members of the group. You cannot add the group itself.

Examples of Calculated Items

The examples and explanations in this section assume that you have a basic understanding of SQL statements and their syntax. The syntax shown in these examples applies to the Custom Formula function in the "New Calculated Item dialog." The examples are hypothetical. Not all possible calculated items are shown.

Example 6–1 shows the code required to obtain the value of the current measure, such as dollar sales, for each of the products SoftDrinkA, SoftDrinkB, and SoftDrinkC, and adds the values.

This is equivalent to selecting Sum from the Function list, and then typing or clicking 'SoftDrinkA','SoftDrinkB','SoftDrinkC' to add them to the Function field.

Example 6–1   Obtaining the Value of the Current Measure

```
sum('SoftDrinkA','SoftDrinkB','SoftDrinkC')
```

Example 6–2 obtains the minimum current measure, such as dollars in sales, for SoftDrinkA or SoftDrinkB, whichever is lower.

In Example 6–1 and Example 6–2, each functional calculated item is performed for each member in the outer layer, such as the Product layer. For example, if Year and

Product are positioned on an axis, and one of the preceding calculated items is built on the Product layer, then the results are computed per year.

Example 6–2   Obtaining the Minimum Current Measure

```
min('SoftDrinkA','SoftDrinkB')
```

Example 6–3 obtains the values for each item in the outer layer, such as Year and Product, and adds them.

Instead of specifying a named item for an attribute column, such as SoftDrinkA, you can specify $n or $-n, where n is an integer that indicates the item's row position. If you specify $n, then the measure is taken from the nth row. If you specify $-n, then the measure is taken from the nth to the last row.

For example, for dollar sales, $1 obtains the measure from the first row in the data set, and $-1 obtains the measure from the last row in the data set.

Example 6–3   Obtaining the Values of Each Item in the Outer Layer

```
sum(*)
```

Example 6–4 obtains the current measure, such as dollar sales, of the item from the first, second, and third rows, and sums them.

Example 6–4   Obtaining the Values of Measures and Summing Them

```
sum($1,$2,$3)
```

Example 6–5 adds sales of SoftDrinkA, SoftDrinkB, and SoftDrinkC. Note that the two calculated items shown in the example are equivalent. That is, Sum is the default function; therefore, it can be omitted.

Example 6–5   Adding Sales Values

```
'SoftDrinkA' + 'SoftDrinkB' + 'SoftDrinkC'

sum('SoftDrinkA','SoftDrinkB','SoftDrinkC')
```

Example 6–6 adds sales of SoftDrinkA with sales of diet SoftDrinkA, then adds sales of SoftDrinkB with sales of diet SoftDrinkB, and returns the maximum of these two amounts.

Example 6–6   Adding Sales Values and Returning the Maximum

```
max('SoftDrinkA' + 'diet SoftDrinkA', 'SoftDrinkB' + 'diet SoftDrinkB')
```

7

Prompting in Dashboards and Analyses

This chapter explains how to construct prompts in Oracle Business Intelligence Enterprise Edition and use them to specify the data that is displayed in dashboards and analyses. It also describes the auto-complete functionality and explains how to add dashboard prompts to dashboards and dashboard pages.

This chapter includes the following sections:

- What Are Inline and Dashboard Prompts?
- What are Column Prompts?
- Other Prompt Types
- What Types of User Input Options Can I Use With a Column or Variable Prompt?
- How Do Prompts Work in Oracle BI Mobile?
- Can Dashboard Prompts and Analysis Prompts Interact?
- In What Order Does Oracle BI EE Apply Prompts with Default Values?
- What Is Auto-Complete?
- Creating a Column Prompt
- Overriding a Selection Step With a Column Prompt
- Creating an Image Prompt
- Creating a Currency Prompt
- Creating a Variable Prompt
- Editing Prompts
- Adding a Dashboard Prompt to a Dashboard or Dashboard Page
- Adding a Hidden Dashboard Prompt to a Dashboard or Dashboard Page

What Are Inline and Dashboard Prompts?

The two differences between inline prompts and dashboard prompts is where they are stored and their runtime behavior.

A prompt that is created at the analysis level is called an inline prompt because the prompt is embedded in the analysis and is not stored in the Oracle BI Presentation Catalog and, therefore, cannot be added to other analyses. Inline prompts allow the end users to specify the data values that determine the content of the analysis. An inline prompt can be a column prompt, variable prompt, image prompt, or currency prompt. When you create an inline prompt, you select the columns and operators for

the prompt and specify how the prompt is displayed to the users and how the users select the values. The user's choices determine the content of the analyses that are embedded in the dashboard. An inline prompt is an initial prompt, meaning that it only displays when the analysis is rendered. After the user selects the prompt value, the prompt fields disappear from the analysis and the only way for the user to select different prompt values is to re-run the analysis.

A prompt that is created at the dashboard level is called a dashboard prompt because the prompt is created outside of a specific dashboard and is stored in the catalog as an object, which can then be added to any dashboard or dashboard page that contains the columns that are specified in the prompt. Dashboard prompts allow the end users to specify the data values that determine the content of all of the analyses and scorecard objects contained on the dashboard.A dashboard prompt can be a column prompt, variable prompt, image prompt, or currency prompt. Dashboard prompts are reusable, because you can create one prompt and use it many times. When the prompt object is updated and saved, those updates are immediately displayed in all dashboards where the prompt is used. A dashboard prompt is a specific kind of filter that, when created, saved, and applied to a dashboard or dashboard pages, can filter all or some of the analyses and scorecard objects that are embedded in a dashboard or analyses and scorecard objects that are embedded on the same dashboard page. A dashboard prompt is interactive and is always displayed on the dashboard page so that the user can prompt for different values without having to re-run the dashboard. Users can create and save dashboard prompts to either a private folder or to a shared folder.

Note that for a dashboard using a column that was renamed in the Business Model, the existing dashboard prompts based on the renamed column do not work with newly created analyses. The workaround for this issue is to use Catalog Manager to rename the column in the catalog.

For more information about creating a column prompt, see "Creating a Column Prompt."

What are Column Prompts?

A column prompt is the most common and flexible prompt type. A column prompt enables you to build very specific value prompts to either stand alone on the dashboard or analysis or to expand or refine existing dashboard and analysis filters. Column prompts can be created for hierarchical, measure, or attribute columns at the analysis or dashboard level.

You can create intelligent prompts that are specialized for the user's business needs and roles so that the user can quickly and accurately find the appropriate data that is needed to make a key business decision.

Oracle BI Enterprise Edition also enables you, as the content designer, to create currency prompts, image prompts, and variable prompts. For more information about these types of prompts, see "Other Prompt Types."

How Do Column Prompts and Selection Steps Interact?

Selection steps allow the user to provide or refine the data from attribute columns and measures columns and to provide a kind of filter for hierarchical columns. Note that selection steps are applied after data aggregation. When you create selection steps for a column, you have the option of overriding one step of the selection with a dashboard or analysis column prompt. All selection steps before and after the override step are processed as specified, and the override step is processed using the user-specified data values that are collected by the column prompt. Column prompts that are created for hierarchical columns allow you to include only the Choice List input option.

For more information about selection steps, see "What are Filters and Selection Steps?" and "Working with Selections of Data." For more information about creating a prompt that works with selections, see "Overriding a Selection Step With a Column Prompt."

Other Prompt Types

In addition to column prompts, you can create currency prompts, image prompts, and variable prompts. The following list contains information about these prompt types.

For information about column prompts, see "What are Column Prompts?"

- **Currency Prompt** — A currency prompt enables the user to change the currency type that is displayed in the currency columns on an analysis or dashboard. For example, suppose that an analysis contains the sales totals for a certain region of Canada in Canadian dollars. However, because the users viewing the analysis reside in the United States, they can use the currency prompt to change the sales totals from Canadian dollars to US dollars. The prompt's currency selection list is populated with the currency preferences from the user's "My Account dialog: Preferences tab." Note that the Currency Prompt option is available only if the administrator has configured the userpref_currencies.xml file as described in "Configuring Currency Options" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*. For more information about creating a currency prompt, see "Creating a Currency Prompt."

- **Image Prompt** — An image prompt provides an image that users click to select values for an analysis or dashboard. For example, in a sales organization, users can click their territories from an image of a map to see sales information, or click a product image to see sales information about that product. If you know how to use the HTML <map> tag, then you can create an image map definition. For more information about creating an image prompt, see "Creating an Image Prompt."

- **Variable Prompt** — A variable prompt enables the user to select a value that is specified in the variable prompt to display on the dashboard. A variable prompt is not dependent upon a column, but can still use a column. For example, you can use variable prompts to allow the user to specify existing data to perform sales projections. For example, you can create a variable prompt called Sales Projections and specify the variable prompt values as 10, 20, and 30 percent. Then you create an analysis that contains the Region and Dollars columns. Within the Dollars column formula, you select the multiply operator and insert the Sales Projection variable. When users run this analysis, they can select a percentage by which to recalculate the Dollars column. For more information about creating a variable prompt, see "Creating a Variable Prompt."

What Types of User Input Options Can I Use With a Column or Variable Prompt?

At design time, you must specify the prompt's user interface component. This component enables the user to enter a prompt value at runtime. You can select from several user input options. The **Radio Button** option enables the user to specify only one prompt value. The **Check Boxes**, **Choice List**, **List Box**, and **Text Field** options allow the user to select either one or multiple prompt values. The **Slider** option enables the user to select multiple values by specifying a range of values, or all values that are lesser than or greater than a specified value (for example, include everything equal to 200 and greater). Note that the input option types that are available depend upon the column type that you are working with. The following sections provide information about each input option.

Check Boxes

The **Check Boxes** input option provides the user with a visible list of all prompt values where a small, selectable box displays before each value item. This input option is suitable for a prompt that contains a smaller set of data. Note that the **List Box** input option is suitable for a prompt that contains a larger set of data. This user input type automatically enables the user to select one or more prompt values. To select a specific prompt value, the user scans the list and clicks the box that corresponds to a particular item.

Figure 7–1 shows an example of the **Check Boxes** user input option for a column or variable prompt. The column being prompted is D51 Area, and each value option (Africa, Central, East) is displayed next to a small box. To select a value, the user clicks the small box that is adjacent to the prompt value. This example shows that Africa and Central are selected, which illustrates that the user can select multiple prompt values.

Figure 7–1   Example of Check Box User Input Option
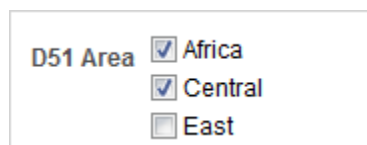
Choice List

The **Choice List** input option provides the user with a collapsed list of all prompt values. This option is useful for a long list of values where you want to provide the user with the ability to search for a specific value. You can set up this user input type to accept only one prompt value or multiple prompt values.

This input option provides a field and list that, when the user clicks the down-arrow button, expands and contains a list of all prompt values. To select a specific prompt value from the expanded list, the user scrolls through the list (or searches the list) and clicks the box that corresponds to a particular value. If you are using this input option with hierarchical columns, then a search dialog is displayed where the user can search for the prompt values.

Figure 7–2 shows an example of the **Choice List** user input option for a column or variable prompt. The column being prompted is D51 Area. The user accesses the list of values by clicking the down-arrow button next to the D51 Area field. After accessing the list of values, each value option (Africa, Central, East, Eastern, Europe, Middle East) is displayed next to a small box. To select a value, the user clicks the small box that is adjacent to the prompt value. This example shows that Africa and Central are selected, which illustrates that the user can select multiple prompt values. The user can also click Search at the end of the list of values to search for a specific value.

Figure 7–2   Example of Choice List User Input Option
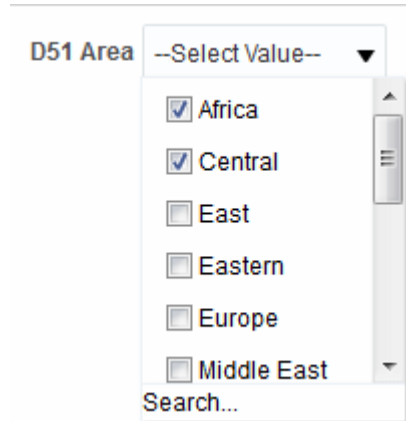
List Box

The **List Box** input option provides the user with a visible list of all prompt values. This input option is suitable for a prompt that contains a large set of data. Note that the **Check Boxes** input option is suitable for a prompt that contains a smaller set of data. You can set up this user input type to allow the user to select only one prompt value or multiple prompt values by using Ctrl+ click or Shift+ click.

To select a specific prompt value, the user scans the list and selects the prompt value name (for example, Chicago), similar to how a user would click a hyperlink. The **List Box** option is very similar to the **Check Boxes** option, but the **List Box** option does not include a box before each value item.

Figure 7–3 shows an example of the **List Box** user input option for a column or variable prompt. The column being prompted is D51 Area. The list contains each value option (Africa, Central, East, Eastern, Europe). To select a value, the user clicks a value. This example shows that Central is selected.

Figure 7–3   Example of List Box Input Option
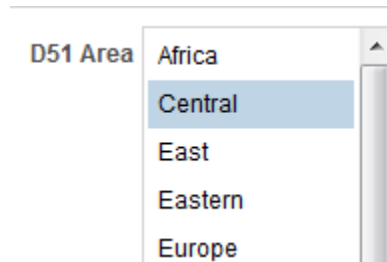
Radio Buttons

The **Radio Buttons** input option provides the user with a visible list of all prompt values where a **Radio Button** is displayed before each prompt value. This option type is useful for short lists of values where the user is to select only one prompt value. To select a prompt value, the user scans the list and selects the radio button that corresponds to a particular item.

Figure 7–4 shows an example of the **Radio Buttons** user input option for a column or variable prompt. The column being prompted is D51 Area. The list contains each value option (Africa, Central, East, Eastern, Europe, Middle East). To select a value, the user clicks a radio button that corresponds to the value. This example shows that the Central radio button is selected.

Figure 7–4   Example of Radio Buttons Input Option
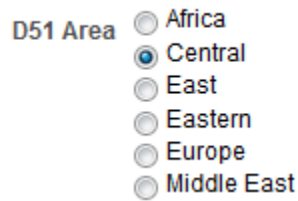
Slider

This option is not available for Variable Prompts. Note that the Prompt Width option, which sets the prompt's field size, and the "Wrap Label to Fit" Prompts page setting option cannot be specified for or applied to this user input type.

You can use the **Slider** input option for numeric data values only. Depending upon the operator that you select, this option enables the user to select multiple values by specifying a range of values, or all values that are lesser than, greater than, or equal to a specified value. You select the **Slider** option to provide the user with a number line representation of the range of prompt values. The number line displays the prompt values in a range, for example 10,000 to 20,000. To select a prompt value, the user can either click a value on the number line or click and drag the thumb to select the desired value. A spinner box is also provided with up and down-arrow buttons that the user can click to select the desired value. If you selected the **Slider** option and the **is between** operator for the prompt, then the user can click and drag two thumbs to select the desired range of values for the prompt. Two spinner boxes are provided where you can either type or use the up and down-arrow buttons to specify a range of values.

Figure 7–5 shows an example of the **Slider** user input option that accepts a range of values for a column prompt. The column being prompted is 7-Shipped Amount. The slider itself is a number line and on the left end is the number label 500K, in the middle is the number label 750K, and on the right end is the number label 1M. There are also two spinner boxes above the number line. From these spinner boxes, the user can specify either a single number (for example, 500000 in the first spinner box and 500000 in the second spinner box) or two numbers to specify a range of numbers (for example, 500000 in the first spinner box and 750000 in the second spinner box). To specify numbers in the spinner boxes, the user can either type the value or use the box's up and down arrows to scroll to the desired value. To select a value from the number line, the user clicks and drags the thumb to the desired value or clicks and drags both thumbs to specify the desired range of values. This example shows that a range of values from 500000 to 750000 is selected.

Figure 7–5   Example of Slider Input Option
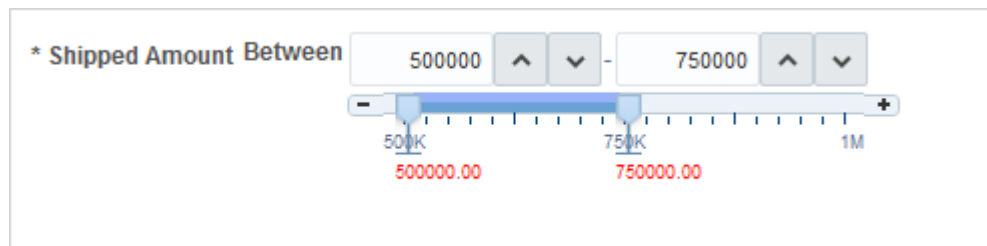
Text Field

The **Text Field** input option provides the users with a field into which they can type a specific prompt value. You cannot use this option for multiple prompt values. Only the field and the field label display for this option. This option is useful in instances where the user knows the prompt value and does not have to search for it, or for prompts with numeric values. Note that the prompt value that you enter must match the column's value. For example, if a column's data values include AMERICAS (in all capital letters), then the user must type AMERICAS into the text field. Numeric values cannot contain commas. If your repository is configured for double columns, and you are creating a prompt on a display column and specify **Text Field**, then filtering occurs on display values, not on code values.

Figure 7–6 shows an example of the **Text Field** user input option for a column or variable prompt. The column being prompted is D52 Area. The field next to the D51 Region label is blank. In this field, the user enters the name of the Region (for example (AMERICAS, APAC, and EMEA). This example shows that the AMERICAS was entered into the text field.

Figure 7–6   Example of Text Field Input Option
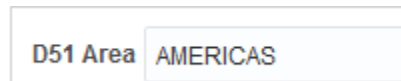
How Do Prompts Work in Oracle BI Mobile?

While prompts function the same way on a mobile device—viewed in the Oracle BI Mobile application—they render differently and users interact with them differently.

Any customizing of prompt labels that is done in the desktop version of Oracle Business Intelligence has no bearing on prompts as displayed in Oracle Business Intelligence Mobile. All properties related to the formatting of prompts are ignored in Oracle BI Mobile.

For more information on working with prompts in the Oracle BI Mobile application, see *User's Guide for Oracle Business Intelligence Mobile for Apple iOS*.

Can Dashboard Prompts and Analysis Prompts Interact?

You can combine and wire prompts in various ways to create dashboards and reports that allow users to request precise, meaningful data. Combining and wiring prompts enables you to specify how dashboard prompts interact with analysis prompts. Note that currency prompts and variable prompts cannot be combined or wired.

For example, you can create analysis A that contains information about the amount of product that is sold by region and to the Region column add the **Is protected** option and then add a Region prompt. You can then create analysis B that contains information about sales person by region and analysis C that contains information about city by region. You then create and save a dashboard prompt for Region. When you create a dashboard and add analyses A, B, and C and the Region dashboard prompt and run the dashboard, the dashboard prompt input drives only what is displayed in analyses B and C. In this scenario, analysis A does not use the Region value that is specified in the dashboard prompt because you set analysis A's Region column filter value to **Is protected**. Therefore, the only way that analysis A accepts a prompt value is if the user specifies a prompt value in Region A's prompt fields.

There are various ways that you can combine and wire prompts. Table 7–1 describes each method.

Table 7–1   Methods of Combining and Wiring Oracle BI EE Analysis and Dashboard Prompts

Wiring Method	Description
Auto wiring	Oracle BI Enterprise Edition's auto wiring functionality assumes that you intended to create a functioning prompt for the column and, therefore, activates and applies the prompt. Oracle BI EE applies the auto wiring method when you create an analysis and add a column prompt or image prompt. This auto wiring method does not require the **is prompted** filter operator. Any unprotected filter can be used.
	Note that setting the filter operator to **is prompted** provides a more precise level of control between prompts and filters than the auto wiring method. For more information, see the "Filter operator is set to **is prompted**" row in this table.
Constrained Prompts	Use this method with several columns in a prompt to constrain the user's prompt choice based on subsequent choices. Constrained prompts can be set up on the "Prompt options dialog" to specify which prompt narrows the choices. For example, if one column filters on region and the next column filters on city, then the city column can be constrained to show only cities in the selected region.
Filter operator is set to **is prompted**	Use this method to build complex prompts that interact with filters. When you use this method, you have full control over how the dashboard prompts, inline prompts, and filters are applied to the embedded analysis.
Selection steps Override with Prompt option	Use this method to use an analysis or dashboard column prompt to provide the data choices for a specific member selection step on a hierarchical or attribute column. Since you cannot use filters with hierarchical columns, selection steps are the only way that you can use prompts with hierarchical columns. Only one selection step per column selection step set can be overridden with a prompt. All selection steps before and after the overridden step are processed as specified.
	For more information about selections steps, see "What are Filters and Selection Steps?" and "Working with Selections of Data." For more information about creating a prompt that works with selections, see "Overriding a Selection Step With a Column Prompt."
Protected versus Unprotected filters	Use this method to determine whether the dashboard prompt can supply the inline prompt's value when the corresponding column's filter value is set to something other than **Is prompted**. The unprotected and protected filter settings can be used when a dashboard prompt and inline prompt reside on the same dashboard and both prompts were created for the same column.
	When the column's filter value is unprotected, the dashboard prompt value determines the analysis' results. If the filter value is set to something other than **Is prompted** (for example, **Is equal to/is in**) and the filter is set to protected filter, then the dashboard prompt cannot determine the report results.
	For more information about protecting a filter, see "Filters pane."

In What Order Does Oracle BI EE Apply Prompts with Default Values?

Because prompting enables you to build flexible dashboards and analyses, it is important to understand how Oracle BI EE initiates a complex dashboard's prompts. The following list presents the order in which, at runtime, Oracle BI EE applies prompts with default values:

1. Hidden prompts whose scope is the dashboard page.

   For more information about hidden prompts, see "Adding a Hidden Dashboard Prompt to a Dashboard or Dashboard Page."

2. Hidden prompts whose scope is the whole dashboard.

3. Prompts whose scope is the dashboard page. The precedence order of dashboard page prompts is unspecified.

4. Prompts whose scope is the whole dashboard.

5. Prompts, either inline or named, whose scope is the analysis.

What Is Auto-Complete?

Oracle BI EE provides auto-complete functionality for prompts, which, when enabled, suggests and highlights matching prompt values as the user types in the prompt selection field.

Auto-complete is only available for the Choice List prompt type when the prompt designer selected the "Enable User to Type Value" option in the "New Prompt dialog." Note that auto-complete is not available for hierarchical prompts.

The administrator configures the auto-complete functionality to be case-sensitive or case-insensitive, and then specifies the matching level. The matching level determines how Oracle BI EE matches the column's values to what the user types. There are three different ways that the administrator can set up auto-complete matching:

- **Starts With** — As the user types, Oracle BI EE suggests the column values that begin with the letter or text that the user is typing. For example, if the administrator configured auto-complete to be case-insensitive and the matching level to Starts With and the user types "m," then Oracle BI EE suggests "**M**icropod" and "**M**P3 Speakers System."

- **Word Starts With** — As the user types, Oracle BI EE suggests the column values that contain any words who's first letter matches what the user is typing. For example, if the administrator configured auto-complete to be case-insensitive and the matching level to Word Starts With and the user types "c," then Oracle BI EE suggests "**C**omCell," "MPEG **C**amcorder," and "7 Megapixel Digital **C**amera."

- **Match All** — As the user types, Oracle BI EE suggests the column values that contain any letter that the user is typing. For example, if the administrator configured auto-complete to be case-insensitive and the matching level to Match All and the user types "l," then Oracle BI EE suggests "**L**CD 36X Standard," "**L**CD HD Television," "7 Megapixe**l** Digita**l** Camera," and "P**l**asma HD Te**l**evision."

When the administrator properly configures the prompts setting in the Oracle BI EE instance configuration file, the auto-complete functionality highlights matching values when the user accesses the "Select Values dialog" to search for a prompt value. However, the matching level is not determined by the preference set by the administrator. Instead, the user selects the matching level in the "Select Values dialog."

The prompts auto-complete functionality is enabled by the administrator at the system level, but the dashboard designer can exclude the auto-complete functionality from dashboards, and user can turn auto-complete off by using the "My Account dialog." Note the following relationships between auto-complete settings:

- **System Setting** — The administrator modifies the system configuration file to enable the auto-complete functionality for Oracle BI EE. When this functionality is turned on, all users can access the auto-complete prompts functionality. If this functionality is turned off, then all auto-complete fields are disabled on the Oracle BI EE user interface. For more information, see "Configuring for Prompts" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*

- **Dashboard Setting** — If auto-complete is enabled for Oracle BI EE, then the dashboard designer can remove the auto-complete functionality from individual dashboards by setting the **Prompts Auto-Complete** field to **Off** in the "Dashboard Properties dialog." However, the auto-complete prompts functionality will be

available for other dashboards where the **Prompts Auto-Complete** setting is set to **User Preference**.

- **User Preference Setting** — If auto-complete is enabled for Oracle BI EE and for individual dashboards, users can disable the auto-complete prompts functionality for their accounts by setting the **Prompts Auto-Complete** field in the "My Account dialog: Preferences tab" to **Off**. Setting this option to **Off** overrides the system and dashboard settings, and no auto-complete functionality will appear for the user.

Creating a Column Prompt

A column prompt enables users to select the values to populate a column in a dashboard or analysis. Use the following procedure to create a named column prompt that you can apply to one or more dashboards, or to create an inline column prompt that is embedded in an analysis. This procedure does not include information about selection steps or hierarchical columns. For information about column prompts and selection steps, see "Overriding a Selection Step With a Column Prompt."

For information about opening a prompt for editing, see "Editing Prompts."

To create a column prompt:

1. To create a dashboard prompt, use the following sub-procedure.

   a. Navigate to the Oracle BI Enterprise Edition Home page, locate the global header, hover the mouse pointer over the **New** menu to access the menu, and select **Dashboard Prompt**. From the Select Subject Area menu, select the subject area for which you want to create a prompt. The "Definition pane" is displayed.

   b. Click the **New** toolbar button in the Definition Pane to access the prompt type selection list. From the list, select **Column Prompt**. The "Select Column dialog" is displayed.

   c. Select a column and click **OK**. The "New Prompt dialog" displays.

      If your repository is configured for double columns, then ensure that you select the correct display column. For information on double columns, see "Understanding the Double Column Feature."

      The number of columns that you include in a prompt can affect performance. In general, you should limit the number of columns to as few as possible.

      If you are creating a dashboard prompt and want to add or remove related subject areas, then click the **Select subject area** button in the "Select Column dialog" to display the "Add/Remove Subject Areas dialog."

2. To create an inline prompt, use the following sub-procedure.

   a. Create a new analysis or access an existing analysis for which you want to create a prompt. Click the Prompts tab. The "Definition pane" is displayed.

   b. Click the **New** toolbar button in the Definition Pane to access the prompt type selection list. From the list, select **Column Prompt**. The analysis' selected columns are displayed in the cascading menu that is adjacent to the Column Prompt selection item.

   Note: If the appropriate column is not available from the list, then you can click the **More Columns** options in the cascading list and select the appropriate column from the "Select Column dialog."

   ---

    c. Select a column. The "New Prompt dialog" displays.

       If you want to create the prompt for a column that is not displayed in the column list, then select the **More Columns...** option. The "Select Column dialog" is displayed where you can browse for and select a column.

       If your repository is configured for double columns, then ensure that you select the correct display column. For information on double columns, see "Understanding the Double Column Feature."

       The number of columns that you include in a prompt can affect performance. In general, you should limit the number of columns to as few as possible.

       If you are creating a dashboard prompt and want to add or remove related subject areas, then click the **Select subject area** button in the "Select Column dialog" to display the "Add/Remove Subject Areas dialog."

3. (Optional) Click the **Edit Formula** button to display the "Edit Column Formula dialog: Column Formula tab" where you can modify the formula for the column.

4. In the **Label** field, change the default label, if necessary, by entering a caption for the column filter prompt. The caption displays as the prompt's field label.

5. In the **Description** field, enter a short description for the prompt. This description is displayed as tooltip text, which is displayed when the user hovers the mouse pointer over the prompt's label in the dashboard or analysis.

6. From the **Operator** list, select the operator to use.

7. In the **User Input** field, select how you want the prompt interface to ask the user for input (for example, prompt the user with a radio button to select only one prompt value). Note that the column type determines the user input options from which you can select.

8. Within the Options section, select prompt options to specify how you want the list values to be displayed to the user, and how you want the user to interact with the prompt. The prompt options vary depending on the user input type and list values type that you selected. For more information about the individual prompt options, see "New Prompt dialog."

9. In the **Default selection** field, select the prompt value or values that users see initially. If you select a default type, then a field is displayed where you can either select specific values, or specify how you want the default values to be determined. For example, if you select **SQL Results**, you must then supply a SQL statement to generate the list of values.

10. Click **OK**. The prompt is displayed in the "Definition pane."

11. Save the prompt. Note the following options:

    ■ If you are creating a dashboard prompt, then click the **Save Prompt** button in the "Prompt editor," specify the folder in which you want to save the prompt, and give the prompt a descriptive name. Note that dashboard prompts that are saved in personal folders are available only to you. Dashboard prompts that are saved in shared folders are available to other users that have permission to access the object.

    ■ If you are saving a dashboard prompt for use with an Oracle BI Publisher report that receives its data from a SQL query against the Oracle BI Server, Oracle Database, or other JDBC source, then the dashboard prompt's name must match the name of the report's parameter.

    ■ If you are creating an inline prompt, then save the analysis.

12. Use the arrow buttons in the Definition Pane to reorder the selected prompt. Reordering the prompts controls the order in which the choices are displayed to users at runtime, so ensure that the order is logical, especially if you are creating constrained prompts.

13. Select the type of layout you want on the prompts page by clicking either the **New Row** button or **New Column** button in the Definition pane's toolbar. In the Definition table, click the check box corresponding to the prompt item that you want to display in a new row or column.

14. To preview how the prompt is displayed on the dashboard, either use the "Display pane" to preview the prompt with sample data, or click the **Preview** button (if available) in the Definition Pane toolbar to view the prompt with actual prompt values.

> **Note:** If the **Preview** button is not available, then the administrator has suppressed its display.

Overriding a Selection Step With a Column Prompt

Use the following procedure to create a selection step with a column prompt override. You can override a selection step with either a dashboard or an analysis prompt. For example, you can specify that the Products.Brand selection step be overridden with a column prompt specifying the BizTech and FunPod members.

The following list provides examples of overriding selection steps with prompts when the user selects groups or column members:

- One or more groups, such as My Regions and My Cities, can override a selection step only of the Add type.

- One or more members, such as Central and Eastern, can override a selection step of any type.

- One or more groups *and* one or more members, such as My Regions and Central, can override a selection step of any type. However, groups are ignored and members are supported.

For more information about using a column prompt to override a selection step, see the following topics:

- "Other Prompt Types"

- "What are Filters and Selection Steps?"

- "Working with Selections of Data"

To create or edit a column prompt to override a selection step:

1. In the analysis in which you want to create or edit a column prompt to override a selection step, navigate to the Selection Steps pane and specify the selection steps.

   For information about specifying selection steps, see "Working with Selections of Data."

2. Determine which selection step you want to override with a column prompt and click its **Edit** button. The Edit Member Step dialog is displayed.

3. Select the **Override with** box and then select **Prompt**.

4. Click **OK** and save the analysis.

5. If needed, create either a named or inline prompt. For information, see "Creating a Column Prompt."

Creating an Image Prompt

An image prompt provides users with an image that contains sections or areas that they can click to select a specific prompt value. For example, an image prompt can be a map of the United States with sections that represent the North, South, East, West, and Central sales divisions. Users can then click the divisions that correspond to the sales information that they want to view in the dashboard or analysis.

You can apply image prompts to one or more dashboards, or embed them in analyses. Use the following procedure to create or edit an image prompt. For information about opening a prompt for editing, see "Editing Prompts."

To create an image prompt:

1. To create a named image prompt, use the following sub-procedure.

    a. Navigate to the Oracle BI Enterprise Edition Home page, locate the global header, hover the mouse pointer over the **New** menu to access the menu, and select **Dashboard Prompt**. The Select Subject Areas menu is displayed.

    b. From the Select Subject Area menu, select the subject area for which you want to create the prompt. The "Definition pane" is displayed.

2. To create an inline prompt, either create an analysis or access an existing analysis for which you want to create a prompt. In the "Analysis editor," click the Prompts tab. The "Definition pane" is displayed.

3. Click the **New** button in the Definition Pane. From the list, select **Image Prompt**.

The "Image Map Prompt Properties dialog" is displayed.

4. Enter a caption for the image prompt in the **Caption** field. The caption is displayed as the prompt's field label.

5. In the **Description** field, enter a short description for the prompt. This description is displayed as tooltip text, which is shown when the user hovers the mouse pointer over the prompt's label in the dashboard or analysis.

The descriptions are also displayed when administrators view the stored prompt object from the Catalog Manager.

6. Enter the location and name of the image in the **Image URL** field.

The image file must reside on a web server. Oracle recommends that you put the image files in the directory that contains all web resource files (for example, app\res\region3.jpg). Placing the image files with the web resource files prevents a security warning message from displaying when the user accesses the image from the dashboard or analysis.

However, if you are using a web server, such as WebLogic, where the resource files are located in the deploy directory, you must put the image file in the deploy directory and the directory that contains all web resource files.

7. Enter the appropriate HTML <map> tags and data in the **HTML** field. In the map tags, indicate the map region's shape, X and Y coordinates, and region name. For example:

```
<MAP Name="mymap">
<AREA Shape="poly" Coords="70,84,51,300,455"
   Href="http://www.map.com/region1.html">
```

```
<AREA Shape="poly" Coords="25,180,125,280,485,668"
   Href="http://www.map.com/region2.html">
<AREA Shape="poly" Coords="152,106,186,225,340,193"
   Href="http://www.map.com/region3.html">
<AREA Shape="poly" Coords="675,763,929,286,10,908"
   Href="http://www.map.com/region43.html">
</MAP>
<IMG Src="../images/imagemap.gif" Width="500" Height="300"
   Alt="Image Map" Usemap="#mymap" Ismap>
```

8. To extract the image map information from the HTML, click **Extract Image Map from HTML**.

   The Image Map Prompt Properties dialog expands to show the area titles, shapes, and coordinates that were entered in the **HTML** field.

   – For each area, in the **Column** field, enter the name of the column to pass when a user clicks it, and the value to use.

   > **Note:** The column must be a fully qualified column name in the format Folder.Column Name.

   – Place double quotes around any column names that contain spaces. For example:

     * "Country name"

     * "Units shipped"

9. Click **OK**. The prompt is displayed in the "Definition pane."

10. Save the prompt. Note the following options:

    ■ If you are creating a dashboard prompt, then click the **Save** button in the prompt's editor, specify the folder in which you want to save the prompt, and give the prompt a descriptive name. Note that dashboard prompts that are saved in personal folders are available only to you. Dashboard prompts that are saved in shared folders are available to other users that have permission to access the object.

    ■ If you are saving a dashboard prompt for use with an Oracle BI Publisher report that receives its data from a SQL query against the Oracle BI Server, Oracle Database, or other JDBC source, then the dashboard prompt's name must match the name of the report's parameter.

    ■ If you are creating an inline prompt, then save the analysis.

11. Use the arrow buttons in the Definition Pane to reorder the selected prompt. Reordering the prompts controls the order in which the choices are displayed to users at runtime, so ensure that the order is logical, especially if you are creating constrained prompts.

12. If you want to add a new row or column to the prompts page, then click the **New Row** button or **New Column** button in the Definition pane's toolbar. In the Definition table, click the check box corresponding to the prompt that you want to display in a new row or column.

13. To preview how the prompt is displayed on the dashboard, either use the "Display pane" to preview the prompt with sample data, or click the **Preview** button (if available) in the Definition Pane toolbar to view the prompt with actual prompt values.

> **Note:** If the **Preview** button is not available, then the administrator has suppressed its display.

Creating a Currency Prompt

A currency prompt enables users to change the currency type that is displayed in the dashboard or analysis. When applied to a dashboard or embedded in an analysis, the prompt provides users with a list where they can select a currency. The currency types in this list are specified by the administrator in userpref_currencies.xml. The same list of currencies is displayed in the "My Account dialog: Preferences tab."

Use the following procedure to create a currency prompt that you can apply to one or more dashboards, or to create a currency prompt that is embedded in an analysis. For information about opening a prompt for editing, see "Editing Prompts."

To create a currency prompt:

1. To create a named currency prompt, use the following sub-procedure.

   a. Navigate to the Oracle BI Enterprise Edition Home page, locate the global header, hover the mouse pointer over the **New** menu to access the menu, and select **Dashboard Prompt**. The Select Subject Areas menu is displayed.

   b. From the Select Subject Area menu, select the subject area for which you want to create the prompt. The "Definition pane" is displayed.

2. To create an inline prompt, either create an analysis or access an existing analysis for which you want to create a prompt. In the "Analysis editor," click the Prompts tab. The "Definition pane" is displayed.

3. Click the **New** button from the Definition Pane. From the list, select **Currency Prompt**.

   The "New Prompt dialog" is displayed.

   > **Note:** The Currency Prompt option is available only if the administrator has configured the userpref_currencies.xml file as described in "Configuring Currency Options" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

4. Enter a label for the currency prompt in the **Label** field. The label is displayed as the prompt's field label.

5. In the **Description** field, enter a short description for the prompt. This description is displayed as tooltip text, which is displayed when the user hovers the mouse pointer over the prompt's label in the dashboard or analysis.

   The descriptions are also displayed when administrators view the stored prompt object from the Catalog Manager.

6. Click **OK**. The prompt displays in the "Definition pane."

7. Save the prompt. Note the following options:

   ■ If you are creating a dashboard prompt, then click the **Save** button in the prompt's editor, specify the folder in which you want to save the prompt, and give the prompt a descriptive name. Note that dashboard prompts that are saved in personal folders are available only to you. Dashboard prompts that

are saved in shared folders are available to other users that have permission to access the object.

- If you are saving a dashboard prompt for use with an Oracle BI Publisher report that receives its data from a SQL query against the Oracle BI Server, Oracle Database, or other JDBC source, then the dashboard prompt's name must match the name of the report's parameter.

- If you are creating an inline prompt, then save the analysis.

8. Use the arrow buttons in the Definition Pane to reorder the selected prompt. Reordering the prompts controls the order in which the choices are displayed to users at runtime, so ensure that the order is logical, especially if you are creating constrained prompts.

9. If you want to add a new row or column to the prompts page, then click the **New Row** button or **New Column** button in the Definition pane's toolbar. In the Definition table, click the check box corresponding to the prompt that you want to display in a new row or column.

10. To preview how the prompt is displayed on the dashboard, either use the "Display pane" to preview the prompt with sample data, or click the **Preview** button (if available) in the Definition Pane toolbar to view the prompt with actual prompt values.

> **Note:** If the **Preview** button is not available, then the administrator has suppressed its display.

Creating a Variable Prompt

Use the following procedure to create a variable prompt that you can apply to one or more dashboards, or to create a variable prompt that is embedded in an analysis. For more information about variable prompts, see "Other Prompt Types." For more information about variables, see "Using Variables." For information about opening a prompt for editing, see "Editing Prompts."

To create a variable prompt:

1. To create a named variable prompt, use the following sub-procedure.

   a. Navigate to the Oracle BI Enterprise Edition Home page, locate the global header, hover over the **New** menu to access the menu, and from the menu select **Dashboard Prompt**. The Select Subject Areas menu is displayed.

   b. From the Select Subject Area menu, select the subject area for which you want to create the prompt. The "Definition pane" is displayed.

2. To create an inline prompt, either create an analysis or access an existing analysis for which you want to create a prompt. In the "Analysis editor," click the Prompts tab. The "Definition pane" is displayed.

3. Click the **New** button in the Definition Pane. From the list, select Variable Prompt.

   The "New Prompt dialog" is displayed.

4. In the **Prompt for** box, select the variable type that you are creating and then enter the name of the variable.

5. In the **Label** field, enter a caption for the variable filter prompt. The caption is displayed as the prompt's field label.

6. In the **Description** field, enter a short description for the prompt. This description is displayed as tooltip text, which is displayed when the user hovers the mouse pointer over the prompt's label in the dashboard or analysis.

   The descriptions are also displayed when administrators view the stored prompt object from the Catalog Manager.

7. In the **User Input** field, select how you want the prompt interface to ask the user for input. For example, prompt the user with a radio button to select only one prompt value.

8. If you selected either the **Choice List**, **Check boxes**, **Radio buttons**, and **List box** user input type, then you must also specify the prompt's list of values. For more information, see "New Prompt dialog."

9. Within the Options section, select the prompt options. The prompt options vary depending on the user input type that you selected. The prompt options allow you to further specify how you want the user to interact with the prompt (for example, whether user input is required).

10. In the **Default selection** field, select the prompt value that users see initially. If you select a specific value, then the **Default Value** field is displayed in which you can enter a value.

11. Click **OK**. The prompt is displayed in the "Definition pane."

12. Save the prompt. Note the following options:

    - If you are creating a dashboard prompt, then click the **Save** button in the prompt's editor, specify the folder in which you want to save the prompt, and give the prompt a descriptive name. Note that dashboard prompts that are saved in personal folders are available only to you. Dashboard prompts that are saved in shared folders are available to other users that have permission to access the object.

    - If you are saving a dashboard prompt for use with an Oracle BI Publisher report that receives its data from a SQL query against the Oracle BI Server, Oracle Database, or other JDBC source, then the dashboard prompt's name must match the name of the report's parameter.

    - If you are creating an inline prompt, then save the analysis.

13. Use the arrow buttons in the Definition Pane to reorder the selected prompt. Reordering the prompts controls the order in which the choices are displayed to users at runtime, so ensure that the order is logical, especially if you are creating constrained prompts.

14. If you want to add a new row or column to the prompts page, then click the **New Row** button or **New Column** button in the Definition pane's toolbar. In the Definition table, click the check box corresponding to the prompt that you want to display in a new row or column.

15. To preview how the prompt is displayed on the dashboard, either use the "Display pane" to preview the prompt with sample data, or click the **Preview** button (if available) in the Definition Pane toolbar to view the prompt with actual prompt values.

   > **Note:** If the **Preview** button is not available, then the administrator has suppressed its display.

Editing Prompts

Use the following procedure to open and edit a saved dashboard or inline prompt. If you edit and save a named prompt, the changes that you make to the prompt are propagated to wherever the prompt is used.

To edit a prompt:

1. To open a dashboard prompt, use the following sub-procedure:

   a. In the global header, click **Catalog**. The "Catalog page" is displayed.

   b. Navigate to the prompt to edit and click the **Edit** link. The "Prompt editor" is displayed.

2. To open an inline prompt, use the following sub-procedure:

   a. In an analysis, click the Prompts tab.

   b. In the "Definition pane" highlight the prompt to edit and click the **Edit** button. The "Prompt editor" is displayed.

3. Make the desired changes.

4. Save the prompt.

Adding a Dashboard Prompt to a Dashboard or Dashboard Page

Use the following procedure to add a dashboard prompt to a dashboard or dashboard page. For more information about dashboard prompts, see "What Are Inline and Dashboard Prompts?"

To add a dashboard prompt to a dashboard or dashboard page:

1. Create a new dashboard or open an existing dashboard and click the **Edit Dashboard** button. For more information about creating or editing a dashboard, see "Creating Dashboards."

   Tip: When adding a column object to a dashboard, you can drag and drop the column to display vertically on the dashboard. You can then add dashboard prompts to this column, and at runtime, the dashboard's prompts displays in a pane on the side of the dashboard.

2. In the Dashboard builder's Catalog pane, locate and drag and drop an object such as an analysis or KPI watchlist onto a section in the dashboard. (See "How Can I Use KPIs?" for additional information about adding KPI objects (for example, KPI watchlists or KPI contribution wheels) to a dashboard.)

3. In the Dashboard builder's Catalog pane, locate and drag and drop the dashboard prompt onto a section in the dashboard.

   Tip: If you do not want a new browser window to open after the user selects prompt values, then click the dashboard section's **More Option** button and select **Drill in Place**.

4. Hover the mouse pointer over the prompt object in the Page Layout area to display the object's toolbar, click the **Properties** button, and select **Scope**. Note the following options:

   - If you select **Dashboard**, then the prompt affects all dashboard pages that contain the prompt. The prompt value that the user selects for the dashboard level prompt overrides values for page level dashboard prompts.

- If you select **Page**, then the dashboard prompt affects only the page or pages to which you add the prompt.

5. Hover the mouse pointer over the prompt object in the Page Layout area to display the object's toolbar, click the **Properties** button, and select **Prompt Links...**. The "Prompt Links dialog" displays where you specify whether to display the **Edit** and **Copy** links with the prompt at runtime.

Adding a Hidden Dashboard Prompt to a Dashboard or Dashboard Page

Use the following procedure to add a hidden dashboard prompt to a dashboard or dashboard pages. At runtime, the hidden dashboard prompt sets the default values for all of the corresponding prompts on the dashboard or dashboard page, and the unprotected inline prompts that are located on the analyses on the dashboard or dashboard page.

To add a hidden dashboard prompt to a dashboard or dashboard page:

1. Create and save a dashboard prompt, which contains specific data values, to use as a hidden prompt. For more information about creating prompts, see "Creating a Column Prompt."

2. Create a new dashboard or open an existing dashboard and click the **Edit Dashboard** button. For more information about creating or editing a dashboard, see "Creating Dashboards."

3. In the "Dashboard builder," click the **Tools** button and select **Dashboard Properties**. The "Dashboard Properties dialog" is displayed.

4. If you want to add the hidden prompt to the whole dashboard, then click the **Filters and variables Edit** button. The "Dashboard Filters and Variables dialog" is displayed.

   If you want to add the hidden prompt to a dashboard page, then select the page from the "Dashboard Pages" table and click the **Select a prompt to capture default filters and variables** button, which is located above the "Dashboard Pages" table. The "Filters and Variables - page dialog" is displayed.

5. Click the **Embed New Hidden Dashboard Prompt** button to browse for and select the dashboard prompt. Click **OK**.

   Note: You can add one or more hidden dashboard prompts to the dashboard or dashboard page.

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6. In the Dashboard Properties page, click the **OK** button to save the dashboard's properties.

8

Formatting Analyses, Views, and Dashboard Pages

This chapter explains how to apply formatting to analyses, views, and dashboard pages in Oracle Business Intelligence Enterprise Edition. It describes cosmetic formatting, conditional formatting, custom format masks, and custom format strings.

This chapter includes the following sections:

- What Can be Formatted?
- Formatting Columns in Analyses
- What is Cosmetic Formatting?
- Applying Conditional Formatting to Tables, Pivot Tables, Performance Tiles, Graphs, Heat Matrices, and Trellises
- Custom Format Masks
- Custom Format Strings

What Can be Formatted?

After you create and run an analysis, default formatting rules are applied to the analysis' results. Default formatting rules are based on cascading style sheets and XML message files. You can create additional formatting to apply to specific results. Additional formats help you to highlight blocks of related information and call attention to specific data elements. You can also use additional formatting to customize the general appearance of analyses and dashboards.

You can apply formatting to the following:

- Columns in analyses, as described in "Applying Formatting to Columns in Analyses."
- Views, as described in "Applying Formatting to Views."
- Dashboard pages, as described in "Applying Formatting to Dashboard Pages."

Applying Formatting to Columns in Analyses

As you work with columns in an analysis, you can specify their formatting. The formatting that you apply is visible when the column is displayed in views such as tables and pivot tables. For information, see "Formatting Columns in Analyses."

Applying Formatting to Views

You can apply formatting to views in the following ways:

- In the View editor: When you edit a view in its editor, you can generally display various dialogs that allow you to format either the view itself or its pieces, as applicable. Formatting options are unique to the view type. Formatting that you specify in the view editor overrides any formatting that was specified for columns.

- In the Compound Layout: When you use the "Compound Layout," you can click a button on the toolbar of the container for each view to display a formatting dialog. Use that dialog to apply formatting to the view's container, such as to place a green background on the container for a table.

Applying Formatting to Dashboard Pages

You can apply formatting to the page layout columns and sections of dashboard pages. When you edit a dashboard page, you can edit the properties of its columns and sections and apply cosmetic formatting. For information, see "What is Cosmetic Formatting?" and Chapter 5, "Building and Using Dashboards".

Formatting Columns in Analyses

When you build an analysis, you can edit properties for columns to control their appearance and layout. You can also specify formatting to apply only if the contents of the column meet certain conditions. By default, the specifications for a column apply only to the current analysis.

If your account has the appropriate privileges, then you can save the user-specified column properties as the systemwide default settings to use every time that data from that column, or columns of that particular data type, is displayed in results. The properties that you can save as defaults include formatting ones and other properties such as those that affect interactions and data write back.

Because groups and calculated items are simply members of their respective columns, they inherit the formatting from the column and follow the same precedence order as for other members, unless you specifically apply formatting to the groups or calculated items.

This section contains the following topics:

- "What Kinds of Formatting Can I Apply?"

- "Applying Formatting to a Column"

- "Saving Formatting Defaults"

What Kinds of Formatting Can I Apply?

You can use the tabs in the "Column Properties dialog" to customize how content is displayed for columns in views. Hierarchy levels provide an additional detail of formatting for hierarchical columns.

The following list provides examples of the kinds of formatting that you can apply:

- Apply cosmetic formatting to the column or hierarchy level, such as font family and size.

- Assign alternate folder and column heading names and apply custom formatting to them.

- Control the display of duplicate data, such as repeating column labels.

- Override the default formatting for columns and data values with custom formatting.

- Apply conditional formatting to the column or hierarchy level, which enables different formatting to be applied based on the values. For example, values greater than $1 million can be formatted with a green color.

Applying Formatting to a Column

You can use the following procedure to set default formatting for columns. You can override the default settings by formatting columns in editors for data views, such as tables.

To apply formatting to a column:

1. Open the analysis in which you want to edit formatting and behavior in the "Analysis editor: Criteria tab," and then:

2. Add or locate the column or hierarchy level to modify. (Expand a hierarchical column to see its levels.)

3. Click the **Options** button to the right of the column name or hierarchy level name in the Selected Columns pane, and click **Column Properties** or **Hierarchy Level Properties**. The "Column Properties dialog" is displayed.

4. Click the "Column Properties dialog: Style tab" and specify how you want each cell and its contents to be displayed in the analysis. For example, change the cell border to red and the cell content to be displayed in a 14-point Arial font.

   For more information, see "What is Cosmetic Formatting?"

5. Click the "Column Properties dialog: Column Format tab" to specify various properties such as those for heading names and value suppression.

6. Click the "Column Properties dialog: Data Format tab" to specify how you want to override the data's default display characteristics. The options that display on this tab depend upon the data type (text, date and time zone, or numeric).

   See "Custom Format Strings" for additional information on customizing date and time fields and see "Custom Format Masks" for creating custom masks for numeric data.

7. Click the "Column Properties dialog: Conditional Format tab" to add conditional formatting to a column or hierarchy level.

   For more information, see "Applying Conditional Formatting to Tables, Pivot Tables, Performance Tiles, Graphs, Heat Matrices, and Trellises."

8. If you accessed the Column Properties dialog from the Criteria tab, you can optionally, click **Save as Default** and click the appropriate option to restore or to save defaults, if you have the appropriate privileges.

9. Click **OK** to save your changes.

Saving Formatting Defaults

When you use the tabs in the "Column Properties dialog" to customize how content is displayed for columns in views, you override the Oracle Business Intelligence style sheet and the system defaults for the column or hierarchy level.

You have the option of saving the modified properties for just the column or hierarchy level within the analysis, of saving the properties as systemwide defaults for the data type, or of saving the properties as systemwide defaults for the column or hierarchy level so that its formatting and behavior is the same no matter in which analysis it displays. Anyone who uses this column or hierarchy level or a column or hierarchy level of this data type in subsequent analyses therefore uses the settings in the "Column Properties dialog" by default. To save systemwide properties, you must have the appropriate privileges.

The ability to set a systemwide default can provide consistency and save time within your organization. For example, suppose that your organization had decided to use Arial as the font family for all text columns in all analyses. Suppose that a decision is later made to switch to Times New Roman for all text columns. You can simply save Times New Roman as the systemwide default for text columns. All existing analyses that contain text columns in which the font family is specified as Default (Arial) are updated automatically.

What is Cosmetic Formatting?

Cosmetic formatting affects the visual appearance of data in columns and hierarchy levels, views, and columns and sections on dashboard pages. You can apply cosmetic formatting, copy and paste cosmetic formatting attributes, and save a formatted analysis to use with the columns of another analysis.

You can display various dialogs that provide access to and control over various cosmetic attributes. Depending on the object that you are formatting, the dialog displays different options, such as font, cell, and border controls, background color, additional formatting options such as cell padding, and custom CSS style options for HTML.

Using a Saved Analysis to Modify the Cosmetic Appearance of Other Analyses

After you have customized the cosmetic appearance of an analysis using the Criteria tab and the Results tab and have saved it, you can import the formatting from the saved analysis and its views to new or existing analyses. Some views, such as gauge, graph, heat matrix, performance tile, and treemap do not support formatting by importing. This section contains the following topics:

- "Where is the Import formatting from another analysis Button?"

- "Which View Types Support Imported Formatting?"

- "How is Imported Formatting Applied?"

- "Importing Formatting Using a Saved Analysis"

Where is the Import formatting from another analysis Button?

You can use a saved analysis to modify the cosmetic appearance of other views by clicking the **Import formatting from another analysis** button. This button is available on the following toolbars:

- The Compound Layout toolbar — When you click this button, the formatting is applied to all applicable views in the layout. See "Applying Formatting from Containers."

- The view editor toolbar — When you click this button, the formatting is applied only to the view that you are editing. See "Which View Types Support Imported Formatting?"

Which View Types Support Imported Formatting?

The following list describes the components that support the use of a saved analysis for formatting other views:

- **View Types** — You can import formatting from the following view types:

  - Legend — Imports formatting for the legend title, the caption, and the legend container. Textual content is not imported.

  - Narrative — Imports only the text font color. Textual properties such as prefix, postfix, and narrative texts are not imported.

  - Pivot table, table, and trellis — Imports formatting for the columns, green bar specifications, sub-totals and grand totals, and section properties.

  - Static Text — Imports only the text font color. Textual content is not imported.

  - Title — Imports formatting for the title, logo, subtitle, start time, and help URL.

  - View Selector — Imports only the caption formatting.

- **Compound Layout** — You can import formatting that was specified after clicking the **Format Container** button for the view in the Compound Layout.

How is Imported Formatting Applied?

Formatting is applied slightly differently depending on whether you are importing formatting that was applied to columns, to views, or to view containers in the Compound Layout.

Applying Formatting from Columns This functionality works best for views when attribute, measure, or hierarchical column numbers align precisely or for a single column template that can be applied to all columns. If a single column exists in the saved analysis, then its formatting is applied to all columns in the tables, pivot tables, and trellises of the target analysis.

For multiple columns, formatting is applied positionally, from left to right for column headings and values. A column that exceeds the number in the saved analysis gets the closest column's format repeated. For example, suppose the saved analysis contains four columns formatted with these colors in this order: red, green, blue, yellow. In the target analysis, its six columns would acquire these colors in this order: red, green, blue, yellow, yellow, yellow.

Applying Formatting from Views Formatting is applied to a view only if a view of that type exists in the target analysis. The imported formatting applies to all views of that type in the target analysis. For example, suppose that a saved analysis contains a legend to which you have customized formatting. If you import that formatting into a target analysis that contains three legends, then all three legends inherit that formatting.

Applying Formatting from Containers In the Compound Layout, you can specify formatting properties (such as background color, borders, and padding) for view containers. When you import that container formatting using a saved analysis, the views in the target analysis inherit the exact container formatting properties as the views in the saved analysis.

The layout of the views in the two analyses need not be exactly the same for container formatting to work correctly. If the target analysis contains more views than the source analysis, then the extra views inherit the imported formatting. For example, suppose a

saved analysis contains two tables that are stacked on top of each other in the Compound Layout. Suppose the target analysis contains four tables that are laid out two by two. The source analysis has only one "layout column" of two table views. The two tables in each of the first and second "layout columns" of the target analysis inherit the applied formatting.

Importing Formatting Using a Saved Analysis

To use a saved analysis to modify the cosmetic appearance of another analysis:

1. Display either the analysis in which you want to import formatting in the "Analysis editor: Results tab," or display the view in its editor.

2. Click the **Import formatting from another analysis** toolbar button.

3. In the "Select Analysis dialog," navigate to the saved analysis and click **OK**.

Applying Conditional Formatting to Tables, Pivot Tables, Performance Tiles, Graphs, Heat Matrices, and Trellises

In tables, pivot tables, performance tiles, graphs, heat matrices, and trellises conditional formatting helps direct attention to a data element if it meets a certain condition. For example, you can show below-quota sales figures in a certain color, or display an image such as a trophy next to the name of each salesperson who exceeds quota by a certain percent.

This section describes how to apply conditional formatting in tables, pivot tables, performance tiles, heat matrices, and trellises. For information on graphs, see "Graph Formatting Based on Columns." This section contains the following topics:

- "How is Conditional Formatting Applied?"

- "Can Conditional Formats Be Based on Another Column?"

- "What Factors Affect Conditional Formats?"

- "Applying Conditional Formatting"

- "Example of Conditional Formatting for Ranking"

How is Conditional Formatting Applied?
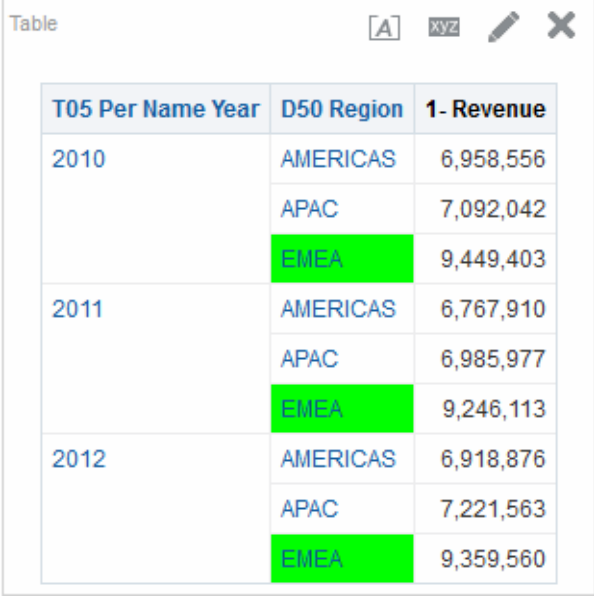
You apply conditional formatting by selecting one or more columns or hierarchy levels in the analysis to use, specifying the condition to meet, and then making specifications for font, cell, border, and style sheet options to apply when the condition is met. The conditional formats can include colors, fonts, images, and so on, for the data and for the cell that contains the data. Your specifications apply only to the contents of the columns or hierarchy levels in the tables and pivot tables for the analysis with which you are working.

You can add multiple conditions so that the data is displayed in one of several formats, based upon the value of the data. For example, below-quota sales can be displayed in one color, and above-quota sales can be displayed in another color. When you specify multiple conditions, all the conditions are verified and the formats are merged for the conditions that are true. In the event of a conflict when trying to merge multiple formats, the condition that is last verified as true affects the format that is displayed.

Can Conditional Formats Be Based on Another Column?

You can create conditional formats to apply to one column based on the values of a second column, for display in tables, pivot tables, and trellises. For example, you can create a conditional format to color the D50 Region column green when values of the 1 - Revenue column are greater than $9 million, as shown in Figure 8–1.

Figure 8–1 Conditional Formatting on the Region Column

You can create a condition using a column that is not displayed in views for the analysis, if you use the **Hide** option on the Column Format tab of the Column Properties dialog. If you place the column in the Excluded drop target of the Layout pane, then you cannot create a condition using that column.

> **Note:**   Performance tiles cannot inherit conditional formatting based on another column, nor do performance tiles have an Excluded drop target.

Conditional formatting is applied based on the underlying value, even if you select the **Show Data As** options in the Layout pane to show the data as percentages or indexes.

What Factors Affect Conditional Formats?

The way that conditional formats are applied to columns depends on the factors that are described in the following list:

- "Layout, Order, and Conditional Formats"
- "Value Suppression and Conditional Formats"

Layout, Order, and Conditional Formats
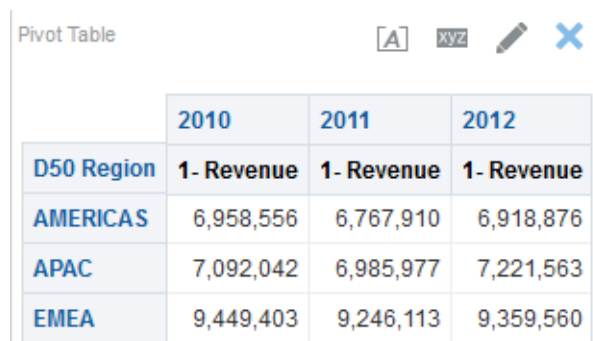
The layout of the columns in the view affects the conditional formatting of the values of one column when the conditional format is based on another column. Changing the layout of the columns in the view can change the display of the conditional formats. For example, suppose that you specify a conditional format on the D50 Region column

where T05 Per Name Year is 2009. If D50 Region and T05 Per Name Year are on opposite edges of the pivot table, then no conditional formatting is visible.

The order of the columns as they are displayed in the view also affects conditional formatting. The order in the view affects the "grain" at which the values are displayed. You can think of "grain" as a level of aggregation. The conditional format applies when the column to format is displayed at a finer grain or the same grain as the column on which the format is based. If the column being formatted is of a higher grain than the column on which the format is based, then the format applies only if the condition is based on a measure column. If the format is based on an attribute column and the column to format is displayed at a higher grain, then the conditional format does not apply.

For example, consider the table in Figure 8–2. A conditional format has been specified to color the D50 Region when T05 Per Name Year is 2011. Notice that no light blue coloring is visible because D50 Region is on a different edge than T05 Per Name Year. See "Value Suppression and Conditional Formats" for additional information.

Figure 8–2   Columns on Opposite Edges with No Conditional Formatting Applied

Pivot Table			
	2010	2011	2012
D50 Region	1- Revenue	1- Revenue	1- Revenue
AMERICAS	6,958,556	6,767,910	6,918,876
APAC	7,092,042	6,985,977	7,221,563
EMEA	9,449,403	9,246,113	9,359,560

Suppose that you change the order of the columns so that T05 Per Name Year is the first column in the table. Then the T05 Per Name Year column is displayed at a higher grain, and the appropriate conditional formatting is applied to the D50 Region column. Figure 8–3 shows a pivot table with the appropriate conditional formatting.

Figure 8–3   Conditional Formatting Based on Column Order

Conditional formats can be displayed on any edge of the table, pivot table, or trellis. On the Prompts drop target (also known as the "page edge"), the conditional format applies only to the column member that is currently selected for that target. For example, suppose that you have a D50 Region column that has the members AMERICAS, APAC, and EMEA. Suppose the D50 Region column is on the Prompts drop target for a pivot table and the conditional format is set to color the region name green if 1 - Revenue is greater than $6.5 million. If AMERICAS is the only region that meets that condition, then AMERICAS is colored green only when it is selected for the Prompts drop target.

Value Suppression and Conditional Formats

For tables, the value suppression setting in the "Column Properties dialog: Column Format tab" affects conditional formatting. If you set value suppression to **Repeat**, then the column that you are formatting is displayed at the detail grain of the view. No aggregation is needed on the column on which the format is based for applying the conditional format.

For example, consider the table in Figure 8–4. A conditional format has been applied to color the D50 Region column light blue when T05 Per Name Year is 2011. Notice that no light blue coloring is visible, because the value suppression is set to **Suppress**, which does not allow for repeating column values for the members of D50 Region.

Figure 8–4   Conditional Formatting When Suppression is Enabled

If the value suppression is set to **Repeat**, then column members are repeated and the appropriate conditional formatting is applied. Figure 8–5 shows a table with repeat value suppression.

Figure 8–5   Conditional Formatting for Repeat Value Suppression

Applying Conditional Formatting

To apply conditional formatting:

1. Open the analysis in which you want to edit formatting and behavior in the "Analysis editor: Criteria tab."

> **Note:** You can also apply conditional formatting to a performance tile from the "Results tab: Performance Tile editor" by clicking the **Edit Conditional Formatting** link in the "Performance Tile Properties dialog." This opens the "Conditional Formatting dialog." You would then add the conditional formatting to your tile by completing steps 4 through 6 below. Note that the conditional format is not reflected in the Styles pane.

2. Add or locate the column or hierarchy level to modify. Click the **Options** button to the right of the column name in the Selected Columns pane, and click **Column Properties** or **Hierarchy Level Properties**. The "Column Properties dialog" is displayed.

3. Click the "Column Properties dialog: Conditional Format tab."

> **Note:** You cannot apply conditional formatting to the data cell background or font color in a heat matrix.

4. Click **Add Condition**, then select the column to which to apply the condition.

5. Complete the "New Condition dialog." You can click the **Edit Condition** button to the right of the condition name to display the "Edit Condition dialog."

> **Note:** When you access the "New Condition dialog" from the Conditional Format tab, the dialog shows only the options that apply to conditional formats. For example, the Operator list shows the subset of operators that are used in conditional formats, and you can apply only presentation variables.

6. Complete the "Edit Format dialog" to apply formatting for the condition.

Example of Conditional Formatting for Ranking

The following example describes how conditional formatting can be applied to results to show ranking.

Suppose an analysis includes ten ranking categories, with a value of 1 in the column indicating the worst ranking, and a value of 10 indicating the best ranking. You could create three conditional formats to show the following:

- One image to indicate a low rank for columns that contain 1, 2, or 3.
- Another image to indicate an average rank for columns that contain 4, 5, 6, or 7.
- A third image to indicate a high rank for columns that contain 8, 9, or 10.

In the Graphics dialog, selecting the **Images Only** image placement option would cause the columns to be displayed with only images, and not the ranking numbers, in the results.

Custom Format Masks

A custom format mask provides additional options for formatting a column that contains numeric data (for example, revenue or billed quantity). To set a custom

format mask for a column that contains numeric data, you use the **Treat Numbers As** field in conjunction with the **Custom Numeric** field. See "Column Properties dialog: Data Format tab" for additional information.

Table 8–1 shows the mask character and a description. The third column is a specific example of a numeric field that uses the mask for the United States with a language-base of English.

Table 8–1   Custom Format Mask for Numbers

Mask Character	Description	Example
#	Use a pound sign or hash mark for an optional digit (preceding and trailing zeroes will be removed)	Specifying #,###,##0.### as the mask for 12345.67, yields 12,345.67.
0	Use a zero for a required digit	Specifying #0.##**0** as the mask for 12.34, yields 12.340.
" "	Use double quotations to display anything verbatim **Note:** If you use the double quotations mask character to represent numeric data, you must remove the explicit mask character prior to exporting the results of the analysis to Excel because Excel cannot translate the mask character.	Specifying "++++" as part of a mask, yields **++++**.
;	Use a semicolon to separate positive, negative, and null formats	Specifying "+"#0.000**;**"-"#0.000;"nulls" as the mask for 467482.18, yields +467482.18. See Figure 8–6.
[$]	Use as a locale-specific currency symbol	Specifying [$]#,##0.## as the mask for 5000.48, yields **$**5,000.48 for a user having English-United States selected as the locale, and £5,000.48 if English-United Kingdom is selected as the locale.

The decimal and thousands separator characters that you use in the **Custom Numeric** field to define the format mask are always the:

- **Period** — Used to separate the whole part from the fractional part of a number

- **Comma** — Used to separate thousands

However, the separator characters that are actually displayed in analyses and dashboards are dependent upon the country and language in which you are running Oracle BI EE.

Table 8–2 shows examples for specific countries and language combinations. Note that the examples shown in this table are **not** all inclusive, and are correct at the time of writing.

Table 8–2   Locale-specific Custom Format Masks for Numbers - Decimal and Thousands Characters

Format to Display	Use This Format Mask in BI EE	Pre-defined Country (Language) Separator Character	Typically Used in This Country (Language)
Decimal: 123,45 Thousands: 6.789	Decimal: ###.## Thousands: #,###	Decimal: , (comma) Thousands: . (period)	Argentina (Spanish), Denmark (Danish), Ecuador (Spanish), Germany (German), Greece (Greek), Italy (Italian), and Liechtenstein (German)
Decimal: 123.45 Thousands: 6,789	Decimal: ###.## Thousands: #,###	Decimal: . (period) Thousands: , (comma)	Australia (English), Egypt (Arabic), Guatemala (Spanish), Israel (Hebrew), Japan (Japanese), Singapore (Chinese), and the United States (English)
Decimal: 123.45 Thousands: 6'789	Decimal: ###.## Thousands: #,###	Decimal: . (period) Thousands: ' (apostrophe)	Switzerland (French, German, and Italian)
Decimal: 123,45 Thousands: 6 789	Decimal: ###.## Thousands: #,###	Decimal: , (comma) Thousands: (space)	Finland (Finish), Poland (Polish), and Sweden (Swedish)

A custom format mask allows you to override both the negative and null format by providing separate masks that are separated by semicolons. A fully defined mask might appear as *positivemask;negativemask;nullmask*. See Figure 8–6.

■   If you omit the null mask, then a blank displays for a null value.

■   If you omit the negative mask, then the positive mask displays for the negative mask.

■   You must use a negative mask, if you want to use a null mask.

■   If you use all #'s as the mask, the value zero (0) displays as blank.

> **Note:**   In Excel, a fully defined mask might appear as *positivemask;negativemask;zeromask;text*. When you export a column that uses a null mask, the null mask is dropped because Excel does not support it. In addition, Excel's zero mask is not used as Oracle BI EE does not support a zero mask.

Figure 8–6 shows a table of revenue that includes a "year ago revenue calculation" and a "quarterly compounded yearly growth calculation" by year and quarter for the Americas. The same custom format mask was used for all measure columns, and the text "null" was set to display for the measure calculation (see "Understanding Null

Suppression" for additional information on null suppression). The custom format mask used in this table for the three columns is: **"+"#0.000;"-"#0.000;"null"**.

- A plus sign with a two decimal position mask displays for a positive number.

- A minus sign with a two decimal position mask displays for a negative number.

- If the value of the measure is null, the word **null** displays.

Figure 8–6   Example of a Fully Defined Custom Mask

1. Open the analysis in which you want to edit formatting in the "Analysis editor: Criteria tab."

2. Add or locate the column to modify.

3. Click the **Options** button to the right of the column name in the Selected Columns pane.

4. Click **Column Properties**. The "Column Properties dialog" is displayed.

5. Click the "Column Properties dialog: Data Format tab."

6. Select the **Override Default Data Format** check box.

7. Select **Custom** from the **Treat Numbers As** list.

8. Enter the mask for the numeric field in the **Custom Numeric Format** text box and click the **OK** button.

Custom Format Strings

Custom format strings provide additional options for formatting columns or hierarchy levels that contain time stamps, dates, and times. To set custom format strings to a column or hierarchy level, you use the **Custom Date Format** field (for date and time fields) or the **Custom Numeric Format** field (for numeric fields) in the "Column Properties dialog: Data Format tab."

This section contains the following topics:

- "Custom Format Strings for Date and Time Fields"

■   "Custom Format Strings for Numeric Fields"

Custom Format Strings for Date and Time Fields

You can set custom format strings to a column or hierarchy level in the **Custom Date Format** field in the "Column Properties dialog: Data Format tab."

This section contains the following topics:

■   "General Custom Format Strings"

■   "ODBC Custom Format Strings"

General Custom Format Strings

Table 8–3 shows the general custom format strings and the results that they display. These allow the display of date and time fields in the user's locale.

Table 8–3   General Custom Format Strings

General Format String	Result
[FMT:dateShort]	Formats the date in the locale's short date format. You can also type [FMT:date].
[FMT:dateLong]	Formats the date in the locale's long date format.
[FMT:dateInput]	Formats the date in a format acceptable for input back into the system.
[FMT:time]	Formats the time in the locale's time format.
[FMT:timeHourMin]	Formats the time in the locale's time format but omits the seconds.
[FMT:timeInput]	Formats the time in a format acceptable for input back into the system.
[FMT:timeInputHourMin]	Formats the time in a format acceptable for input back into the system, but omits the seconds.
[FMT:timeStampShort]	Equivalent to typing [FMT:dateShort] [FMT:time]. Formats the date in the locale's short date format and the time in the locale's time format. You can also type [FMT:timeStamp].
[FMT:timeStampLong]	Equivalent to typing [FMT:dateLong] [FMT:time]. Formats the date in the locale's long date format and the time in the locale's time format.
[FMT:timeStampInput]	Equivalent to [FMT:dateInput] [FMT:timeInput]. Formats the date and the time in a format acceptable for input back into the system.
[FMT:timeHour]	Formats the hour field only in the locale's format, such as 8 PM.
YY or yy	Displays the last two digits of the year, padded to the left with zero, if necessary, for example, 01 for 2001.
YYY or yyy	Displays the four- digit year, padded to the left with zero, if necessary, for example, 0523.
YYYY or yyyy	Displays the four- digit year, for example, 2011
M	Displays the numeric month, for example, 2 for February.
MM	Displays the numeric month, padded to the left with zero for single-digit months, for example, 02 for February.

Table 8–3 (Cont.) General Custom Format Strings

General Format String	Result
MMM	Displays the abbreviated name of the month in the user's locale, for example, Feb.
MMMM	Displays the full name of the month in the user's locale, for example, February.
D or d	Displays the day of the month, for example, 1.
DD or dd	Displays the day of the month, padded to the left with zero for single-digit days, for example, 01.
DDD or ddd	Displays the abbreviated name of the day of the week in the user's locale, for example, Thu for Thursday.
DDDD or dddd	Displays the full name of the day of the week in the user's locale, for example, Thursday.
DDDDD or ddddd	Displays the first letter of the name of the day of the week in the user's locale, for example, T for Thursday.
h	Displays the hour in 12-hour time, for example 2.
H	Displays the hour in 24-hour time, for example, 23.
hh	Displays the hour in 12-hour time, padded to the left with zero for single-digit hours, for example, 01.
HH	Displays the hour in 24-hour time, padded to the left with zero for single digit hours, for example, 23.
m	Displays the minute, for example, 7.
mm	Displays the minute, padded to the left with zero for single-digit minutes, for example, 07.
s	Displays the second, for example, 2. You can also include decimals in the string, such as s.# or s.00 (where # means an optional digit, and 0 means a required digit).
ss	Displays the second, padded to the left with zero for single-digit seconds, for example, 02. You can also include decimals in the string, such as ss.# or ss.00 (where # means an optional digit, and 0 means a required digit).
t	Displays the first letter of the abbreviation for ante meridiem or post meridiem in the user's locale, for example, a.
tt	Displays the abbreviation for ante meridiem or post meridiem in the user's locale, for example, pm.
gg	Displays the era in the user's locale.

ODBC Custom Format Strings

Table 8–4 shows the ODBC standard type custom format strings and the results that they display. These strings display date and time fields according to the ODBC standard.

Table 8–4 ODBC Custom Format Strings

ODBC Format String	Result
[FMT:dateODBC]	Formats the date in standard ODBC yyyy-mm-dd format (4-digit year, 2-digit month, 2-digit day).

Table 8–4   (Cont.) ODBC Custom Format Strings

ODBC Format String	Result
[FMT:timeODBC]	Formats the time in standard ODBC hh:mm:ss format (2-digit hour, 2-digit minute, 2-digit second).
[FMT:timeStampODBC]	Equivalent to typing [FMT:dateODBC] [FMT:timeStampODBC]. Formats the date in yyyy-mm-dd format, and the time in hh:mm:ss format.
[FMT:dateTyped]	Displays the word *date* and then shows the date, in standard ODBC yyyy-mm-dd format. The date is shown within single quote characters (').
[FMT:timeTyped]	Displays the word *time* and then shows the time, in standard ODBC hh:mm:ss format. The time is shown within single quote characters (').
[FMT:timeStampTyped]	Displays the word *timestamp* and then the timestamp, in standard ODBC yyyy-mm-dd hh:mm:ss format. The timestamp is shown within single quote characters (').

Custom Format Strings for Numeric Fields

You can set custom format strings to a column or hierarchy level in the **Custom Numeric Format** field in the "Column Properties dialog: Data Format tab."

> **Note:**   When applying a format from a different data type—for example, applying a date type format to a numeric field—if the actual value is out of bounds, then the format is not applied and instead the original value is displayed. As an example, take the format [MMMM]. If the original value to be converted is 13, then that value is out of bounds because there are only 12 months in a year. The original value, 13, is displayed without being converted to a month name. If the original value is 12, however, then applying the custom format converts the value to the 12th month, that is "December".

This section contains the following topics:

- "Custom Format Strings for Integral Fields"
- "Custom Format Strings for Conversion into Hours"
- "Custom Format Strings for Conversion into Hours and Minutes"
- "Custom Format Strings for Conversion into Hours, Minutes, and Seconds"
- "Custom Format Strings for Displaying Duration"

Custom Format Strings for Integral Fields

Table 8–5 shows the custom format strings that are available when working with integral fields. These allow the display of month and day names in the user's locale.

Integral fields hold integers that represent the month of the year or the day of the week. For months, 1 represents January, 2 represents February, and so on, with 12 representing December. For days of the week, 1 represents Sunday, 2 represents Monday, and so on, with 7 representing Saturday.

Table 8–5   Format Strings for Integral Fields

Integral Field Format String	Result
[MMM]	Displays the abbreviated name of the month in the user's locale.
[MMMM]	Displays the full name of the month in the user's locale.
[DDD]	Displays the abbreviated name of the day of the week in the user's locale.
[DDDD]	Displays the full name of the day of the week in the user's locale.

Custom Format Strings for Conversion into Hours

Table 8–6 shows the custom format strings that you can use to format data into hours. You use these strings on the following kinds of fields:

■   Fields that contain integers or real numbers that represent the time that has elapsed since the beginning of the day (12:00 AM).

■   Fields where the output is in [FMT:timeHour] format, as described in Table 8–3, " General Custom Format Strings". (This format displays the hour field only in the locale's format, such as 8 PM.)

Table 8–6   Format Strings for Conversion into Hours

Data Conversion Format String	Result
[FMT:timeHour]	This assumes that the value represents the number of hours that have elapsed since the beginning of the day, and formats the number of hours into an hh display, where hh is the number of hours. Fractions are dropped from the value. For example, a value of 2 is formatted as 2 AM, and a value of 12.24 as 12 PM.
[FMT:timeHour(min)]	This assumes that the value represents the number of minutes that have elapsed since the beginning of the day, and formats the number of minutes into an hh display, where hh is the number of hours. Fractions are dropped from the value. For example, a value of 2 is formatted as 12 AM, and a value of 363.10 as 06 AM.
[FMT:timeHour(sec)]	This assumes that the value represents the number of seconds that have elapsed since the beginning of the day, and formats the number of seconds into an hh display, where hh is the number of hours. Fractional hours are dropped from the value. For example, a value of 600 is formatted as 12 AM, a value of 3600 as 1 AM, and a value of a value of 61214.30 as 5 PM.

Custom Format Strings for Conversion into Hours and Minutes

Table 8–7 shows the custom format strings that you can use to format data into hours and minutes. You use these strings on fields that contain integers or real numbers that represent the time that has elapsed since the beginning of the day (12:00 AM).

They can also be used where the output is in [FMT:timeHourMin] format, described in Table 8–3, " General Custom Format Strings". (This format displays the time in the locale's time format, but omits the seconds.)

Table 8–7   Format Strings for Conversion into Hours and Minutes

Data Conversion Format String	Result
[FMT:timeHourMin]	This assumes that the value represents the number of minutes that have elapsed since the beginning of the day, and converts the value into an hh:mm display, where hh is the number of hours and mm is the number of minutes. Fractions are dropped from the value. For example, a value of 12 is formatted as 12:12 AM, a value of 73 as 1:13 AM, and a value of 750 as 12:30 PM.
[FMT:timeHourMin(sec)]	This assumes that the value represents the number of seconds that have elapsed since the beginning of the day, and converts the value into an hh:mm display, where hh is the number of hours and mm is the number of minutes. Fractions are dropped from the value. For example, a value of 60 is formatted as 12:01 AM, a value of 120 as 12:02 AM, and a value of 43200 as 12:00 PM.
[FMT:timeHourMin(hour)]	This assumes that the value represents the number of hours that have elapsed since the beginning of the day, and converts the number of hours into an hh:mm display, where hh is the number of hours and mm is the remaining number of minutes. For example, a value of 0 is formatted as 12:00 AM, a value of 1.5 as 1:30 AM, and a value of 13.75 as 1:45 PM.

Custom Format Strings for Conversion into Hours, Minutes, and Seconds

Table 8–8 shows the custom format strings that you can use to format data into hours, minutes, and seconds. You use these strings on fields that contain integers or real numbers that represent time.

They can also be used where the output is in [FMT:time] format, described in "General Custom Format Strings." (This format displays the time in the locale's time format.)

Table 8–8   Format Strings for Conversion into Hours, Minutes, and Seconds

Data Conversion Format String	Result
[FMT:time]	This assumes that the value represents the number of seconds that have elapsed since the beginning of the day, and converts the value into an hh:mm:ss display, where hh is the number of hours, mm is the number of minutes, and ss is the number of seconds. For example, a value of 60 is formatted as 12:01:00 AM, a value of 126 as 12:02:06 AM, and a value of 43200 as 12:00:00 PM.
[FMT:time(min)]	This assumes that the value represents the number of minutes that have elapsed since the beginning of the day, and converts the value into an hh:mm:ss display, where hh is the number of hours, mm is the number of minutes, and ss is the number of seconds. For example, a value of 60 is formatted as 1:00:00 AM, a value of 126 as 2:06:00 AM, and a value of 1400 as 11:20:00 PM.
[FMT:time(hour)]	This assumes that the value represents the number of hours that have elapsed since the beginning of the day, and converts the value into an hh:mm:ss display, where hh is the number of hours, mm is the number of minutes, and ss is the number of seconds. For example, a value of 6.5 is formatted as 6:30:00 AM, and a value of 12 as 12:00:00 PM.

Custom Format Strings for Displaying Duration

Table 8–9 shows the custom format strings that you can use to format duration data into days, hours, minutes, and seconds. You use these strings on fields that contain integers or real numbers that represent time.

This allows the display of duration, such as the length of time for a telephone call. You can format a numeric field as DD:HH:MM:SS.

You can add literal values in the string to make the output more meaningful, as in the following example:

[duration][opt:dd"d":][opt:hh"h":]mm"m":ss"s"
When input = 15000, output is: 04h:10m:00s

In this way, the literal values *h*, *m*, and *s* represent *hours*, *minutes*, and *seconds* in the output.

Adding [opt:...] anywhere in the string makes the field optional, in that it is not displayed if it has no value. In the example above, [opt:dd] means a value for days is not displayed because it has no value.

Table 8–9   Format Strings for Displaying Duration

Data Conversion Format String	Result
[duration(sec)][opt:dd]:hh:mm:ss	Formats the total of seconds as duration. For example, a duration value of 16500.00 is displayed as 04:35:00, meaning a duration of four hours, 35 minutes, and zero seconds.
	opt:dd displays the number of days, but if *opt* has no value, it is not displayed.
	Second is the default unit of time.
[duration(min)][opt:dd]:hh:mm:ss	Formats the total of minutes as duration. For example, a duration value of 275.00 is displayed as 04:35:00, meaning a duration of four hours, 35 minutes, and zero seconds.
	opt:dd displays the number of days, but if *opt* has no value, it is not displayed.
[duration(hour)][opt:dd]:hh:mm:ss	Formats the total of hours as duration. For example, a duration value of 4.58 is displayed as 04:35:00, meaning a duration of four hours, 34 minutes, and 48 seconds.
	opt:dd displays the number of days, but if *opt* has no value, it is not displayed.
[duration(day)][opt:dd]:hh:mm:ss	Formats the total of days as duration. For example, a duration value of 2.13 is displayed as 02:03:07:12, meaning a duration of two days, three hours, seven minutes, and twelve seconds.
	opt:dd displays the number of days, but if *opt* has no value, it is not displayed.

9

Delivering Content

This chapter provides information on how to deliver personalized and actionable content to users in Oracle Business Intelligence Enterprise Edition. It describes how to create agents, how to subscribe to agents, and how to configure devices and delivery profiles.

This chapter includes the following sections:

- What Are Agents?
- What Are Alerts?
- How Agents Work
- What Is the Agent Editor?
- About Controlling Access to Agents
- About Using Customization in Agents
- Creating Agents
- Viewing Summaries of Agent Settings
- Saving Agents
- Subscribing to Agents
- Displaying a List of the Agents That You Subscribe to or That You Own
- Unsubscribing from Agents
- Customizing Your Agent Subscriptions
- Disabling and Enabling Agents' Schedules
- What Are Devices and Delivery Profiles?
- Configuring Your Devices and Delivery Profiles
- Accessing and Managing Your Alerts
- Subscribing to an RSS Feed for Alerts

What Are Agents?

Agents enable you to automate your business processes. You can use them to provide event-driven alerting, scheduled content publishing, and conditional event-driven action execution.

You can choose:

- A schedule that the Agent runs on

- A data condition that determines what the Agent does

- An analysis that can be distributed

- Actions that can be automatically executed depending on whether the data condition is met

Agents can dynamically detect information-based problems and opportunities, determine the appropriate individuals to notify, and deliver information to them through a wide range of devices (email, phones, and so on).

> **Note:** The delivery content of an agent is localized according to the preferred locale of the recipient. (Users specify their preferred locale in the "My Account dialog: Preferences tab.")

What Are Alerts?

An alert is a notification generated by an agent that delivers personalized and actionable content to specified recipients and to subscribers to the agent.

You can see the alerts that have been delivered to you throughout Oracle BI Enterprise Edition, for example:

- In the Alerts section of the Home page.

- On the first page of My Dashboard. (An Alerts section is automatically added to the first page of My Dashboard, if you do not manually place one there.)

- On a dashboard page, if the content designer adds an Alerts section to the page. See "Adding Content to Dashboards."

- In the Alerts dialog displayed from the **Alerts!** button in the global header.

- In specified delivery devices, such as a phone. See "What Are Devices and Delivery Profiles?"

For more information, see "Accessing and Managing Your Alerts."

How Agents Work

In the simplest format, an agent automatically performs a specified catalog analysis based on a defined schedule, and examines the results for a specific problem or opportunity. If the specific problem or opportunity is detected in the results, then an alert is generated and delivered to specified recipients and to subscribers to the agent, using the delivery options that are specified for each person.

For more information on alerts, see "What Are Alerts?" For more information on delivery options, see "What Are Devices and Delivery Profiles?"

To handle more complex requirements, agents can invoke actions that trigger other agents, scripts, Java programs, or applications. Results can be passed between agents, and to other applications or services through XML, HTML, or plain text. For example, an agent might run an analysis to identify all current product orders over a specified dollar amount that cannot be filled from a regional warehouse. The results can be passed to another agent that runs an analysis to locate alternative sources for these products. A final agent might be triggered to feed information into a corporate CRM system and to notify the appropriate account representatives of the alternative sourcing.

You might automatically be a recipient of alerts generated by some agents, and agents created by others might be available for you to subscribe to. You can also create your own agents if you have the appropriate permissions and responsibilities. Depending on the level of authority that you have, you can selectively share agents with others or make agents available for all users.

What Is the Agent Editor?

The Agent editor lets you create agents to deliver personalized and actionable content to users. It also lets you view a summary of the current settings of agents.

The Agent editor contains the following tabs:

- **General** — Lets you specify the priority of the content that an agent is to deliver and how to generate the delivery content (that is, what user to run the query as).

- **Schedule** — Lets you specify whether the agent is to be run based on a schedule, how often it runs, and when its running is to start and end.

- **Condition** — Lets you specify whether an agent always delivers its content and executes its actions, or conditionally delivers its content and executes its actions.

- **Delivery Content** — Lets you specify the content to deliver with an agent, such as a dashboard page or a saved analysis.

- **Recipients** — Lets you specify who is to receive the delivery content of the agent and who is allowed to subscribe to the agent.

- **Destinations** — Lets you specify where the content is to be delivered.

- **Actions** — Lets you specify one or more actions to execute when an agent finishes.

You access the Agent editor when you create or edit an agent. See "Creating Agents."

About Controlling Access to Agents

Access to agents is available to all Oracle BI EE users. Granting access to specific agent functions is performed from the "Administration: Manage Privileges page." If you have the appropriate authority, then you can grant or deny explicit access to a variety of agent privileges, including the ability to perform the following actions:

- Create agents

- Publish agents for subscription

- Deliver agents to specified or dynamically determined users

- Chain agents

- Modify current subscriptions for agents

For more information about privileges, see "Managing Presentation Services Privileges" in *Security Guide for Oracle Business Intelligence Enterprise Edition*.

About Using Customization in Agents

Using customization in agents enables you to create generic agents that you can use for more than one circumstance. This helps you to reduce the number of agents and conditions that you must create for your organization. It also lets you provide the specific alert required for a particular circumstance.

Customization in an agent is accomplished by overriding the operators and values of prompted filters associated with analyses that are used in the agent. (A prompted filter is a filter whose operator is set to Is Prompted. For more information on prompted filters, see "Creating Column Filters.")

You use analyses in an agent when you specify that the agent is to:

- Conditionally deliver its content and execute its actions using a condition (either named or inline) that is based on an analysis. For more information on conditions, see Chapter 10, "Working with Conditions."

- Deliver an analysis as its content.

Prompted filters can be customized at various points, depending on how the analysis with which it is associated is used:

- If the analysis is used as the basis for a named condition, then the chain for customization is as follows:

  1. In the analysis

  2. In the named condition

  3. In the agent customization of the condition

  4. In the subscription customization of the agent condition

- If the analysis is used as the basis for an inline condition created in an agent, then the chain of customization is as follows:

  1. In the analysis

  2. In the agent customization of the condition

  3. In the subscription customization of the agent condition

- If the analysis is specified as the delivery content for an agent, then the chain for customization is as follows:

  1. In the analysis

  2. In the agent customization of the delivery content

  3. In the subscription customization of the delivery content

When using customization in an agent, keep the following points in mind:

- Once a filter is overridden, it cannot be overridden again further in the customization chain. For example, if you override a filter in the agent customization of the delivery content, then the subscriber cannot override it later in the subscription customization of the delivery content.

- If any filters in an analysis are combined (that is, constructed using AND and OR), then this AND and OR structure is not displayed in the customization.

- If the same filters are used more than once in an agent, then only a unique set of the filters is displayed for customization. The customized values that you specify are applied to all instances of the repeated filter.

  Exception: If the analysis is the result of combining two or more analyses based on a union operation, then unique filters from each part of the union are displayed for customization. For more information on combining analyses, see "Combining Columns Using Set Operations."

- Filters passed between agents participating in a chain (see the Invoke Agent action in "Actions that Invoke Operations, Functions or Processes in External Systems") do not support customization. The filters passed from the parent agent are those

without subscriber customizations. The filters passed to the child agent replace the respective prompted filters before subscriber customizations are applied.

Creating Agents

Use the following procedure to create an agent.

To create an agent:

1. In the global header, click **New** and select **Agent**.

    The "Agent editor" is displayed.

2. In the "Agent editor: General tab," specify the priority of the content that the agent is to deliver and how to generate the delivery content (that is, what user to run the query as).

3. In the "Agent editor: Schedule tab," specify whether the agent is to be run based on a schedule, how often it runs, and when its running is to start and end.

4. In the "Agent editor: Condition tab," specify whether the agent always delivers its content and executes its actions, or conditionally delivers its content and executes its actions.

    For more information on conditions, see Chapter 10, "Working with Conditions."

5. In the "Agent editor: Delivery Content tab," specify the content to deliver with the agent, such as a dashboard page or a saved analysis.

6. In the "Agent editor: Recipients tab," specify who is to receive the delivery content of the agent and who is allowed to subscribe to the agent.

7. In the "Agent editor: Destinations tab," specify where the content is to be delivered.

8. In the "Agent editor: Actions tab," specify one or more actions to execute when the agent finishes.

9. Save the agent. See "Saving Agents."

    After you have saved the agent, you can run the agent by clicking the **Run Agent Now** toolbar button. This is helpful, for example, to test the agent.

Notes

- You can also display the Agent editor by selecting **Agent** from the **Create . . .** area of the "Home page."

- You can also create an agent from an analysis. For how, see "Creating Agents from Analyses."

Viewing Summaries of Agent Settings

You can view a summary of the current settings for an agent. A summary is displayed in the "Agent editor" and can be expanded or collapsed. By default, the summary is expanded.

To expand or collapse a summary of an agent's settings:

1. To the left of the **Overview** heading in the Agent editor, click the:

    - **Plus** button to expand the summary.

    - **Minus** button to collapse the summary.

Notes

- You can also view a summary of an agent's settings in the "Preview pane" of the "Catalog page."

Saving Agents

You can save agents in existing folders or in new folders that you create as follows.

- If an agent is available for subscription, then you must save it in a subfolder in /Shared Folders, for example, /Shared Folders/Shared Agents/Sales/Agent1. (Note that you cannot save an agent directly in /Shared Folders, for example, /Shared Folders/Agent1.)

- If an agent is not available for subscription, then you can save it in a subfolder in /Shared Folders, in /My Folders, or in a subfolder in /My Folders, for example, /My Folders/Sales/Agent1. (Note that you cannot save an agent directly in /Shared Folders, for example, /Shared Folders/Agent1.)

For more information about subscribing to agents, see "Subscribing to Agents."

To save an agent:

1. In the "Agent editor" toolbar, click one of the following buttons:

    – To save a new agent or to save an existing agent with the same name in the same folder, click the **Save this Agent** button.

    – To save an existing agent with another name or in another folder, click the **Save this Agent as** button.

2. Complete the "Save Agent dialog," if displayed, and click **OK**.

Subscribing to Agents

You can subscribe to agents that the owner has made available to you for subscription.

To subscribe to an agent:

1. In the global header, click **Catalog** and navigate to the agent to which you want to subscribe.

2. Click the **More** link for the agent and select **Subscribe**.

To make an agent available for subscription, in the "Agent editor: Recipients tab," the **Publish Agent for Subscription** option must be selected, and users, and Catalog groups and Application roles that are allowed to subscribe must be identified.

Displaying a List of the Agents That You Subscribe to or That You Own

You can display a list of the agents that you subscribe to or that you own, that is, those that you have saved in your personal folder (My Folders).

To display a list of the agents that you subscribe to or that you own:

1. In the global header, click **Home**. The "Home page" is displayed.

2. In the **Browse/Manage. . .** area:

    - To show a list of the agents that you currently subscribe to, click **My Agent Subscriptions**.

      The "Catalog page" is displayed with a list of the agents to which you are currently subscribed. (Note that agents that you have been designated a

recipient of are not included in this list.) You can then perform various tasks, such as customizing your subscription, unsubscribing from the agent, or printing a summary of the agent settings.

■ To show a list of the agents that you own, click **My Agents**.

The "Catalog page" is displayed with a list of the agents saved in your personal folder (My Folders). You can then perform various tasks, such as running the agent or editing the agent.

Unsubscribing from Agents

You can unsubscribe from agents to which you are currently subscribed.

To unsubscribe from an agent:

1. In the global header, click **Home**. The "Home page" is displayed.

2. In the **Browse/Manage. . .** area, click **My Agent Subscriptions**.

   A list of the agents to which you are currently subscribed is displayed. (Note that agents that you have been designated a recipient of are not included in this list.)

3. Navigate to the agent from which you want to unsubscribe.

4. Click the **More** link for the agent and select **Unsubscribe**.

Customizing Your Agent Subscriptions

Suppose an agent has been set up to allow users to customize the subscription and the agent uses an analysis that includes a prompted filter for either its condition, the delivery content, or both. You can customize the filter values for the conditional analysis, the delivery content analysis, or both to suit your needs.

To allow users to customize an agent subscription, you must select the **Allow Subscribers to Customize Agents** option in the "Agent editor: Recipients tab."

To customize an agent subscription:

1. In the global header, click **Home**. The "Home page" is displayed.

2. In the **Browse/Manage. . .** area, click **My Agent Subscriptions**.

   A list of the agents to which you are currently subscribed is displayed. (Note that agents that you have been designated a recipient of are not included in this list.)

3. Navigate to the agent whose subscription you want to customize.

4. Click the **More** link for the agent and select **Customize Subscription**.

   The "Customize Subscription to Agent dialog" is displayed.

5. Customize the prompted filters or the parameters as needed. (Depending on how the agent has been set up, you can customize the prompted filters or the parameters for the condition, the delivery content, or both.)

   To customize a prompted filter or parameter:

   a. Click the **Modify the operator/value for this parameter** button.

      The "Edit Parameter Filter dialog" is displayed.

   b. Edit the values as needed.

   c. Click **OK**.

6. Click **OK** in the Customize Subscription to Agent dialog.

> **Note:** The customized filter values that you set in the previous steps are not automatically displayed in agent results. To display the customized values, see "Displaying Customized Filter Values in Agent Results."

Displaying Customized Filter Values in Agent Results

If you have customized filter values in an agent subscription and want to display the filter values in the agent results, then you must add a Filters view to the analysis.

To display customized filter values in agent results:

1. Edit the analysis that is being customized.

2. Display the "Analysis editor: Results tab."

3. Add the Filters view to the analysis. For how, see "Adding Views to the Results of Analyses."

Disabling and Enabling Agents' Schedules

You can temporarily disable (and then enable) an agent's schedule. Disabling an agent's schedule stops the agent from running on its defined schedule. It does not stop it from being run by other means, for example, by the **Run Agent Now** toolbar button in the "Agent editor."

Disabling an agent's schedule is useful if you have defined a schedule for an agent but find you want to stop it for a certain period of time.

In addition, an agent's schedule may be temporarily disabled by default. For example, if you copy a folder that contains one or more agents, then the schedule of each agent copy is disabled by default, and the agent does not run on its defined schedule until you enable it.

To disable and then enable an agent's schedule:

1. In the global header, click **Catalog** and navigate to the agent whose schedule you want to disable or enable.

2. Click the **More** link for the agent and select one of the following options:

   - **Disable Schedule** to disable the agent's schedule

   - **Enable Schedule** to cause the agent to run on schedule again

You also can disable and enable an agent's schedule by using the **Enabled** box in the "Agent editor: Schedule tab."

What Are Devices and Delivery Profiles?

Devices and delivery profiles control how you will be reached when an alert is generated by an agent and which devices receive the content:

- **Device** — A device is the medium used to deliver content to you. The content of an agent can be delivered to a range of devices as an email or SMS message.

- **Delivery profile** — A delivery profile specifies which devices to use to deliver content to you, based on the priority of the content. You can define several

delivery profiles to meet your needs, and switch among them. However, only one profile can be active at any given time.

For example, you might have an **In the Office** delivery profile that delivers content to an office email, and an **On the Road** profile that delivers content to your cell phone, depending on the priority of the information.

You configure your devices and your delivery profiles from the "My Account dialog: Delivery Options tab." For more information, see "Configuring Your Devices and Delivery Profiles." (The administrator manages the types of devices that are available to you. For information, see "Managing Device Types for Agents" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.)

Note: Your organization might automatically generate system delivery devices and delivery profiles as follows:

- Using the SA System subject area, your organization can generate system delivery devices based on each user's email address and other device information (such as cell phone numbers) from the SA System subject area, and then generate a system delivery profile for each user using the user's system delivery devices.

- Using the LDAP server (but only if delivery devices and profiles have not been generated from the SA System subject area), your organization can generate system delivery devices based on each user's email address from the LDAP server and then generate a system delivery profile for each user using the user's system delivery device.

If you do not configure any devices or profiles, then the system delivery profile that is generated for you is used as the default. (Note that, even if you define other profiles, you can configure the system profile as your default profile.) If you define a delivery profile, then you can include system devices in this profile and set the priority levels for which this delivery device is used.

See "Setting Up the SA System Subject Area" in *Scheduling Jobs Guide for Oracle Business Intelligence Enterprise Edition*.

Depending on the destinations that are specified for an agent, content can be delivered to the:

- Home page and dashboard. (For how content is delivered as an alert to the Home page and dashboard, see "What Are Alerts?")

- Active delivery profile or specific devices.

    When the destinations are specific devices, content is delivered to the devices that you have configured rather than to the devices in your active delivery profile. For example, if an Agent is defined to be delivered to Email devices, then the default Email device that you configured is used rather than any Email devices that you configured in your active delivery profile.

Delivery content is assigned a specific priority. The default priority is normal. When you select devices for your active profile, you can indicate what priority content should be sent to that device. For example, if you have added a cell phone to your delivery profile, then you might associate it with high priority content only. When you know that you will be away from the office frequently and out of email range, you can select to receive only low priority content through your office email.

Configuring Your Devices and Delivery Profiles

You use the "My Account dialog: Delivery Options tab" to configure the devices and delivery profiles to be used to reach you when an alert is generated by an agent. For more information about devices and delivery profiles, see "What Are Devices and Delivery Profiles?"

To configure your devices and delivery profiles:

1. In the global header, click **Signed In As *username*,** (where *username* is the name that you use to log in to Oracle BI Enterprise Edition) and then select **My Account** to display the "My Account dialog."

2. Click the Delivery Options tab.

3. In the Devices area, add or edit the appropriate devices.

   To add a device, perform the following steps:

   a. Select the device category button (for example, **Email**) for the device to add.

   b. Click the **Create Device** button to display the "Create Device dialog."

   c. In the **Name** field, enter the name of the device, for example, Work Email.

   d. In the **Category** box, select the device category.

   e. In the **Device Type** box, select the type of device.

   f. In the **Address/Number** field, enter the address for the device, for example, an email address for email.

   g. Click **OK** to return to the My Account dialog: Deliver Options tab.

   The device is displayed in the Devices list for the appropriate category (for example, **Email**).

   h. If you want this device to be the default device, then select the **Default** option to the right of the device name.

   To edit a device, perform the following steps:

   a. Select the device in the list.

   b. Click the **Edit Device** button to display the "Edit Device dialog."

   c. Make your edits and click **OK** to return to the My Account dialog: Deliver Options tab.

4. Add or edit the appropriate delivery profiles.

   To add a delivery profile, perform the following steps:

   a. Click the **Create Delivery Profile** button to display the "Create Delivery Profile dialog."

   b. In the **Name** field, enter a delivery profile name.

   c. To the right of each delivery device to use when this profile is the active profile, select one or more of the priority options — **High**, **Normal**, or **Low**. These priorities are used together with the priority of the delivery content to determine the destination for delivery content. For more information on the priority of the delivery content, see "Agent editor: General tab."

   d. Click **OK** to return to the My Account dialog: Deliver Options tab.

   The profile is displayed in the Delivery Profiles list.

    e. If you want the delivery profile to be your active profile, then select the **Active** option to the right of the profile name.

To edit a delivery profile, perform the following steps:

    a. Select the delivery profile in the list.

    b. Click the **Edit Profile** button to display the "Edit Delivery Profile dialog."

    c. Make your edits and click **OK** to return to the My Account dialog: Deliver Options tab.

5. Click **OK**.

Accessing and Managing Your Alerts

You can access a list of your alerts. The list shows the name of each alert along with its delivery date and time, and number of occurrences.

Using this list, you can:

- View the content for an alert.

- Clear an alert and all its occurrences.

- Edit the agent that generated the alert, if you have permission to modify the agent.

- Run the agent that generated the alert, if you have permission to execute the agent.

- Subscribe to the Oracle BI Alerts feed. See "Subscribing to an RSS Feed for Alerts."

- Clear all your alerts and all their occurrences.

For more information about alerts, see "What Are Alerts?"

To access and manage your alerts:

1. In the global header, click **Alerts!**.

The "Alerts dialog" is displayed.

2. View and manage your alerts as needed.

You can also access and manage your alerts from the Alerts section on the "Home page."

Subscribing to an RSS Feed for Alerts

You can receive alerts by way of an RSS 2.0 compatible reader that supports HTTP basic authentication. However, if Oracle BI Presentation Services uses the HTTPS protocol, then the RSS reader that you use must also support the HTTPS protocol.

To subscribe to an RSS Feed for alerts, you must have been granted the Access to RSS Feeds privilege by the administrator.

To subscribe to an RSS feed for alerts:

1. Click the **Alerts!** link to display the "Alerts dialog."

2. Click the **Subscribe to RSS feed** button (located to the left of the **Clear All** button).

The browser's page to subscribe to an RSS feed is displayed.

3. Subscribe to the Oracle BI Alerts following the instructions on the browser's page.

10

Working with Conditions

This chapter describes how to work with conditions in Oracle Business Intelligence Enterprise Edition. It explains how you use conditions to determine whether agents deliver their content and execute their actions, whether action links are displayed in dashboard pages, and whether sections and their content are displayed in dashboard pages.

This chapter includes the following sections:

What Are Conditions?

Conditions are objects that return a single Boolean value based on the evaluation of an analysis or of a Key Performance Indicator (KPI).

What a condition evaluates depends on whether it is based on an analysis or on a KPI, as follows:

- For an analysis, it evaluates the row count of the analysis.

- For a KPI, it evaluates the status of the KPI.

For example, a condition might evaluate whether the results of an analysis return a number of rows greater than 0:

- If the analysis returns at least one row, then the condition evaluates to true.

- If the analysis does not return any rows, then the condition evaluates to false.

For What Do I Use Conditions?

You use conditions to determine whether:

- Agents deliver their content and execute their actions

- Actions links (which when clicked run actions) are displayed in dashboard pages

- Sections and their content are displayed in dashboard pages

For example, a sales manager wants to deliver a Monthly Sales Report to his direct reports only when sales drop below $2 million. You might create a condition that is based on an analysis that shows sales that are below $2 million and add it to an agent whose delivery content is the Monthly Sales Report. When the condition evaluates to true (that is, the analysis contains rows where sales are below $2 million), the agent is triggered to deliver the Monthly Sales Report.

You can also use a different kind of condition to determine whether action links are enabled in analyses. For information, see "About Conditionally Enabling Actions Added to Analyses."

What Are the Elements of a Condition?

A condition consists of the following elements:

- An analysis or KPI.

- The criteria to use when evaluating the condition:

    - For an analysis, the criteria is a row count and an operator to apply to the row count (for example, the row count equals 100) and values for any prompted filters that are associated with the analysis.

    - For a KPI, the criteria is a KPI status (for example, the KPI status is OK) and values for KPI dimensions that were set to **is prompted** in the KPI. Note that this will display as "Not Set" when creating the condition.

What Are Named Conditions?

A named condition is a condition that you define and then save by name in the Oracle BI Presentation Catalog so that you can reuse it in agents and dashboard pages.

You create a named condition when you create a condition from the:

- New menu in the global header by selecting **Condition** under **Analysis and Interactive Reporting**

- Home page by clicking the **More** link under **Analysis and Interactive Reporting** in the Create area and selecting **Condition**

You also create a named condition from the "Agent editor: Condition tab" when you save an inline condition to the catalog. For information on inline conditions, see "What

Are Inline Conditions?"

What Are Inline Conditions?

An inline condition is a condition that you define at the point of use and do not save by name in the catalog. Instead it is saved as part of the dashboard page or agent.

An inline condition is automatically deleted when the dashboard page or agent that contains it is deleted. This simplifies catalog management for conditions that make sense only within particular Oracle BI content.

You can create an inline condition when you:

- Create or edit an agent and specify (in the "Agent editor: Condition tab") that the agent is to deliver its content and run associated actions conditionally. See "Using Conditions to Determine Whether Agents Deliver Their Content or Execute Their Actions."

  For information on creating agents, see "Creating Agents."

- Add an action link to a dashboard page and specify that the action link is to be displayed conditionally. See "Using Conditions to Determine Whether Action Links Are Displayed in Dashboard Pages."

  For information about adding action links to dashboard pages, see "About Adding Actions to Dashboard Pages."

- Add a section to a dashboard page and specify that the section is to be displayed conditionally. See "Using Conditions to Determine Whether Sections Are Displayed in Dashboard Pages."

  For information about adding sections to dashboard pages, see "Adding Content to Dashboards."

Who Creates Conditions?

Generally:

- Administrators create the named conditions for an organization, which are then used by content designers (providing they have the appropriate permissions to the conditions or the folders in which the conditions are saved) as they create dashboards and agents.

  The ability to create or edit named conditions is controlled by the Create Conditions privilege, which is managed by the administrator.

- Content designers create inline conditions.

For information about privileges, see "Managing Presentation Services Privileges" in *Security Guide for Oracle Business Intelligence Enterprise Edition*.

For information about permissions, see Chapter 14, "Managing Objects in the Oracle BI Presentation Catalog."

Creating Named Conditions

You can create named conditions that you can reuse in agents and dashboard pages. See "What Are Named Conditions?"

To create a named condition:

1. In the global header, click **New** and then select **Condition**.

The "New Condition dialog" is displayed.

2. Complete the New Condition dialog. For more information, see "Specifying the Settings for Conditions."

Using Conditions to Determine Whether Agents Deliver Their Content or Execute Their Actions

You can use conditions to determine whether agents deliver their content or execute their actions. For information on agents, see Chapter 9, "Delivering Content."

To use a condition to determine whether an agent delivers its content or executes its actions:

1. Edit the agent.

2. Click the "Agent editor: Condition tab."

3. Select the **Use a condition** box.

4. If you want to:

   a. Create a new condition, click **Create** to display the "Create Condition dialog" and then complete the dialog.

      For information on completing the dialog, see "Specifying the Settings for Conditions."

   b. Select an existing condition, click **Browse** to display the "Select Condition dialog" and then complete the dialog.

   c. Save the agent.

Using Conditions to Determine Whether Action Links Are Displayed in Dashboard Pages

You can use conditions to determine whether action links are displayed in dashboard pages. For information on adding actions links to dashboard pages, see "About Adding Actions to Dashboard Pages."

To use a condition to determine whether an action link is displayed in a dashboard page:

1. Edit the dashboard. For information, see "Editing Dashboards."

2. Click the tab of the page that contains the action link to display conditionally.

3. Hover over the action link object in the Page Layout area to display the action link object's toolbar and click the **Properties** button, or, if the action link is in an action link menu:

   a. Hover over the action link menu object in the Page Layout area to display the action link menu object's toolbar and click the **Properties** button.

      The "Action Link Menu Properties dialog" is displayed.

   b. Select the action link to conditionalize and click the **Edit** button.

   The "Action Link Properties dialog" is displayed.

4. In the **Show** component, click the **Conditionally** box.

   The **Condition** component is displayed.

5. If you want to:

   a. Create a new condition, click the **New Condition** button to display the "New Condition dialog" and then complete the dialog.

      For information on completing the dialog, see "Specifying the Settings for Conditions."

   b. Select an existing condition, click the **Select Condition** button to display the "Select Condition dialog" and then complete the dialog.

6. Click **OK** in the Action Link Properties dialog.

7. If the action link is in an action link menu, then click **OK** in the Action Link Menu Properties dialog.

8. Save the dashboard.

Using Conditions to Determine Whether Sections Are Displayed in Dashboard Pages

You can use conditions to determine whether sections are displayed in dashboard pages. For information on adding sections to dashboards, see "Adding Content to Dashboards."

To use a condition to determine whether a section is displayed in a dashboard page:

1. Edit the dashboard. For information, see "Editing Dashboards."

2. Click the tab of the page that contains the section to display conditionally.

3. Hover over the section in the Page Layout area to display the section's toolbar, click the **Properties** button for the section, and select **Condition**. The "Section Condition dialog" is displayed.

4. If you want to:

   a. Create a new condition, click the **New Condition** button to display the "Create Condition dialog" and then complete the dialog.

      For information on completing the dialog, see "Specifying the Settings for Conditions."

   b. Select an existing condition, click the **Select Condition** button to display the "Select Condition dialog" and then complete the dialog.

5. Click **OK** in the Section Condition dialog.

6. Save the dashboard.

Specifying the Settings for Conditions

You must specify the settings for a condition in either the New Condition, Create Condition, or Edit Condition dialog, when you create or edit a condition as described in the following sections:

- "Creating Named Conditions"

- "Using Conditions to Determine Whether Sections Are Displayed in Dashboard Pages"

- "Using Conditions to Determine Whether Agents Deliver Their Content or Execute Their Actions"

- "Using Conditions to Determine Whether Action Links Are Displayed in Dashboard Pages"

- "Editing Named Conditions"

- "Editing, Customizing, Testing, Saving, and Disabling Conditions Used in Agents"

- "Editing, Testing, Saving, and Removing Conditions Used in Action Links in Dashboard Pages"

- "Editing, Testing, Saving, and Removing Conditions Used in Sections in Dashboard Pages"

To specify the settings for a condition in the New Condition dialog, Create Condition dialog, or Edit Condition dialog:

1. In the **Create condition based on** box, select whether the condition is to be based on an **Analysis** or **KPI**.

2. For:

   - (optional) An analysis, edit any prompted filters, as desired.

   - A KPI, specify the values for any KPI dimensions.

   Note: If you specify values for any prompted filters, then these values cannot be overridden at the point of use.

   You cannot pin multiple values for KPI dimensions when creating a condition.

   ---

3. Specify the evaluation criteria as follows:

   - For an analysis, in the **Condition true if number or rows** area:

     – In the *Operator* box, select the operator to apply to the row count.

     – In the *Row Count* box or boxes, specify the row count to be evaluated.

   - For a KPI, in the **Condition true if KPI** box, select the KPI status.

4. (optional) Click **Test** to test the condition.

5. If you want to save the condition as:

   - An inline condition, click **OK**.

   - A named condition, click **Save** to display the "Save As dialog," where you can save the condition by name to the catalog.

   Note: If a condition is based on an analysis or KPI that is private, you cannot save it in the /Shared Folders folder.

Editing Named Conditions

To edit a named condition:

1. Navigate to the condition in the catalog.

2. Click the **Edit** link to display the "Edit Condition dialog."

3. Make the desired changes.

For more information on completing the Edit Condition dialog, see "Specifying the Settings for Conditions."

Editing, Customizing, Testing, Saving, and Disabling Conditions Used in Agents

You can:

- Edit inline conditions

- Customize named conditions by editing prompted filters

- Test conditions to see whether the conditions evaluate to true or false

- Save inline conditions to the catalog as named conditions

- Remove conditions

To edit, customize, test, save, or remove a condition used in an agent:

1. Edit the agent.

2. Click the "Agent editor: Condition tab."

3. To:

   - Edit an inline condition, click **Edit Condition** to display the "Edit Condition dialog," and make the desired changes. For more information on completing the Edit Condition dialog, see "Specifying the Settings for Conditions."

   - To customize the prompted filters of a named condition, click **Customize** to display the "Customize Condition dialog," and make the desired customizations.

   - To test a condition, click **Test**. The evaluation results are displayed.

   - To save an inline condition to the catalog as a named condition, click **Save To Catalog** to display the "Save As dialog."

   - To disable a condition, click **Do not use a condition (always deliver content and run actions)**.

4. Save the agent.

Editing, Testing, Saving, and Removing Conditions Used in Action Links in Dashboard Pages

You can perform the following tasks on conditions that are used in action links in dashboard pages:

- Edit conditions

- Test conditions to see whether the conditions evaluate to true or false

- Save inline conditions to the catalog as named conditions and save named conditions to the catalog by other names

- Remove conditions

To edit, test, save, or remove a condition used in an action link in a dashboard page:

1. Edit the dashboard page that contains the action link.

2. Hover over the action link object in the Page Layout area to display the action link object's toolbar and click the **Properties** button, or, if the action link is in an action link menu:

    a. Hover over the action link menu object in the Page Layout area to display the action link menu object's toolbar and click the **Properties** button.

    The "Action Link Menu Properties dialog" is displayed.

    b. Select the action link that contains the condition and click the **Edit** button.

    The "Action Link Properties dialog" is displayed.

3. Click the **More** button to the right of the **Condition** field and then:

- To edit a condition, select **Edit Condition** to display the "Edit Condition dialog" and make the desired changes. For more information on completing the Edit Condition dialog, see "Specifying the Settings for Conditions."

- To test a condition, select **Test Condition**. The evaluation results are displayed.

- To save an inline condition to the catalog as a named condition, select **Save Condition As** to display the "Save As dialog."

- To remove a condition, select **Remove Condition**.

4. Click **OK** in the Action Link Properties dialog.

5. If the action link is in an action link menu, then click **OK** in the Action Link Menu Properties dialog.

6. Save the dashboard.

Editing, Testing, Saving, and Removing Conditions Used in Sections in Dashboard Pages

You can perform the following tasks on conditions that are used in sections in dashboard pages:

- Edit conditions

- Test conditions to see whether the conditions evaluate to true or false

- Save inline conditions to the catalog as named conditions and save named conditions to the catalog by other names

- Remove conditions

To edit, test, save, or remove a condition used in a section in a dashboard page:

1. Edit the dashboard page that contains the section.

2. Hover over the section in the Page Layout area to display the section's toolbar, click the **Properties** button for the section, and select **Condition**. The "Section Condition dialog" is displayed.

3. Click the **More** button to the right of the **Condition** field and then:

- To edit a condition, select **Edit Condition** to display the "Edit Condition dialog" and make the desired changes. For more information on completing the Edit Condition dialog, see "Specifying the Settings for Conditions."

- To test a condition, select **Test Condition**. The evaluation results are displayed.

- To save an inline condition to the catalog as a named condition, select **Save Condition As** to display the "Save As dialog."

- To remove a condition, select **Remove Condition**.

4. Save the dashboard.

11

Working with Actions

This chapter describes how to work with actions in Oracle Business Intelligence Enterprise Edition. It describes how to use actions to navigate to related content and to invoke operations, functions, or processes in external systems and explains how to add actions to analyses, dashboard pages, agents, KPIs, and initiatives and objectives in scorecards.

This chapter includes the following sections:

- What Are Actions?
- What Are Action Links and Action Link Menus?
- What Action Types Are Available?
- Who Can Create Actions?
- Where Can I Add Actions?
- What Are Named Actions?
- What Are Inline Actions?
- What Are Action Parameters?
- About Conditionally Enabling Actions
- About Customizing Information Displayed to Users on Action Execution
- Creating Named Actions
- Specifying the Settings for New Actions
- Adding Actions to Analyses
- About Adding Actions to Dashboard Pages
- Adding Actions to Dashboard Pages Using Action Links
- Adding Actions to Dashboard Pages Using Action Link Menus
- Adding Actions to Agents
- Adding Actions to KPIs
- Adding Actions to Initiatives and Objectives in Scorecards
- Creating a New Action Based on an Existing Named Action
- Editing Named Actions
- Editing Actions and Action Links Added to Analyses
- Editing Actions, Action Links, and Action Link Menus Added to Dashboard Pages

- [Editing Actions Added to Agents](#)

- [Editing Actions and Action Links Added to KPIs](#)

- [Editing Actions and Actions Links Added to Initiatives and Objectives in Scorecards](#)

- [Saving Inline Actions in Analyses to the Catalog](#)

- [Saving Inline Actions in Dashboards to the Catalog](#)

- [Testing a Named Action by Executing It](#)

What Are Actions?

Actions provide functionality to:

- Navigate to related content

- Invoke operations, functions, or processes in external systems

You can include actions in analyses, dashboard pages, agents, scorecard objectives, scorecard initiatives, and KPIs

Actions can be executed:

- Explicitly by end users who click action links that are embedded within:

  - Analyses on column headings, column values, and hierarchy level values, in certain views, such as graphs, and on totals and grand totals within tables and pivot tables

  - Dashboard pages

  - Content delivered by agents

  - Scorecards in Cause & Effect Maps, Custom Views, Strategy Tree Views, Strategy Maps, KPIs, KPI contribution wheels, and KPI watchlists

  - KPI analyses

- Automatically, as the final step of an agent

- Directly from the "Home page" or from the "Catalog page"

For example, a sales director wants to meet with the sales manager of any region where sales drop below a certain threshold. You might embed an action object into the sales director's dashboard to enable the sales managers to schedule such a meeting simply by clicking a link. Or, you could use an agent to schedule the meeting automatically as soon as the sales threshold is passed.

What Are Action Links and Action Link Menus?

An action link is a link to an action that you have embedded in an analysis, dashboard page, scorecard objective, scorecard initiative, KPI contribution wheel, or KPI that, when clicked, runs an associated action.

Figure 11–1 shows an analysis to which an action link has been added to column values. When you hover the mouse pointer over a column value (for example, revenue for Bluetooth Adaptor in this figure), the column value is displayed as a link. Clicking the column link displays the associated action link, then clicking the action link executes the associated action.

Figure 11–1   Example of an Action Link Added to an Analysis

In analyses, KPIs, KPI contribution wheels, scorecard objectives, and scorecard initiatives, multiple action links are displayed in a list. Figure 11–2 shows an analysis to which a list of action links (Send Email to Manager and Display Graph View) has been added to column values. When you hover the mouse pointer over a column value (for example, revenue for Bluetooth Adaptor in this figure), the column value is displayed as a link. Clicking a column value link displays a list of actions. Clicking an action in the list executes the associated action.

Figure 11–2   Example of Multiple Action Links Added to an Analysis

On a dashboard page, you can add action links as standalone links or you can group multiple action links together on action link menus. An action link menu lets users select, from a list of action links, the appropriate action to be executed based on the business insight that they gained from the data.

Additionally, you can conditionally show each action link, depending on the data. This powerful functionality enables you to set up context-sensitive menus that present users with the appropriate next steps based on the data that is displayed. For more information on conditionally showing action links, see "About Conditionally Enabling Actions."

Action links that you add to analyses are displayed to users in the following views:

- Funnel graphs

- Gauges

- Graphs

- Heat matrices

- Map views

- Performance Tiles

- Pivot tables

- Tables

- Trellises

- Treemaps

For information about views, see Chapter 4, "Adding Views for Display in Dashboards."

Action links that you add to scorecard objectives and initiatives are displayed to users in the following scorecard views:

- Cause & effect maps

- Custom views

- Strategy trees

- Strategy maps

- KPI watchlists

Action links that you add to KPIs are displayed to users in KPI analyses.

> **Note:** Action links are not included in exported formats, for example, Excel and PDF.

What Action Types Are Available?

The types of actions that are available are categorized into two groups: those that *navigate* to related content and those that *invoke* operations, functions, or processes in external systems.

Privileges control which types of actions you can create. You might be able to create only navigate-type actions, only invoke-type actions, or both navigate- and invoke-type actions. Or, you might be able to only execute actions (if they exist as shared objects in the catalog or in a shared object, for example in a dashboard or analysis). For more information, see "Who Can Create Actions?"

In addition, where you can an add an action depends on its type. For information, see "Where Can I Add Actions?"

For information about the Contextual Event action type, which developers can use when adding Oracle BI EE objects to Oracle ADF applications, see "Passing Business Intelligence Content with the Oracle BI EE Contextual Event Action" in *Developer's Guide for Oracle Business Intelligence Enterprise Edition*.

Actions that Navigate to Related Content

The following list identifies and describes the types of actions that navigate to related content:

- **Navigate to BI Content** — Navigates to an analysis, a specific dashboard page, or dashboard.

- **Navigate to a Web Page** — Navigates to a specified URL.

- **Navigate to EPM Content** — Navigates to Financial Reporting content.

  This action type requires some configuration before it is available. For information on the required configuration, see *Integrator's Guide for Oracle Business Intelligence Enterprise Edition*.

- **Navigate to E-Business Suite** — Navigates to an Oracle E-Business Suite page or form. You use this type of action to allow users to navigate back to an Oracle E-Business Suite page or form after they have first logged in to Oracle E-Business Suite and then accessed Oracle BI EE.

  This action type requires some configuration before it is available. For information on the required configuration, see *Integrator's Guide for Oracle Business Intelligence Enterprise Edition*.

- **Navigate to Siebel CRM** — Navigates to a view (such as an opportunity) in a Siebel CRM application. You use this type of action to allow users to navigate from a dashboard that is embedded in a Siebel CRM application to a record in a view in the CRM application.

  This action type requires some configuration before it is available. For information on the required configuration, see *Integrator's Guide for Oracle Business Intelligence Enterprise Edition*.

Actions that Invoke Operations, Functions or Processes in External Systems

The following list identifies and describes the types of actions that invoke operations, functions, or processes in external systems:

- **Invoke a Web Service** — Invokes a Web Service operation or any SOA service that is exposed as a Web Service (for example, a Business Process Execution Language (BPEL) process in the Oracle SOA Suite that is exposed as a Web Service).

  This action type requires some configuration before you can use it. For information on the required configuration, see *Integrator's Guide for Oracle Business Intelligence Enterprise Edition*.

- **Invoke a Java Method** — Invokes a Java method in an Enterprise Java Bean (EJB).

  This action type requires some configuration before you can use it. For information on the required configuration, see *Integrator's Guide for Oracle Business Intelligence Enterprise Edition*.

- **Invoke a Browser Script** — Invokes a JavaScript function from the client web browser.

  This action type requires some configuration before you can use it. For information on the required configuration, see *Integrator's Guide for Oracle Business Intelligence Enterprise Edition*.

- **Invoke Server Script** — Executes a custom script when the current agent completes. The custom script type can be either Javascript or VBScript.

  > **Note:** This action supports custom script actions when the server is running on Microsoft Windows. For other platforms (including Windows), consider using the Invoke Java Method (EJB) or Invoke Web Services action.

- **Invoke an HTTP Request** — Sends an HTTP request through the server to a target URL. This action type is used to invoke external systems that are exposed by URL APIs.

- **Invoke Agent** — Invokes another agent. This action type lets you chain agents. For example, you can have Agent A invoke Agent B, which invokes Agent C and so on.

Who Can Create Actions?

The ability to create actions is controlled by the following action privileges, which are managed by the administrator:

- **Create Navigate Actions** — Grants the right to create actions that navigate to related content.

- **Create Invoke Actions** — Grants the right to create actions that invoke operations, functions, and processes to external systems.

- **Save Actions containing embedded HTML** — Used in conjunction with the Create Invoke Actions privilege, grants the right to embed HTML code in the customization of the results of an Invoke a Web Service action.

By default, these action privileges are granted to the administrator.

For information about privileges, see "Managing Presentation Services Privileges" in *Security Guide for Oracle Business Intelligence Enterprise Edition*.

For information about permissions, see Chapter 14, "Managing Objects in the Oracle BI Presentation Catalog."

Where Can I Add Actions?

Where you can add an action depends on its type. You can add some types to analyses, dashboard pages, agents, scorecard objectives, scorecard initiatives, and KPIs, while others you can add only to agents or only to analyses, dashboard pages, scorecard objectives, scorecard initiatives, and KPIs. Table 11–1 lists the types of actions and identifies where you can add each type.

Table 11–1   Action Types and Where You Can Add Them

Action Type	Add to Analyses, Dashboard Pages, Scorecard Objectives, Scorecard initiatives, and KPIs	Add to Agents
Navigate to EPM Content	Yes	No
Navigate to BI Content	Yes	No
Navigate to a Web Page	Yes	No
Navigate to E-Business Suite	Yes	No
Navigate to Siebel CRM	Yes	No
Invoke a Web Service	Yes	Yes
Invoke a Java Method	Yes	Yes
Invoke a Browser Script	Yes	No
Invoke an HTTP Request	Yes	Yes
Invoke Agent	No	Yes
Invoke Server Script	No	Yes **Note:** For this action type, the server must be running on Microsoft Windows.
Invoke Java Jobs	No	Yes

For more information on adding actions to objects, see:

- "Adding Actions to Analyses"

- "About Adding Actions to Dashboard Pages", "Adding Actions to Dashboard Pages Using Action Links", and "Adding Actions to Dashboard Pages Using Action Link Menus"

- "Adding Actions to Agents"

- "Adding Actions to KPIs"

- "Adding Actions to Initiatives and Objectives in Scorecards"

What Are Named Actions?

A named action is an action that you define and then save by name in the Oracle BI Presentation Catalog so that you can reuse it. You can also reuse a named action as a template to create another named action.

You can save all types of actions to the catalog except the following types:

- Invoke Agent

- Invoke Server Script

- Invoke Java Jobs

For example, suppose that you frequently want to include navigation to your organization's web site in analyses and dashboard pages that you are designing. You can create an action that navigates to the URL and save it to the catalog. Then as you create analyses and dashboard pages, you can add this named action to them.

You create a named action when you create an action from the:

- **New** menu on the global toolbar by clicking **Action** and then selecting one of the action types (for example, **Navigate to a Web Page**).

- Home page by clicking **Action** in the Create area and then selecting one of the action types (for example, **Navigate to BI Content**).

You can also create a named action from a dashboard, an analysis, or a KPI. You do so by creating an inline action and then, to keep it, saving it to the catalog. For information on inline actions, see "What Are Inline Actions?"

What Are Inline Actions?

An inline action is an action that you define at the point of use and do not save by name in the catalog. Instead, it is saved as part of the analysis, dashboard page, agent, scorecard objective, scorecard initiative, or KPI.

An inline action is automatically deleted when the analysis, dashboard page, agent, scorecard objective, scorecard initiative, or KPI that contains it is deleted. This simplifies catalog management for actions that make sense only within particular BI content.

For example, suppose that you are designing a dashboard page and want to invoke an EJB that you plan to use only once. You can create an action that invokes the EJB at that point and then add it to the page. When you save the dashboard, the action is saved with it.

You create an inline action when you:

- Create or edit an agent and add a new action to run when the agents finishes.

    For information, see "Adding Actions to Agents."

- Edit a dashboard page and add a new action to the page using an action link or an action link menu.

  For information see "About Adding Actions to Dashboard Pages."

- Create or edit an analysis and add a new action to a column heading, column value, or hierarchy level value using an action link.

  For information, see "Adding Actions to Analyses."

- Create or edit a KPI and add a new action to the KPI using an action link.

  For information, see "Adding Actions to KPIs."

- Create or edit an initiative or objective in a scorecard and add a new action to the initiative or objective using an action link.

  For information, see "Adding Actions to Initiatives and Objectives in Scorecards."

What Are Action Parameters?

Action parameters are used to pass data from Oracle BI EE to the operations or processes that are represented by actions:

- For actions that invoke Web Service operations, the parameters correspond to the simple types defined as attributes and simple elements (or complex elements deconstructed into their simple type components) within the input message of a Web Service operation and are read from the Web Service Definition Language (WSDL) that defines the operation and any parameters on that operation.

- For actions that invoke a Java method, browser script, or server script, the parameters correspond to the arguments on the method.

- For actions that navigate to a web page or invoke an HTTP Request, the parameters correspond to the parameters passed through from the URL.

- For actions that navigate to BI Content, parameters are automatically passed from the source to the target. When navigating from one analysis to another, if the source row of data contains a field with the same logical name as a field used in a filter on the target analysis, then the value of this field will be passed as a parameter. Note that the operator on the filter should be set to **is prompted** or **is equal to / is in**.

When creating a named action or when associating an action with an object (such as a column on an analysis), you can specify whether a parameter is:

- **Fixed** — A fixed parameter can be seen but its value cannot be set by a user.

- **Hidden** — A hidden parameter cannot be seen and its value cannot be set by a user. (Note that hidden does not mean that the parameter is secure.)

- **Optional** — An optional parameter does not require a value in order for the action to be executed.

  > **Note:** An action link or conditional action link that is on a displayed total or grand total will not pass a parameter outside of related BI content.

About Conditionally Enabling Actions

You can conditionally enable actions that are added to:

- Analyses. See "About Conditionally Enabling Actions Added to Analyses."

- Dashboard pages. See"About Conditionally Enabling Actions Added to Dashboard Pages."

- Agents. See "About Conditionally Enabling Actions Added to Agents."

Actions that are added to KPIs are associated with KPI ranges so they are enabled conditionally because of their definitions. For the same reason, actions that are added to scorecards are enabled conditionally, because they are associated with states of initiatives and objectives.

About Conditionally Enabling Actions Added to Analyses

When you add an action to an analysis, you can specify that its associated action link is to be displayed only when one or more conditions are met. You do this by selecting one or more columns in the analysis to use and specifying the condition to meet. (The steps to specify a condition are very similar to those used for conditional formatting.)

For example, in an analysis that shows sales figures by regions, you can specify that an action link Send E-mail to Regional Manager is to be displayed only if sales figures drop below a certain amount.

About Conditionally Enabling Actions Added to Dashboard Pages

When you add an action to a dashboard page, you can specify that its associated action link is to be displayed only when a certain condition is satisfied. You do this by specifying a condition (either a named or inline) that is to be satisfied.

For example, in a dashboard page that displays stock levels for products, you can specify that an action link Order Stock is to be displayed only if stock levels are low for a given product.

Using conditional action links on an action link menu lets you display different sets of actions to users, depending on the data in dashboard pages. For example, in a dashboard page that displays stock levels for products, you can add an action link menu that contains the following action links:

- Order Stock and Stop Advertising, if stock levels are zero for a given product

- Order Stock, if stock levels are low for a given product

- No actions, if the stock levels are adequate for a given product

For more information on action links, see "What Are Action Links and Action Link Menus?" For more information on conditions, see Chapter 10, "Working with Conditions."

About Conditionally Enabling Actions Added to Agents

While you primarily use an agent's condition to determine whether the agent delivers its content or not, you can also use it to determine if the agent executes its actions.

When you add an action to an agent, you can specify that the action is to be executed only when a certain condition is satisfied. You do this by adding a condition (either inline or named) to the agent, and then specifying whether you want the action to be executed:

- Only if the agent condition evaluates to true

- Only if the agent condition evaluates to false

For some actions, you can also specify whether to execute the action for each row that is returned by the condition. (Note that Invoke Server Script actions and Invoke Agent actions cannot be executed per row of the result set. In addition, if one of the action parameters is a result set mapping, then it cannot be executed per row.)

For example, you could add an action to an agent that automatically kicks off a new marketing campaign and specify that it is to be executed only if a condition that evaluates whether sales for a region drop below $2,000,000 is true.

For more information on conditions, see Chapter 10, "Working with Conditions."

About Customizing Information Displayed to Users on Action Execution

You can customize information to display to users when they run actions. Specifically, you can:

- Specify whether to display a confirmation prompt to users when they execute the action.

- Customize a dialog that is displayed to users when they need to supply action parameter values before the action is executed.

- Customize an invocation successful message that is displayed to users, or, for an Invoke a Web Service action, you can customize a dialog to display information about the results of the action.

- Customize an invocation failure message that is displayed to users.

You use the "Action Options dialog" to customize this information when you create or edit an action. See "Specifying the Settings for New Actions."

Creating Named Actions

You can create named actions (if you have the appropriate privileges), which content designers can add to analyses, dashboard pages, agents, scorecard objectives, scorecard initiatives, and KPIs.

For more information about named actions, see "What Are Named Actions?"

To create a named action:

1. In the global header, click **New**, select **Action** under **Actionable Intelligence**, and then select the type of action to create.

   The "Create New Action dialog" is displayed.

2. Complete the New Action dialog. For information, see "Specifying the Settings for New Actions."

Specifying the Settings for New Actions

You specify the settings for a new action in the "Create New Action dialog" (displayed as the New Action dialog for agents and dashboards, and Add New Action dialog for scorecards), when you do any of the following tasks:

- "Creating Named Actions"

- "Adding Actions to Analyses"

- "About Adding Actions to Dashboard Pages"

- "Adding Actions to Agents"

- "Adding Actions to KPIs"

- "Adding Actions to Initiatives and Objectives in Scorecards"

To specify the settings for a new action:

1. Click the **Create New Action** button (displayed as the **Add New Action** button in an agent or **New Action** button in a dashboard) and then select the type of action to create. If you selected:

   - **Navigate to BI Content**, first the "Select BI Content For Action dialog" is displayed, where you select the Oracle BI EE content to which to navigate, and then the "Create New Action dialog" is displayed.

   - **Navigate to EPM Content**, first the "Select the Hyperion resource you want this action to invoke dialog" is displayed, where you select the Hyperion resource to which to navigate, and then the Create New Action dialog is displayed.

   - **Invoke a Web Service**, the "Select Web Service Operation dialog" is displayed, where you select a Web Service operation to be invoked or enter the URL for the WSDL if the web service is not preconfigured, and then the Create New Action dialog is displayed.

   - **Invoke a Java Method**, the "Select Java Method dialog" is displayed, where you select the Java method to be invoked, and then the Create New Action dialog is displayed.

   - Any other action type, the Create New Action dialog is displayed.

2. Depending on the type of action that you are creating or editing, do one of the following, as described in Table 11–2.

Table 11–2   First Step by Action Type

Action Type	What You Do
Navigate to a Web Page or Invoke an HTTP Request	In the **URL** field, enter the URL of the web page. **Tip:** You can highlight the URL in the browser and copy and paste it into the **URL** field.
Invoke a Browser Script	In the **Function Name** field, enter the name of the function to be executed or click **Browse** and complete the "Select Script Function dialog." If the script has parameters defined for it and you selected the function in the Select Script Function dialog, then the parameters are displayed in the **Define Parameters** list. If you manually entered the function name, then you must manually add the parameters.
Invoke Server Script	In the **Language** box, select **JavaScript** or **VB Script**, and then in the **Script Path** field, enter the path of the script to be executed. By default, the scripts are stored in the following directory: *ORACLE_INSTANCE*\bifoundation\OracleBISchedulerComponent\coreapplication_obisch*n*\scripts\common. For example D:\OBI11g\instances\instance1\bifoundation\OracleBISchedulerComponent\coreapplication_obisch1\scripts\common. Note that the Administrator can change the default directory where the scripts are stored.

Table 11–2   (Cont.) First Step by Action Type

Action Type	What You Do
Invoke Agent	Click **Browse** and complete the "Select Existing Agent dialog."
Navigate to E-Business Suite	In the **Define Parameters** list, define these mandatory parameters: ■ **FunctionCode** — The name of the function that relates to the target E-Business Suite form, for example, GLXIQJRN ■ **ConnectionPool** — The name of the connection pool for the Oracle E-Business Suite database in the Oracle BI repository, for example, EBS12 You can also define optional parameters for passing the context from Oracle Business Intelligence to EBS forms. For information on defining parameters, see the steps for defining parameters in this procedure. For information on integrating with Oracle E-Business Suite security, see *Integrator's Guide for Oracle Business Intelligence Enterprise Edition*.
Navigate to Siebel CRM	In the **Define Parameters** list, define these mandatory parameters: ■ **View** — The name of the view that contains the record to which to navigate, for example, Opportunity List View. ■ **Applet** — The name of the parent applet in the view that contains the record to which to navigate, for example, Opportunity List Applet. ■ **Pass Value** — The row number of the record to which to navigate, for example, 3SIA-2O5VU. Generally, if you are adding this type of action to an analysis as an inline action, you use a column in the analysis criteria to set the value of **Pass Value**. To do so, click the **Change type of value** button, select **Column Value**, and then click the **Column Value** button and select the column. For how to determine the name of the view, applet, and record row number, see your Siebel CRM application documentation. For information on defining parameters, see the steps for defining parameters in this procedure.

3. (for an Invoke an HTTP Request only) In the **Request** box, select one of the following options:

   ■   **Get** — Invokes the URL as an HTTP GET request.

   ■   **Post** — Invokes the URL as an HTTP POST request.

4. (for an Invoke Agent action only) In the **Execute for Recipients** box, select the scope of recipients. For example, if you want the recipients to be the same as the recipients of the selected agent, then select **Of Specified Agent**.

5. (optional for a Navigate to Web Page or an Invoke an HTTP Request action) To define parameters for the action, click **Define Parameters** to display the **Define Parameters** list.

6. Define the parameters as appropriate:

- To add a parameter, click the **Add Parameter** button. A new parameter row is added to the **Define Parameters** list. (Note that the **Add Parameter** button is not available for all action types.)

- (for an Invoke Server Script action only) To pass the delivery content or the results of the analysis on which the agent condition is based to the script, click the **Add Document Parameter** button. A new document parameter row is added to the **Define Parameters** list.

- Specify the column values for each parameter:

  - In the **Name** column, if you are creating a new parameter, then enter the name of the parameter. Use a name that is unique within the action.

    This column is not available for all action types.

  - In the **Prompt** column, if you want the user to provide the parameter value, then enter the prompt to display to the user.

  - In the **Value** column, to provide a parameter value, enter or select the value. If you want the user to specify the value, then leave this field as is.

  - In the **Fixed** column, specify whether to allow users to see but not set the parameter.

    This column is not available for all action types.

  - In the **Hidden** column, specify whether to hide the parameter from users.

    This column is not available for all action types.

  - In the **Optional** column, specify whether the parameter requires a value before the action can be executed.

7. (optional) Customize information displayed to the user when the action runs:

   a. Click **Options** to display the "Action Options dialog."

   b. Specify the customization that you want.

   c. Click **OK**.

   This functionality is available only for actions where it is appropriate to display information to users.

8. Click **OK**.

   If you are creating a named action, then a dialog is displayed where you specify the information for saving the action.

Adding Actions to Analyses

You can add one or more actions to a column heading, column value, or hierarchy level value in an analysis. When you add an action to a column heading, column value, or hierarchy level value, you add the action by using an action link.

When an analysis that contains one or more action links is presented to users in a pivot table, table, map, graph, trellis, or gauge, users can click a link to run the associated action.

For more information on action links, see "What Are Action Links and Action Link Menus?"

To add one or more actions to an analysis:

1. Edit the analysis to which you want to add one or more actions.

2. Move the mouse pointer over the **Options** button for the column or hierarchy level to which you want to add one or more actions and select **Column Properties** or **Hierarchy Level Properties**.

The "Column Properties dialog" is displayed.

> **Note:** You can also access the **Column Properties** dialog from the "Analysis editor: Results tab." Select the relevant view and click the **Edit View** button. Locate the appropriate column in the "Layout pane," click the **More Options** button, and then select **Column Properties**.

3. Click the "Column Properties dialog: Interaction tab."

4. In the **Primary Interaction** box in the **Column Heading** area (to add one or more actions to a column heading) or the **Value** area (to add one or more actions to a column value or hierarchy level value), select **Action Links** to display the **Action Links** area.

5. Click the **Add Action Link** button. The "New Action Link dialog" is displayed.

6. In the **Link Text** field, enter the text to display as the link to execute the associated action.

7. To create an action (that is, an inline action), click the **Create New Action** button and specify the settings for the new action. For information, see "Specifying the Settings for New Actions."

8. To add an existing action (that is, a named action):

   a. Click the **Select existing action** button.

   The "Open dialog" is displayed.

   b. Complete the Select Action dialog.

   If there are parameters associated with the action, then the "Edit Parameter Mapping dialog" is displayed.

   c. Complete the Edit Parameter Mapping dialog (if displayed).

9. If you are adding the action link to a value, then in the **Show Link** component in the New Action Link dialog, select one of the following options:

   - **Always** — Specifies that the action link is always to be enabled.

   - **Conditionally** — Specifies that the action link is to be enabled only under certain conditions.

     Selecting this option displays the **Conditions** area.

     For more information, see "About Conditionally Enabling Actions."

   If you are adding the action link to a column heading, then the **Conditionally** option is not available.

10. If you selected **Conditionally**, then add one or more conditions to be used to enable the action link. For each condition to add:

   a. Click the **New Condition** button and select the column to use. The "New Condition dialog" is displayed.

   b. Complete the New Condition dialog.

11. In the New Action Link dialog, click **OK** to add the action link to the Action Links area on the Interaction tab.

12. For each additional action link to add, repeat steps 5 -12.

13. To specify that, when only one action link is available at runtime, the action link is to be executed immediately rather than be displayed in a menu for selection, select the **Do not display in a popup if only one action link is available at runtime** box.

14. Select the **Enable on Totals** check box when your analysis contains a total or grand total, and the associated attribute or measure column contains an action link or a conditional action link and you want the action link (or conditional action link) to be applied to both the column and the total or grand total. This does not apply to column heading action links and by default, this behavior is turned off.

15. Click **OK** to close the Column Properties dialog.

16. Click the **Save Analysis** toolbar button on the Analysis editor to save the analysis.

About Adding Actions to Dashboard Pages

You can add actions to dashboard pages in one of two ways:

- By adding to a section on the dashboard page an Action Link object to which you add an action.

  When a dashboard page that contains one or more action links is presented to users, users can click a link to run the associated action.

- By adding to a section on the dashboard page an Action Link Menu object to which you add action links.

  When a dashboard page that contains an action link menu is presented to users, users can select a link from the action link menu to run the associated actions.

For more information on action links and action link menus, see "What Are Action Links and Action Link Menus?"

Adding Actions to Dashboard Pages Using Action Links

To add an action to a dashboard page using an action link:

1. Edit the dashboard page to which you want to add an action.

2. From the Dashboard Object pane, drag and drop an Action Link object on the dashboard page.

3. Click the **Properties** button for the Action Link object to display the "Action Link Properties dialog."

4. Complete the Action Link Properties dialog. For information, see "Completing the Action Link Properties Dialog."

5. Click the **Save** toolbar button on the Dashboard builder to save the dashboard page.

Completing the Action Link Properties Dialog

When you add actions to dashboard pages either by using action links or action link menus, you create action links by completing the "Action Link Properties dialog."

To complete the Action Link Properties dialog:

1. To create an action (that is, an inline action), click the **New Action** button and specify the settings for the new action. For information, see "Specifying the Settings for New Actions."

2. To add an existing action (that is, a named action):

   a. Click the **Select existing action** button.

      The "Open dialog" is displayed.

   b. Complete the Open dialog.

      If there are parameters associated with the action, then the "Edit Parameter Mapping dialog" is displayed.

   c. Complete the Edit Parameter Mapping dialog (if displayed).

3. In the **Link Text** box, enter the text to display as the link to execute the associated action.

   Note: If you enter information into the **Link Text** box prior to adding an existing action or creating an action, the information that you entered is overwritten with the name of the action link.

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4. If you are creating an action link that will not be displayed on an action link menu, then in the **Caption** box, enter a caption to display above the link text.

5. (for an action link that navigates to a URL or to other BI content only) Use the **Open Link in New Window** box in the Action Link Properties dialog to specify whether to open the link in a new browser window or tab.

6. (for Navigate to BI Content actions only) Use the **Add to Briefing Book** box to specify whether the action that is associated with the action link can be executed in a briefing book, but only if the number of briefing book navigation links to be followed is greater than 0.

   For information about briefing books, see "Working with Briefing Books."

7. In the **Show Link** component, select one of the following options:

   - **Always** — Specifies that the action link is always to be enabled.

   - **Conditionally** — Specifies that the action link is to be enabled only if the associated condition is satisfied.

     The Condition area is displayed.

8. If you selected **Conditionally**, then specify the condition as follows:

   a. To create a condition, click the **New Condition** button to display the "New Condition dialog" and then complete the dialog.

      For information on completing the dialog, see "Specifying the Settings for Conditions."

   b. To select an existing condition, click **Select Condition** to display the "Select Condition dialog" and then complete the dialog.

9. Click **OK** in the Action Link Properties dialog.

Adding Actions to Dashboard Pages Using Action Link Menus

To add one or more actions to a dashboard page using an action link menu:

1. Edit the dashboard page to which you want to add one or more actions.

2. From the Dashboard Object pane, drag and drop an Action Link Menu object on the dashboard page.

3. Click the **Properties** button for the Action Link Menu object to display the "Action Link Menu Properties dialog."

4. In the **Menu Label** box, enter the name to display for the menu.

5. In the **Caption** box, enter a caption to display above the action link menu text.

6. Add the action links to the menu as follows:

   ■ To add an action link that already exists on the page, drag and drop the existing Action Link object onto the Action Link Menu object.

   ■ To add a new action link, click the **Add** button to display the "Action Link Properties dialog" and then complete the dialog. For information, see "Completing the Action Link Properties Dialog."

   > **Note:** You also can drag an Action Link object from an Action Link Menu object to create a standalone action link.

7. Click **OK** in the Action Link Menu Properties dialog.

8. Click the **Save** toolbar button on the Dashboard builder to save the dashboard page.

Adding Actions to Agents

You can add one or more actions to an agent.

To add an action to an agent:

1. Edit the agent to which you want to add an action.

2. Click the "Agent editor: Actions tab."

3. Determine whether to add the action to the **Agent Condition True or No Condition Exists** area or the **Agent Condition is False** area as follows:

   ■ If there is no condition associated with the agent, or if there is a condition associated with the agent and you want the action to execute only if the condition evaluates to true, then use the **Agent Condition True or No Condition Exists** area

   ■ If there is a condition associated with the agent and you want the action to execute only if the condition evaluates to false, then use the **Agent Condition is False** area.

4. To create an action (that is, an inline action), click the **Add New Action** button and specify the settings for the new action. For information, see "Specifying the Settings for New Actions."

5. To add an existing action (that is, a named action):

   a. Click the **Add Existing Action** button.

   The "Select Existing Action dialog" is displayed.

   b. Complete the Select Existing Action dialog.

> **Note:** You cannot add an existing action that navigates to related content (such as Navigate to BI Content) or an existing Invoke a Browser Script action to an agent.

If there are parameters associated with the action, then the "Add Existing Action dialog" is displayed.

    c. Specify any required parameter values in the Add Existing Action dialog.

    d. Click **OK**.

6. (not available for Invoke Server Script actions, Invoke Agent actions, or actions for which one of the parameters is a result set mapping) Select the **Invoke per Row** option if you have specified a condition for the agent and want to execute the action for each row returned by the condition.

7. Click the **Save this Agent** toolbar button in the Agent editor to save the agent.

Adding Actions to KPIs

You can add one or more actions to a KPI. When you add an action to a KPI, you add the action by using an action link.

When a KPI that contains one or more action links is presented to end users (generally in a scorecard or a KPI watchlist), users can click a link to run the associated action.

To add one or more actions to a KPI:

1. Edit the KPI to which you want to add one or more actions.

2. Click the "KPI editor: States page."

3. Click the **Define action links for this status** button to display the "Action Links dialog."

4. To add an action that has been added to another range of the KPI, click the **Add Action Link** button and select the action.

5. To add a new action:

    ■ If one or more actions have been added to another range of the KPI, click the **Add Action Link** button and select **New Action Link**.

    ■ If no actions have been added to other ranges of the KPI, then click the **Add Action Link** button.

The "New Action Link dialog" is displayed.

6. In the **Link Text** field, enter the text to display as the link to execute the associated action.

7. To create an action (that is, an inline action), click the **Create New Action** button and specify the settings for the new action. For information, see "Specifying the Settings for New Actions."

8. To add an existing action (that is, a named action):

    a. Click the **Select existing action** button.

The "Open dialog" is displayed.

    b. Complete the Open dialog.

If there are parameters associated with the action, then the "Edit Parameter Mapping dialog" is displayed.

    c. Complete the Edit Parameter Mapping dialog (if displayed).

9. Click **OK** in the New Action Link dialog.

10. For each additional action link to add, repeat steps 5-9.

11. Click **OK** to close the Action Links dialog.

12. Click the **Save KPI As** toolbar button on the KPI editor to save the KPI.

Adding Actions to Initiatives and Objectives in Scorecards

You can add one or more actions to an initiative or objective in a scorecard. When you add an action to an initiative or objective, you add the action by using an action link.

To add one or more actions to an initiative or objective:

1. Edit the scorecard that contains the initiative or objective.

2. Navigate to the initiative or objective to which you want to add an action as follows:

    ■ If you are adding the action to an initiative, then in the "Initiatives pane," double-click the initiative.

    ■ If you are adding the action to an objective, then in the "Strategy pane," double-click the objective.

3. In the Action Link area in the "Analytics pane," click the **New Row** button.

The "Action Link dialog" is displayed.

4. In the **State Equals** box, select the state of the initiative or objective under which the action link is to be enabled.

5. To create an action (that is, an inline action), click the Create New Action button and specify the settings for the new action. For information, see "Specifying the Settings for New Actions."

6. To add an existing action (that is, a named action):

    a. Click the **Select Existing Action** button.

    The "Open dialog" is displayed.

    b. Click **OK**.

7. In the **Link Text** field, enter the text to display as the link to execute the associated action.

8. Click **OK** in the Action Link dialog.

The action link is added to the Action Link area.

9. Save the objective or initiative.

Creating a New Action Based on an Existing Named Action

You can create an action based on an existing named action.

For example, suppose that your organization has an existing named action Send Message that sends an email message. Its parameters include a recipient, subject, message, and priority. You can create an action that is based on this Send Message

action that sends a high priority message. To do so, you provide a high priority value for the priority parameter and save the new action with a new name, such as Send High Priority Message.

To create an action based on an existing named action:

1. Edit the existing named action on which you want to base a new action. The "Edit Action dialog" is displayed.

2. Specify any changes that you want.

3. Click **Save As** and specify the save as criteria in the dialog.

Editing Named Actions

To edit a named action:

1. Navigate to the action in the catalog.

2. Click the **Edit** link to display the "Edit Action dialog."

3. Edit the action and click **OK**.

4. Click **Save Action**.

Editing Actions and Action Links Added to Analyses

To edit an action and action link that have been added to an analysis:

1. Edit the analysis to which the action and action link has been added.

2. Move the mouse pointer over the **Options** menu for the column or hierarchy level to which the action has been added and select **Column Properties** or **Hierarchy Level Properties**.

   The "Column Properties dialog" is displayed.

   > **Note:** You can also access the **Column Properties** dialog from the "Analysis editor: Results tab." Select the relevant view and click the **Edit View** button. Locate the appropriate column in the "Layout pane," click the **More Options** button, and then select **Column Properties**.

3. Click the "Column Properties dialog: Interaction tab."

4. In the Action Links area, select the action to edit and click the **Edit Action Link** button to display the "Edit Action Link dialog."

5. Make the appropriate changes to the action link.

6. Click the **More** button and select **Edit Action**. The "Edit Action dialog" is displayed.

7. Edit the action and click **OK**.

8. Click **OK** in the Edit Action Link dialog.

9. Click **OK** in the Column Properties dialog.

10. Click **Save Analysis**.

Editing Actions, Action Links, and Action Link Menus Added to Dashboard Pages

To edit an action, action link, or action link menu that has been added to a dashboard page:

1. Edit the dashboard page.

2. If the action and action link are associated with an action link menu:

   a. Click the **Properties** button for the Action Link Menu object. The "Action Link Menu Properties dialog" is displayed.

   b. Make the appropriate changes to the menu label and caption.

   c. In the Action Links area, select the action to edit and click the **Edit** button.

      The "Action Link Properties dialog" is displayed.

3. If the action and action link are standalone, click the **Properties** button for the Action Link object to which the action is associated. The "Action Link Properties dialog" is displayed.

4. Make the appropriate changes to the action link.

5. Click the **More** button and select **Edit Action**. The "Edit Action dialog" is displayed.

6. Edit the action and click **OK**.

7. Click **OK** in the Action Link Properties dialog, and then in the Action Link Menu Properties dialog (if displayed).

8. Click **Save** to save the dashboard.

Editing Actions Added to Agents

You can edit an action that you have added to an agent. If the action is an inline action, then you can edit the entire action. If the action is a named action, then you can edit only the parameter values.

To edit an action that has been added to an agent:

1. Open the agent.

2. Click the "Agent editor: Actions tab."

3. Select the action and click the **Edit Parameters** button. The "Edit Action dialog" is displayed.

4. Edit the action and click **OK**.

Editing Actions and Action Links Added to KPIs

To edit an action and action link that have been added to a KPI:

1. Edit the KPI to which the action and action link has been added.

2. Click the "KPI editor: States page."

3. Click the **Define action links for this status** button to display the "Action Links dialog."

4. In the Action Links area, select the action to edit and click the **Edit Action Link** button to display the "Edit Action Link dialog."

5. Make the appropriate changes to the action link.

6. Click the **More** button and select **Edit Action**. The "Edit Action dialog" is displayed.

7. Edit the action and click **OK**.

8. Click **OK** in the Edit Action Link dialog.

9. Click **OK** in the Action Links dialog.

10. Click **Save KPI As**.

Editing Actions and Actions Links Added to Initiatives and Objectives in Scorecards

To edit an action and action link added to an initiative or objective:

1. Edit the scorecard that contains the initiative or objective.

2. Navigate to the initiative or objective as follows:

   - For an initiative, in the "Initiatives pane," double-click the initiative.

   - For an objective, in the "Strategy pane," double-click the objective.

3. In the Action Link area in the "Analytics pane," click the **Edit Row** button.

   The "Action Link dialog" is displayed.

4. Make the changes that you want and click **OK** in the Action Link dialog.

5. Save the objective or initiative.

Saving Inline Actions in Analyses to the Catalog

To save an inline action in an analysis:

1. Edit the analysis to which the action has been added.

2. Move the mouse pointer over the **Options** menu for the column or hierarchy level to which the action has been added and select **Column Properties** or **Hierarchy Level Properties**.

   The "Column Properties dialog" is displayed.

   > **Note:** You can also access the **Column Properties** dialog from the "Analysis editor: Results tab." Select the relevant view and click the **Edit View** button. Locate the appropriate column in the "Layout pane," click the **More Options** button, and then select **Column Properties**.

3. Click the "Column Properties dialog: Interaction tab."

4. In the Action Links area, select the action to save and click the **Edit Action Link** button. The "Edit Action Link dialog" is displayed.

5. Click the **More** button and select **Save Action As** to display the "Save As dialog" to specify the save criteria.

6. Specify the save criteria and click **OK**.

> **Tip:** To replace the reference to the current action with the saved action, select the **Replace current action with a reference to the saved action** box.

7. Click **OK** in the Edit Action Link dialog.

8. Click **OK** in the Column Properties dialog.

Saving Inline Actions in Dashboards to the Catalog

To save an inline action in a dashboard to the catalog:

1. Edit the dashboard page.

2. If the action and action link are associated with and action link menu:

    a. Click the **Properties** button for the Action Link Menu object. The "Action Link Menu Properties dialog" is displayed.

    b. Make the appropriate changes to the menu label and caption.

    c. In the Action Links area, select the action to edit and click the **Edit** button.

    The "Action Link Properties dialog" is displayed.

3. If the action and action link are standalone, then click the **Properties** button for the Action Link object to which the action is associated. The "Action Link Properties dialog" is displayed.

4. Click the **More** button and select **Save Action As**. The "Save As dialog" is displayed.

5. Edit the action and click **OK**.

6. Click **OK** in the Action Link Properties dialog, and then in the Action Link Menu Properties dialog (if displayed).

7. Click **Save** to save the dashboard.

8. Click the **More** button and select **Save Action As** to display the dialog to specify the save criteria.

9. Specify the save criteria and click **OK**.

> **Tip:** To replace the reference to the current action with the saved action, select the **Replace current action with a reference to the saved action** box.

10. Click **OK** in the Action Link Properties dialog, and then in the Action Link Menu Properties dialog (if displayed).

11. Click **Save** to save the dashboard.

Testing a Named Action by Executing It

After creating a named action, you can test it to ensure that it executes properly.

To test a named action by executing it:

1. Navigate to the named action in the catalog.

2. Click the **Execute** link.

3. Respond to any request for more information or any confirmation prompt that is displayed.

> **Note:** A successful invocation message indicates only that the action itself ran successfully. It does not indicate that the process or operation that the action represents ran successfully.

12

Using KPIs and KPI Watchlists

This chapter explains how to use Key Performance Indicators (KPIs) and KPI watchlists in Oracle Business Intelligence Enterprise Edition. It also explains KPI evaluation, dimensions and pinned dimension values, and target settings.

This chapter includes the following sections:

- What Are KPIs?

- How Are KPIs Evaluated?

- How Can I Use KPIs?

- What Are Dimensions and Pinned Dimension Values?

- About KPI Privileges and Permissions

- How Do I Create a KPI?

- Creating KPIs

- Editing KPIs

- What Are Target Settings?

- Generating Analyses from KPIs

- Creating Agents from KPIs

- Contacting the Business Owner of KPIs

- About Overriding Statuses of KPIs

- About Adding Comments to KPIs

- What Are KPI Watchlists?

- Creating KPI Watchlists

- Editing KPI Watchlists

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What Are KPIs?

KPIs are measurements that define and track specific business goals and objectives that often roll up into larger organizational strategies that require monitoring, improvement, and evaluation. KPIs have measurable values that usually vary with time, have targets to determine a score and performance status, include dimensions to allow for more specific analysis, and can be compared over time for trending purposes and to identify performance patterns.

See the following list of specific uses for KPIs in Oracle BI EE:

- Evaluate metrics against their targets and alert the appropriate users through agents when targets are not met.

- Create an analysis from a KPI and add that analysis to a dashboard. An analysis that is created from a KPI can allow the user to drill into different levels of details based on the KPI's dimensions.

  For example, to a KPI called "Product Sales," you can add the Region and Fiscal Time dimensions to view Product Sales figures by region and time periods such as financial quarters. This addition enables you to gather multi-dimensional subsets of data and evaluate the performance of objectives and initiatives that the KPI measures against the different target values of the dimensional metrics.

- In Oracle Scorecard and Strategy Management, use KPIs to evaluate and monitor the performance of the objectives that form the strategy and the initiatives (tasks or projects) that are needed to meet your objectives. For information about scorecards and how to create them, see Chapter 13, "Scorecarding."

  For example, use KPIs for "Average Customer Satisfaction Survey Score" and "Repeat Orders" to measure the performance of an "Improved Customer Satisfaction" objective.

How Are KPIs Evaluated?

A KPI's status and score are determined by comparing its actual value against the thresholds that you define. The performance status of a KPI is represented by the status icon that you assign to each range.

For example, for a product sales KPI in which high values are desirable, you can define the ranges that are described in Table 12–1. Thresholds are the numeric values that separate the ranges.

Table 12–1 Sample Evaluation

Evaluation Range Rule	Threshold	Name	Status Icon
Values exceeding 125 (125 < x) indicate ideal performance	126 and above	Ideal	Blue square
Values between 100 and 125 (100 < x <= 125) indicate good performance	125	Good	Green square
Values between 80 and 100 (80 < x <= 100) indicate acceptable performance	100	Acceptable	Yellow square
Values between 50 and 80 (50 < x < = 80) indicate a warning of poor performance	80	Warning	Light red square
Values less than 50 (x <= 50) indicate critical performance	50 and below	Critical	Dark red square

How Can I Use KPIs?

KPIs are created with the KPI Editor, which can be accessed as a standalone editor or within the "Scorecard editor." After you create and save KPIs, you can use them in the following ways:

- **Building blocks of scorecards** — You can create and assign KPIs to measure the progress and performance of your organization's strategies. Within a scorecard, you can define the *objectives* (goals such as "Decreased Operational Costs") and *initiatives* (processes or tasks such as "Form Cost Minimization Team") to which you assign KPIs to measure progress and performance. See "What Are Objectives?" for additional information about objectives. See "What Are Initiatives?" for additional information about initiatives.

- **As an analysis** — You can generate an analysis from a KPI. When you do so, Oracle BI EE saves the analysis to the catalog. You can include the analysis on a dashboard or as a related document in a scorecard, KPI watchlist, or KPI. Any dimension values that you pinned to the KPI before you output it as an analysis are included in the analysis. Pinning qualifies or filters the data that the user sees by assigning one or more values to the dimension. Drill-down is available on the analysis. Oracle BI EE refreshes the data for the analysis every time a user opens the analysis.

- **Included in KPI watchlists** — You can create a watchlist that contains a group of KPIs or to present one KPI several times with dimension values that are pinned to it. After you save the watchlist, it is available as a catalog object that you can add to dashboards or scorecards. When users access the watchlist, they can change the dimension values for the KPIs that are included in the watchlist. Note that scorecards can contain other types of watchlists, such as Initiatives & KPIs watchlist, Objectives & KPIs watchlist, and Breakdown watchlist. See"Understanding Watchlists" for additional information.

- **Facilitate user interaction** — If KPIs were added to a KPI watchlist or if they were added to objectives or initiatives inside a scorecard, then you can post comments to a KPI and read and reply to other users' comments. You can also contact the KPI's business owner with questions or comments about the KPI. And, if you are the business owner, you can override a KPI's status.

- **Initiate actions** — You can add an action link that when clicked in the KPI runs an associated action. For example, if the performance of a KPI for Internal Spending is too high, indicating excessive spending, then you could create an action link that when clicked, sends an email to the appropriate employees.

- **Trigger agents** — You can use a KPI's values, performance levels, and status to trigger a condition that initiates an agent alert. For example, you can define an agent that notifies you when the value of an Internal Costs KPI exceeds a certain dollar amount.

What Are Dimensions and Pinned Dimension Values?

Dimensions are categorizations of data, and the categorizations reflect how a business analyst wants to analyze data. When analysts say they want to see numbers "by" something or "over" something, they are identifying the dimensions of the data. Common dimensions are geography, product, customer, and time.

For KPIs, you can select any attribute column from the subject area as a dimension. When you design the KPI, you can either pin one or multiple data values to one or more dimensions (for example, Region = Central), or you can specify that you want all or some dimension values pinned when the KPI is added to a watchlist or scorecard

and when a watchlist or scorecard is added to a dashboard. After a value is pinned by the designer, the user cannot change the value.

When adding a KPI without a pre-pinned value to a watchlist, the designer can pin one or more values, or specify a session, repository, or global variable to set the dimension's value. If the designer does not pin a value or variable to a dimension, then the KPI user can select one or more values at runtime from the point of view area in either the KPI watchlist, from the scorecard that contains the KPI, from the variable prompt on a dashboard, or from the column prompt on the dashboard.

> **Note:** If a KPI watchlist, KPI contribution wheel, or scorecard object containing a KPI is added to a dashboard with prompts, and the KPI is not dimensioned by a specific prompt's dimension in the KPI definition, that prompt is ignored. Additionally, if the KPI is pinned to a specific dimension value in its definition, a prompt on that dimension is ignored. Refer to "Adding a Dashboard Prompt to a Dashboard or Dashboard Page" and to the "Dashboard Properties dialog" when adding a KPI watchlist, KPI contribution wheel, or scorecard object containing KPIs to a dashboard that contains prompts.

If a KPI with dimensions is output to an analysis, then the dimensions are displayed as columns and drills. If the dimension values are pinned, then the analysis is limited to the data that is determined by the pinned values. If the dimension is pinned with multiple values, a row is displayed for each pinned value.

> **Best Practice:** Define several dimensions for a KPI, but do not pin the dimensions within the KPI definition itself. This allows the user to reuse the KPI and pin it within a scorecard strategy tree, watchlist, or dashboard prompt. For example, if you create an overly specific KPI that pins a dimension, such as region to North America, the use for the KPI might be limited. If you leave the dimension unpinned, then the user makes the decision what region to pin. The usage for this KPI becomes more flexible and reusable, and prevents you from having to create and manage overly-specific KPIs.

About KPI Privileges and Permissions

The ability to perform certain tasks when building KPIs and KPI watchlists is controlled by privileges. See "About Scorecard Privileges and Permissions" for additional information about Presentation Services privileges.

How Do I Create a KPI?

There are several pages that the content designer can use to build a KPI. These pages are represented in Figure 12–1 and subsequently described in "Creating KPIs."

Figure 12–1   General Process Flow for Creating a KPI
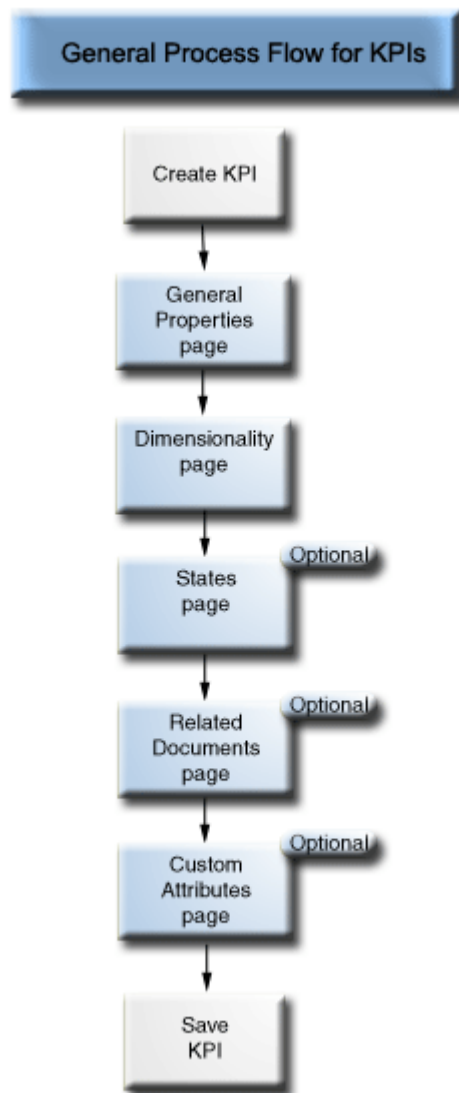
You must complete the "KPI editor: General Properties page" and the "KPI editor: Dimensionality page."

To navigate between pages, you select the **Next** and **Back** buttons, or you click the page name along the navigation train. The navigation train is represented in Figure 12–2.

Figure 12–2   Navigation Train

Creating KPIs

Use the following procedure to create a KPI. You can create a KPI from the global header, the Home page, or from a scorecard. See "Editing KPIs" for additional information about opening a KPI for editing.

To create a KPI:

1. To create a KPI, do one of the following:

   ■ In the global header, click **New** then select **KPI**. From the Select Subject Area dialog, select a subject area for the KPI. The "KPI editor" is displayed.

   ■ From a scorecard, go to the Scorecard Documents pane and click the **Create Object** toolbar button. Or in the Catalog pane, click the **New Object** toolbar button. Select **KPI**, and from the Select Subject Area dialog, select a subject area for the KPI. The "KPI editor" is displayed.

2. On the "KPI editor: General Properties page," specify the business owner, actual value and target value, and whether to make the values writeable, define the data format, and indicate whether to enable trending to determine performance patterns. Oracle recommends that you enable trending because trending enables Scorecard to automatically display historical trend charts. Figure 12–3 shows an example of the "KPI editor: General Properties page" for a revenue KPI.

Figure 12–3   KPI Editor - General Properties Page

Note: If you are going to enable trending, you must also include a Time dimension on the "KPI editor: Dimensionality page." If a Time dimension is selected from the **Compare to Prior** option, the same Time dimension must be added to the "KPI editor: Dimensionality page." If a Time hierarchy level is selected from the **Compare to Prior** option, the hierarchy to which that hierarchy level belongs, must be added to the "KPI editor: Dimensionality page."

If you are planning to use a KPI in a scorecard, you should assign a business owner. You cannot override a KPI status without having a business owner assigned. See "Working with Status Overrides" for additional information.

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3. On the "KPI editor: Dimensionality page," select the dimensions (for example, Sales by Region and by Financial Quarter) that you want to use to aggregate the KPI's actual and target values and determine if the dimensions should be pinned. Note that you should include a time dimension for most KPIs. Exceptions include constants or metrics that are defined as current snapshots, such as "Inventory on

Hand" or "Current Phone Support Wait Time." Figure 12–4 shows an example of the "KPI editor: Dimensionality page." In this example, the "Cust Regions"."D50 Region" dimension is pinned to AMERICAS.

Figure 12–4   KPI Editor - Dimensionality Page
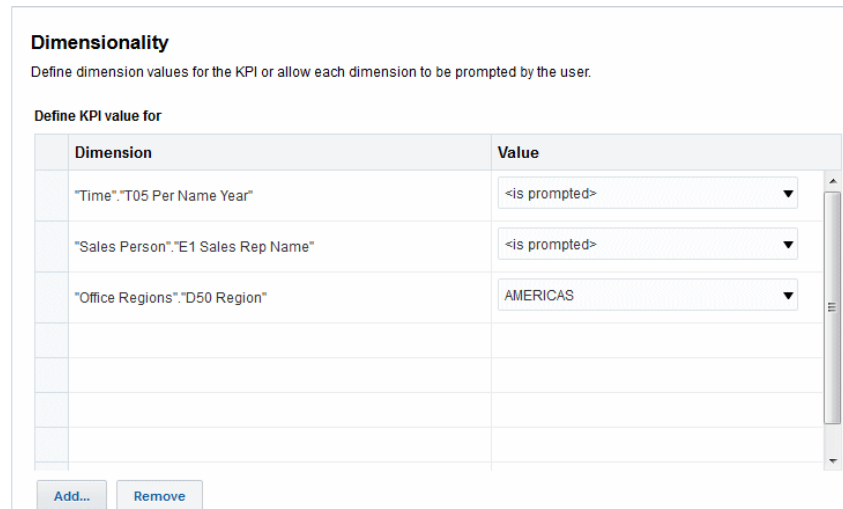
4. On the "KPI editor: States page," indicate the desired goal based on KPI values (for example, "High Values are Desirable"), define the ranges that evaluate KPI values to determine performance status and score, associate performance levels with actions, identify what to do if no data is returned for the KPI, and associate thresholds as a percent of target value. Figure 12–5 shows an example of the "KPI editor: States page."

Figure 12–5   KPI Editor - States Page
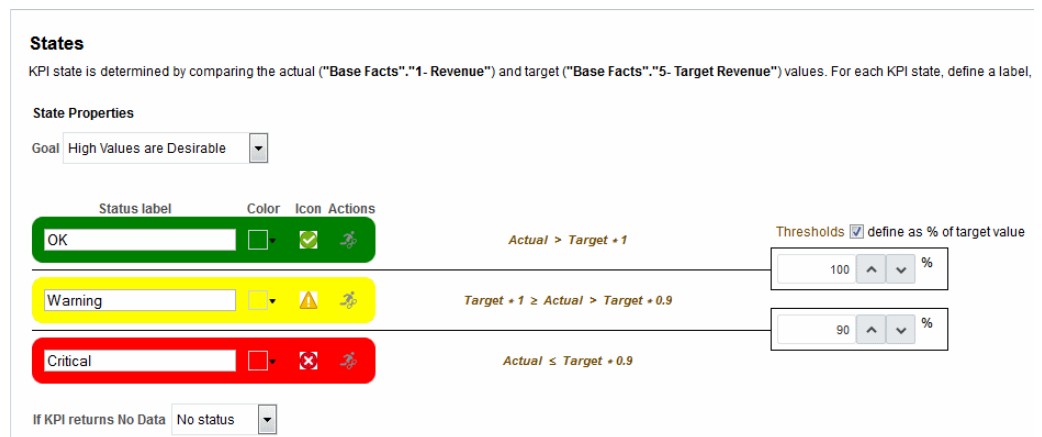
5. On the "KPI editor: Related Documents page," add any external links or business intelligence objects to the KPI. Figure 12–6 shows an example of the "KPI editor: Related Documents page."

Figure 12–6   KPI Editor - Related Documents Page

Related Documents
Related docs description goes here.

	Name	Location
	Revenue Scorecard	/Shared Folders/Sample Lite/Monthly Revenue Trend
	Revenue Dashboard	/Shared Folders/Sample Lite/Dashboards/QuickStart/Order Details

[Add...] [Edit] [Remove]
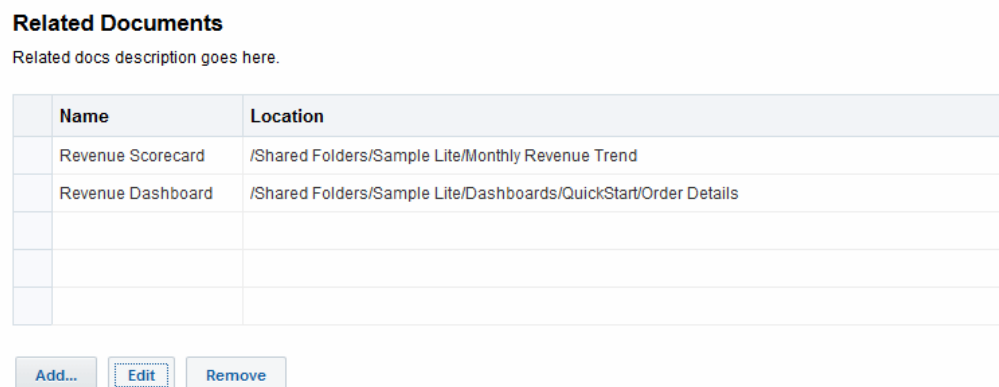
6. On the "KPI editor: Custom Attributes page," include as many as five custom columns. Each custom column must evaluate to a numeric value. Custom columns are helpful when you have an associated calculation that you want to show, which isn't the same as the actual, target, variance, and change formulae. For example, you might add a custom column for Year Ago Revenue that displays next to the Revenue KPI for a matching time period. Figure 12–7 shows an example of the "KPI editor: Custom Attributes page."

Figure 12–7   KPI Editor - Custom Attributes Page

Custom Attributes
Manually create custom columns for the KPI.

Custom Columns

Label	Formula
Year Ago Revenu	"Time Series"."121 Period Ago Rev"

7. Save the KPI.

   Note the following items:

   ■ If you are creating a standalone KPI, then click **Finish** to save the KPI.

   ■ If you are creating a new KPI, then the "Save As dialog" is displayed where you specify the KPI's name and where you want to save the KPI. If you want the KPI to display within a scorecard's "Scorecard Documents pane," then save the KPI to the scorecard object's folder within the catalog.

   ■ If you are creating a KPI from a scorecard, then click **Save** from the "Scorecard editor."

Editing KPIs

Use the following procedures to open and edit a saved KPI. KPIs are stored in the catalog, but can be added to KPI watchlists, scorecards, and dashboards. When you edit and save a KPI, the changes propagate to wherever the KPI is displayed.

Editing KPIs from the Catalog

Use the following procedure to edit a KPI from the catalog.

To edit a KPI from the catalog:

1. In the global header, click **Catalog**. The "Catalog page" is displayed.

2. Navigate to the KPI to edit and click the **Edit** link for the object. The "KPI editor" is displayed.

3. Make the desired changes.

4. Save the KPI.

Editing KPIs from a KPI Watchlist

Use the following procedure to edit a KPI from a KPI watchlist.

To edit a KPI from a KPI watchlist:

1. In a KPI watchlist, right-click the KPI that you want to open.

2. Select **Open KPI Definition**. The "KPI editor" is displayed.

3. Make the desired changes.

4. Save the KPI.

What Are Target Settings?

Target settings allow the user with the proper privileges and security settings to modify the KPI's actual and target values. Once modified, these values are submitted to and stored in the repository. Oracle BI EE then uses these modified values to recalculate aggregate values, refresh the cache, and refresh the KPI watchlists or scorecards to which the KPI was added. Currently target settings are available for Essbase data sources only. See "About Scorecard Privileges and Permissions" for additional information.

Prerequisites for Setting Up Target Settings in KPIs

The administrator must perform the following prerequisite tasks before the content designer can create a KPI with target settings:

- **Configure the repository for target settings** — The Oracle BI EE repository administrator must enable the target setting features by mapping the Oracle Essbase data source to the Physical, Business Model and Mapping, and Presentation layers in the Oracle BI repository. The administrator must then enable write back for the columns in the repository on which target settings are enabled by selecting the **Writeable** option for the logical columns, followed by enabling the **Read/Write** permission for the corresponding presentation columns. See *Metadata Repository Builder's Guide for Oracle Business Intelligence Enterprise Edition* for additional information.

- **Create Calculation Scripts** — The Oracle BI EE repository administrator uses Oracle Essbase to create calculation scripts for the data source. After the calculation scripts are created, they display in the **Post-update Business Rule** list located in the Oracle BI EE "KPI editor: General Properties page." At design time, the content designer chooses a calculation script. At runtime, Oracle BI EE uses the specified calculation script to recalculate the data after the user modifies and saves the KPI's actual and target values.

  See "Developing Calculation Scripts for Block Storage Databases" in *Oracle Essbase Database Administrator's Guide* for additional information.

- **Assign user privileges** — To allow users to modify the actual and target values in a KPI the Oracle BI EE system administrator must assign the user specific privileges. See "About Scorecard Privileges and Permissions" for additional

information about Presentation Services privileges.

Overview of Setting Up Target Settings in KPIs

There are several steps that the content designer must perform to create a KPI with actual and target values that a user can update at runtime. Figure 12–8 shows each required step in the process. See "Description of Target Setting Task Flow Steps" for additional information about each of these steps. See "Creating KPIs" for procedural information about using the "KPI editor" to create a KPI with target settings.

Figure 12–8   Target Setting Task Flow for Content Designers
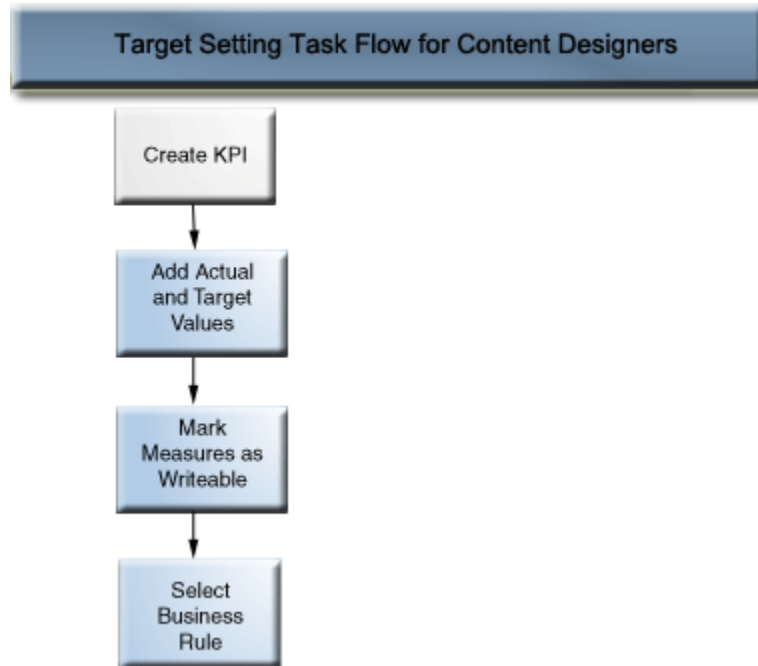
Description of Target Setting Task Flow Steps

The following list describes each step that you must perform to set up a KPI's target settings:

- **Add actual and target values to the KPI** — In the "KPI editor: General Properties page," use the **Actual Value** and **Target Values** fields to specify the values to use to determine the KPI's status and score. Currently you can only create one KPI for each Essbase data source.

- **Mark measures as writeable to enable users to update actual and target values** — In the "KPI editor: General Properties page," use the **Writeable** check box to specify which values you want the user to be able to modify. You can select one or both values as writeable.

- **Select the business rule** — In the "KPI editor: General Properties page," use the **Post-update Business Rule** list to specify the calculation script. Oracle BI EE uses the calculation script to recalculate the data after the values are modified by the user. The repository administrator uses Oracle Essbase to create the data source and the calculation scripts that display at design time. See "Prerequisites for Setting Up Target Settings in KPIs" for additional information about calculation scripts.

User Interaction with Target Settings

The content designer can include KPIs with enabled target settings in watchlists, such as a KPI watchlist, objectives, and initiatives. See "Understanding Watchlists" for additional information.

At runtime, a user who has been granted the proper privileges can modify and save the actual and target values that are writeable. After the user enters and saves the values, Oracle BI EE submits the values to the repository, recalculates the aggregate values, and refreshes the watchlist. See "About Scorecard Privileges and Permissions" for additional information about Presentation Services privileges.

Generating Analyses from KPIs

Use the following procedures to generate an analysis from a KPI. An analysis is a query against an organization's data that provides answers to business questions such as "What are my yearly regional sales of a specific beverage?" For additional information about analyses, see Chapter 2, "Creating Analyses."

You can generate an analysis from a KPI that is included in a KPI watchlist, scorecard, or scorecard diagram view on a dashboard. After you generate the analysis, it is stored in the catalog's Drills folder (/My Folders/Drills). Note that because the My Folders/Drills folder is used for temporary storage, the analysis might not persist after your session ends. To preserve the analysis, copy it to another directory. For example, to preserve an analysis that you plan to use in a shared dashboard, copy it to a folder in /Shared Folders.

After the analysis is generated, the analysis can then be placed onto a dashboard, opened from the catalog as an analysis, or attached as a related document in a scorecard, KPI watchlist, or KPI. Every time a user opens the analysis, its data is refreshed.

> **Note:** If the KPI dimension has a multi-value pinning, each value is displayed as a separate row in the analysis.

To generate an analysis from a KPI on a watchlist:

1. Locate and open the KPI watchlist from the catalog, scorecard, or dashboard that contains the KPI watchlist.

2. Go to the **Performance** tab and within the KPI Watchlist table, select the row that contains the KPI that you want to output to an analysis.

3. Click **Objects** and then select **Analyze**. A new browser tab opens and displays the analysis, and Oracle BI EE saves the analysis to the catalog's Drills folder (/My Folders/Drills).

To output an analysis from a KPI on a scorecard:

1. Expand the scorecard's strategy tree, initiative tree, Scorecard Documents pane, or Catalog pane and select a KPI.

2. Right-click the KPI and select **Analyze**. A new browser tab opens and displays the analysis, and Oracle BI EE saves the analysis to the catalog.

Creating Agents from KPIs

Use the following procedure to create an agent from a KPI by using the **Create Agent** option. This option is available from the **More** list on the "Catalog page" and from the **New Object** list in the Scorecard Editor's "Catalog pane." When you create an agent using this method, Oracle BI EE does the following:

- Uses the KPI dimensions, dimension values that you specify, and status to create a condition that is based on the KPI and adds the condition to the "Agent editor: Condition tab."

- Outputs the KPI as an analysis, saves the analysis to the catalog, and attaches the analysis to the "Agent editor: Delivery Content tab."

For additional information about agents, see Chapter 9, "Delivering Content."

To create an agent from a KPI:

1. Locate the KPI from which you want to create an agent by using one of the following methods:

   - From the "Catalog page," browse for and locate the KPI. In the "Catalog area," click the KPI's **More** list and select **Create Agent**. The "Create New Agent dialog" is displayed.

   - From anywhere in scorecard (Strategy pane, Initiatives pane, Scorecard Documents pane, Catalog pane, or any tab within the Scorecard editor), select a KPI, right-click, and select **Create Agent**. The "Create New Agent dialog," shown in Figure 12–9, is displayed.

Figure 12–9   The Create New Agent Dialog

2. In the **Name** field, enter a name for the agent.

   The "Agent editor" is displayed and the information that you specified in the Create New Agent dialog defaults into the "Agent editor: Condition tab" and the "Agent editor: Delivery Content tab."

3. (optional) Specify a description in the **Description** field.

4. Select the location in which to save the new agent.

5. Select the status that initiates the agent to deliver its content and execute its actions from the **Trigger Agent if KPI Status is** list.

6. (optional) Select a value for the dimensions. Note that agents cannot have KPI dimensions with multiple values.

7. Click **OK**.

8. Complete and save the agent. See "Creating Agents" for additional information.

> **Best Practice:** Use agents for KPIs and scorecards to monitor performance, continuous feedback, and real-time alerts.
>
> Use actions to align day-to-day decisions with your corporate strategy and to trigger alerts for "out of the ordinary" results.

Contacting the Business Owner of KPIs

Use the following procedures to send a message to a KPI's business owner. The business owner is the person who is responsible for managing the KPI. Upon the creation or modification of the KPI, the content designer selects the business owner from the Oracle BI EE user list.

Oracle BI EE uses the delivery devices and profiles that the business owner has specified in the "My Account dialog: Delivery Options tab" to determine where to deliver the message (for example, email, phone, or pager).

To contact the KPI's business owner from a KPI watchlist:

1. Locate and open the KPI watchlist from the catalog, open a dashboard that contains a KPI watchlist, or open the scorecard that contains the KPI watchlist.

2. Go to the **Performance** tab and within the KPI Watchlist table, select the row that contains the KPI whose owner you want to contact.

3. Click **Objects** and then select **Contact Owner**. The "Contact Owner dialog" is displayed.

4. In the **Subject** field, enter a meaningful subject.

5. Select a priority with which to send this message from the **Priority** list.

6. In the **Message** field, enter a message to the KPI's owner.

7. Click **Send**.

To contact the KPI's business owner from a scorecard:

1. Expand the scorecard's strategy tree, initiative tree, or scorecard documents folder and select a KPI.

2. Right-click the KPI and then select **Contact Owner**. The "Contact Owner dialog" is displayed.

3. In the **Subject** field, enter a meaningful subject.

4. Select a priority with which to send this message from the **Priority** list.

5. In the **Message** field, enter a message to the KPI's owner.

6. Click **Send**.

To contact the KPI's business owner from a KPI contribution wheel:

1. Right-click a node on the KPI contribution wheel diagram and then select **Contact Owner**. The "Contact Owner dialog" is displayed.

2. In the **Subject** field, enter a meaningful subject.

3. Select a priority with which to send this message from the **Priority** list.

4. In the **Message** field, enter a message to the KPI's owner.

5. Click **Send**.

About Overriding Statuses of KPIs

A KPI's status can be overridden only by the business owner. The business owner is the person responsible for managing the KPI. Upon the creation or modification of the KPI, the content designer selects the business owner from the Oracle BI EE user list.

The business owner can override a status if the KPI's values are old, unavailable, or otherwise do not accurately reflect the true status of what the KPI is measuring. A KPI's status remains overridden until the business owner removes the override status. For example, if there is a scorecard that contains a KPI that measures a store's sales and a fire destroys the store, causing it to be non-operational, the business owner overrides the KPI's status so that the scorecard is not unbalanced. The business owner keeps this override in place until the store is again operational.

See "Working with Status Overrides" for detailed instructions about overriding a KPI's status.

About Adding Comments to KPIs

Any stakeholder of the KPI can add comments to a KPI's columns. Stakeholders can also review and respond to comments entered by other users. When you access a KPI's comments, a cumulative, chronological list of comments is displayed.

See "Working with Comments" for additional information on adding and reviewing comments.

What Are KPI Watchlists?

KPI watchlists are collections of KPIs that you build by adding the KPIs that are stored in the catalog. After you build and save a KPI watchlist, it is stored as a catalog object and can be added to dashboards and scorecards. Because KPIs cannot be viewed directly from the catalog by users, KPI watchlists are one of the ways, along with outputting a KPI to an analysis and including a KPI on a scorecard, that KPIs are distributed to users.

KPI watchlists provide the following KPI performance information:

- Label to identify the KPI

- Current status

- Trend status that indicates if performance has increased, decreased, or remained the same, and if any changes are desirable (See "KPI Overview" for additional information on trend status.)

- Actual and target values. Note that the content designer can make these values writeable. See "What Are Target Settings?" for additional information.

- Variance value and percent by which the current value deviates from the target

- Change value and percent identify how much the current value differs from that of the previous period

KPI watchlists are useful because you can quickly build formal or informal lists for specific uses and for specific users, or, if users are given the proper privileges, they can build their own KPI watchlists that meet their specific information needs. For example, the KPI watchlist designer might create a KPI watchlist that contains KPIs that support a specific scorecard's strategy and initiatives. Or users might create KPI watchlists to monitor their individual objectives. For example, a sales person can create a KPI watchlist that contains KPIs that monitor quarterly sales totals within a specific region. See "About Scorecard Privileges and Permissions" for additional information about Presentation Services privileges.

The KPI watchlist designer can add one KPI several times to a KPI watchlist, and each time that the KPI is added, pin different dimensions to it so that the user can quickly see the whole picture rather than having to specify dimensions and reloading the KPI.

The KPI watchlist also provides the user with the ability to select a KPI from the watchlist and output it to an analysis, or to contact the KPI's business owner.

Creating KPI Watchlists

Use the following procedure to create a KPI watchlist. See "Editing KPI Watchlists" for additional information about opening KPI watchlists for editing.

To create a KPI watchlist:

1. To create a KPI watchlist, do one of the following:

   - From the Home page, in the global header, click **New** and then select **KPI Watchlist**. The "KPI Watchlist editor" is displayed.

   - From a scorecard, go to the Scorecard Documents pane, click the **Create Object** toolbar button, and then select **KPI Watchlist**. The "KPI Watchlist editor," is displayed.

2. If you are creating a KPI watchlist from the global header, then select any KPI from the catalog pane and drag it to the watchlist table.

   If you are creating a KPI watchlist within the Scorecard Editor, then select a KPI from any pane within the Scorecard Editor and drag it to the watchlist table. The "Add KPI dialog" is displayed.

3. Enter a label for the KPI and if the KPI contains dimensions, then pin values to the dimensions as needed. Click **OK**. See "What Are Dimensions and Pinned Dimension Values?" for additional information about pinning.

4. To edit the KPIs included on the watchlist, edit the KPI's watchlist entry, remove the KPI from the watchlist, analyze the KPI, open the KPI definition, or contact the owner of the KPI, select a KPI from the table, click **Objects**, and select an option. See "KPI Watchlist editor: Performance tab" for additional information.

   You can also view a KPI contribution wheel diagram by right-clicking the KPI, and then selecting **View KPI Contribution Wheel** from the context menu. See "About KPI Contribution Wheel Diagrams" for additional information.

5. To add or remove columns from the watchlist table, click **View** and select **Show More Columns...**. The "Show More Columns dialog" is displayed.

6. Click the KPI Watchlist Editor's Details tab to provide a description of the watchlist, identify a business owner, and add links to related business intelligence objects or external links. See "KPI Watchlist editor: Details tab" for additional

information.

7. Click **Save**.

    If you are creating a new KPI watchlist, then the "Save As dialog" is displayed where you specify the KPI watchlist's name and where you want to save the watchlist.

    If you want the watchlist to display within a scorecard's "Scorecard Documents pane," save the watchlist to the scorecard object's folder within the catalog.

Editing KPI Watchlists

Use the following procedure to edit a KPI watchlist.

To edit a KPI watchlist:

1. In the global header, click **Catalog**. The "Catalog page" is displayed.

2. Navigate to the KPI watchlist to edit and click the **Edit** link for the object. The "KPI Watchlist editor" is displayed.

3. Make the desired changes.

4. Save the KPI watchlist.

About KPI Contribution Wheel Diagrams

A KPI contribution wheel diagram allows you to explore a specific KPI along one of its dimensions to visually convey the relative importance and performance for the various dimension members naturally and intuitively by using sector sizes and colors. It is similar to a strategy wheel contribution diagram in layout (see "Understanding a Strategy Contribution Wheel Diagram").

You can create and save a KPI contribution wheel diagram for a KPI in the global header or from the Home page - Performance Management area using the **More** link.

You can view, create, and save a KPI contribution wheel diagram for a KPI from the Home or Catalog pages, or from within any scorecard view that contains a KPI node, such as strategy tree diagrams, strategy contribution wheel diagrams, smart watchlists, and KPI watchlists.

You can view (in read-only mode) a KPI contribution wheel diagram on a mobile device and interact with any KPI contribution wheel on the mobile device's dashboard by using the **View KPI Contribution Wheel** context menu item. See *User's Guide for Oracle Business Intelligence Mobile for Apple iOS* for detailed information.

> **Note:** Only "additive" KPIs are supported in the KPI contribution wheel at the time of writing. In other words, a KPI whose actual values for child members at a specific level in the dimension hierarchies are added together to equal the actual value of their parent member.

Understanding KPI Contribution Wheel Diagrams

The KPI contribution wheel diagram is composed of the following:

- **KPI contribution wheel** — Consists of a center circle (or focus node) that is the focused dimension member name being examined. Concentric rings (named sectors) surround the focus node. Each sector provides the following information:

  - **Name and percentage**: The name of the dimension and percentage of its parent's actual value displays when you hover the mouse over a sector.

  - **Size of sector**: The size of a sector is determined by the ratio of (sector actual value) / (parent actual value). Only additive KPIs are supported in the KPI contribution wheel at the time of writing.

  - **Color**: The color of each sector is based on the status assessment that corresponds to the current point-of-view or dimensional pinning. The mapping of numeric values to status colors is part of the KPI definition and is configured in the "KPI editor: States page."

  - **Outer rings**: The outer rings allow you to expand and collapse one or more levels to explore the dimension.

- **Information pane** — Displays the following information about the current node (the current node is where the mouse pointer is hovering on the desktop):

  - The explore dimension name from the focus node

  - The status color, actual value, and variance percentage

  - The status of its children

  - The percentage contribution to its parent's actual value

- **Focus trail** — Consists of a group of small circles that represent the node in the center of the KPI contribution wheel and any of its ancestors that are included in the diagram. Each circle displays the status color of its corresponding node. The chained circles show a hierarchy of dimension member nodes as you consume detail in the KPI contribution wheel by drilling. See "Changing Explore Dimensions Within KPI Contribution Wheels" for additional navigation information.

  When the KPI contribution wheel document is saved to the catalog, the focus trail is also saved. When you open the KPI contribution wheel, the focus trail acts as a temporary constraint, in that membership is applied from top to bottom, similar to the way drilling occurs. See "Changing Explore Dimensions Within KPI Contribution Wheels" for additional information.

  Note: When you switch to a different explore dimension, the focus trail will no longer show the ancestors of the prior explore dimension. The focus trail will only show the ancestors in the current explore dimension.

  Double-clicking on the ancestor node in the focus trail changes the focus to that ancestor.

Figure 12–10 shows an example of a KPI contribution wheel diagram for Sales Revenue. The mouse cursor is hovered over a sector (BizTech), showing the percentage of contribution to the overall dimension. In this example, BizTech contributes 43.64% of the overall sales revenue.

Figure 12–10   Example of a KPI Contribution Wheel
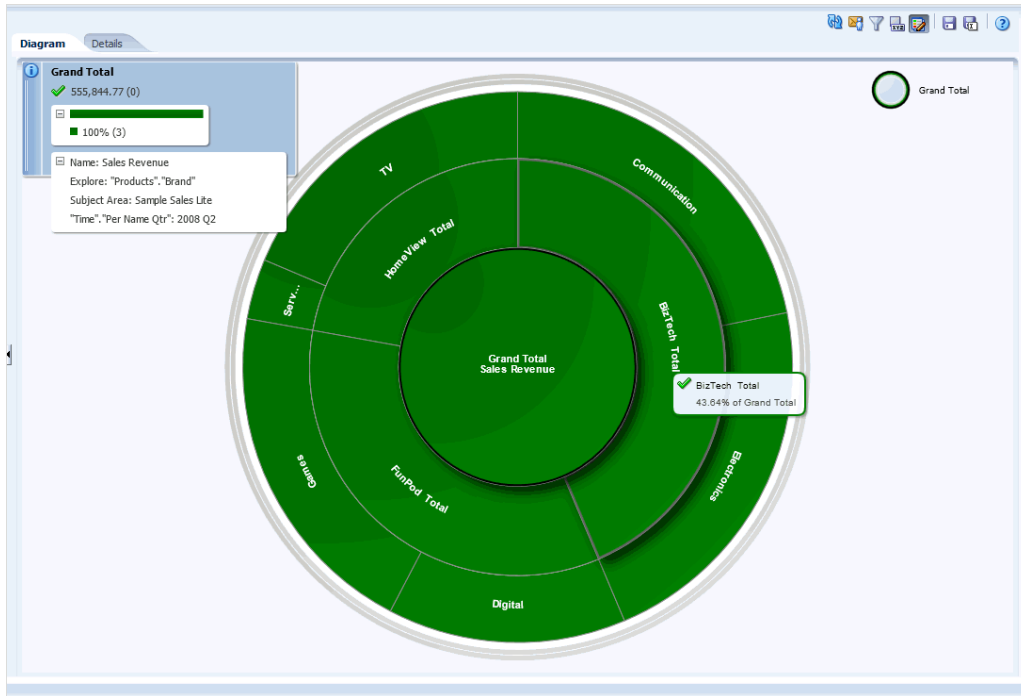
You:

- Create a KPI contribution wheel by:

    - Hovering your mouse in the global header over the New menu, and then selecting **KPI Contribution Wheel**.

    - Clicking the **More** link in the Home page - Performance Management area, and then by selecting **KPI Contribution Wheel** (see "Home page").

    - Right-clicking a KPI in the Home or Catalog pages, and then choosing **View KPI Contribution Wheel**.

    - Right-clicking a KPI node or KPI row in scorecard diagrams or watchlists, and then choosing **View KPI Contribution Wheel**.

- Can switch between dimensions, but view and explore only one dimension at a time.

- Save a KPI contribution wheel to the catalog (not on a mobile device).

- Open a KPI contribution wheel in a standalone editor in either edit mode or read-only mode on a desktop (not on a mobile device).

- View or create a KPI contribution wheel by right-clicking a KPI in a scorecard view (for example, a strategy contribution wheel), smart watchlist, or KPI watchlist, and then selecting **View KPI Contribution Wheel**.

- View (in read-only) a KPI contribution wheel on a dashboard on a mobile device. You cannot open a KPI contribution wheel directly from the catalog in the mobile application.

- Create a KPI contribution wheel for any dimensional additive KPI without having to create a scorecard or manually configure a weight.

- Contact the business owner of a KPI contribution wheel. See "Contacting the Business Owner of KPIs" for additional information.

■ Add the KPI contribution wheel to a dashboard by drag and drop. (See "About KPI Contribution Wheels and Dashboards.")

■ Preview the KPI contribution wheel from the "Catalog page" by selecting the saved KPI contribution wheel and expanding the "Preview pane." See "Preview pane" for additional information.

■ (optionally) Pin one or more dimensions by using the "Dimension Pinnings dialog" in the KPI contribution wheel editor or when adding the KPI contribution wheel diagram to a dashboard. A pinning will also be added if you drill down in one dimension and then switch to another explore dimension. See "About KPI Contribution Wheels and Dashboards."

Note: If you are in accessibility mode, the KPI contribution wheel displays as a standard interactive analysis for the KPI rather than as a KPI contribution wheel diagram. See "Accessibility Features" for additional information.

Creating KPI Contribution Wheels

To create a KPI contribution wheel:

1. If you want to create and save a KPI contribution wheel, hover your mouse in the global header over the New menu, and then select **KPI Contribution Wheel**. The KPI displays in the standalone "KPI Contribution Wheel editor."

2. On the "KPI Contribution Wheel editor: Diagram tab," you can:

   a. Click the **Dimension Pinnings** button to open the "Dimension Pinnings dialog" and change the pinnings for the KPI to update the pinned values. If no pinnings are set, all dimensions default to "Not Pinned" when opened or edited. Click **OK** to save the new pinnings. Note that dimensions that are pinned in the KPI's definition (using the KPI Editor) will not display in the dimension pinnings dialog for the KPI contribution wheel.

   Best Practice: Leave most of the dimensions unpinned so that you can add and use a dashboard prompt on the dashboard. See "What Are Dimensions and Pinned Dimension Values?" for additional information.

   ---

   b. Click the **Contribution Wheel Properties** button to open the "KPI Contribution Wheel Properties dialog" and set the properties to control the appearance of the diagram. You can change the background color, change the gradient color, and so on. Click **OK** to save your changes.

   c. Facilitate user interaction by clicking the **Contact Business Owner** button to contact the business owner of the KPI contribution wheel. See "Contacting the Business Owner of KPIs" for additional information.

   d. Hover your mouse over a sector to view the "Information Pane" detail. Note this updates the information according to the location of the mouse.

   e. Select the node and views its data in the Information pane with a single left-click.

   f. Explore the KPI. See"Changing Explore Dimensions Within KPI Contribution Wheels."

g. Right-click to open a context menu of options.

- If you right-click on the background, you can explore a dimension, open the KPI contribution wheel in the stand alone editor, or revert your pinnings and focus node to those previously saved in the diagram. Revert only affects the pinnings and focus node. It does not affect all properties.

- If you right-click on a KPI contribution wheel diagram node, you can contact the business owner of the KPI, invoke an action link, change the focus of the center node, revert your pinnings and focus node to those previously saved in the diagram, or pin and explore a different dimension.

3. Click the "KPI Contribution Wheel editor: Details tab" to specify supporting information, such as related documents or the business owner.

You can:

a. (optional) Add a description.

b. View, assign, or reassign the business owner.

c. Specify related documents as appropriate.

4. Click the **Refresh** button to update the KPI values.

5. Click the **Dimension Pinnings** button to open the "Dimension Pinnings dialog," to change the pinnings. See "What Are Dimensions and Pinned Dimension Values?" for additional information.

6. Click **Save** or **Save As** to display the "Save dialog" or "Save As dialog." In the Save As dialog, you can save a copy of the KPI contribution wheel with a different name.

Note that you can drag a KPI from the "Catalog pane" to the "KPI Contribution Wheel editor: Diagram tab" to change the KPI used by the wheel. To save this as a new KPI contribution wheel, click the **Save As** button. You cannot drag and drop a new KPI onto the "KPI Contribution Wheel editor: Diagram tab" in read-only mode.

Editing KPI Contribution Wheels

Use the following procedure to edit a KPI contribution wheel.

1. To edit a KPI contribution wheel using a browser, from the "Home page" or "Catalog page," navigate to the KPI contribution wheel and click **Edit**.

- From the "Catalog page," you can open (read-only mode), edit, copy, rename, assign permissions, add to favorites, edit properties, create shortcut, or delete the object.

- From the "Home page" in the recent section, you can open and edit the object.

Note: Edit mode is not available on mobile devices, but you can interact with the KPI contribution wheel in read-only mode.

---

2. Make your changes (if any) to the pinnings by clicking the **Dimension Pinnings** button to open the "Dimension Pinnings dialog," and then click **OK** to save your changes.

3. If you want to navigate to a prior focus node in the same dimension, double-click a circle on the focus trail. Any updates to the focus or focus trail are saved along with the KPI contribution wheel for the current explore dimension.

4. Click the **Save** button.

To open a view of the KPI contribution wheel in read-only mode in a browser, use the following procedure:

1. Click the **Open** link.

2. Make your changes to the pinnings by clicking the **Dimension Pinnings** button and click **OK** to save your changes.

3. If you have the proper privileges and permissions, click the **Save As** button. This allows you to save the KPI contribution wheel as a different name. Refer to "Managing Presentation Services Privileges" in *Security Guide for Oracle Business Intelligence Enterprise Edition* for additional information.

> **Note:** If the KPI is deleted from the catalog, you will receive an error if you try to open or edit the KPI contribution wheel.

Changing Explore Dimensions Within KPI Contribution Wheels

The focus trail preserves the dimension that you are exploring (known as the *explore dimension*) and the center node (or dimension member). The focus trail allows you to drill back up to ancestor nodes within the same dimension. If you switch explore dimensions, the focus trail is cleared and a new pinning is applied. If you focused down in the prior explore dimension (that is, you were not viewing all values), a pinning will automatically be applied. You cannot further explore the pinned dimension unless you remove the pinning by using the "Dimension Pinnings dialog" or the **Revert** context menu option (see "Right-Click Menu" for additional information).

The focus trail is saved (as it appears to the user at that time) when the KPI contribution wheel is saved to the catalog. When you reopen the KPI contribution wheel, the focus constraints are applied from top to bottom, and thus the focus trail members serve as a temporary constraint. In other words, the constraint is only applied via the focus trail and therefore, you can navigate (drill up or down) on the KPI contribution wheel.

Using the focus trail, you can:

- Click on a circle to navigate to an ancestor focus node. Note that you might not see exactly the same information as previously viewed for that node because the state may have changed due to pinnings or prompts.

- Double-click (or tap on a mobile device) to focus up to an ancestor node.

Other areas within the KPI contribution wheel diagram can also be used for navigation. You can:

- Right-click on a sector (also known as a node) and:

  – Access the context menu for expanding and collapsing levels (or you can use the expand and collapse ring icons). Note that expanding a node expands all siblings.

  – Invoke an action.

  – Select **Focus on Node** to drill down.

- Select **Pin to** *Value* **and Explore** *Dimension* to focus on a new dimension. You can view only one dimension at a time.

■ Double-click (or tap on a mobile device) to focus down within a node and make this the new center or focus node. This redraws the point-of-view and the wheel and updates the focus trail. (Note that you must click **Save** in edit mode to preserve this drilling.) You can focus down to a maximum of ten levels.

> **Note:** The new focus node is only preserved in the catalog if you are in edit mode and click **Save**.

■ Expand or collapse the outer sectors one or more levels to explore the dimension. You can:

- Click the expand ring hot spot to expand one more levels.

- Click the collapse ring hot spot to hide the outer level if more than one ring around the center is visible.

- Click the sliver hot spot to expand or collapse the sliver. Note that slivers are only visible if some of the sectors are so thin that it is difficult to click or hover on them. It is a temporary "zoom in" feature.

About KPI Contribution Wheels and Dashboards

You can interact with a KPI contribution wheel on a dashboard. If you have edit privileges, you can drag and drop a KPI contribution wheel onto the dashboard page. See "Adding Content to Dashboards" for additional information. The "Dimension Pinnings dialog" is displayed when the KPI contribution wheel is first added to the dashboard page. You can leave the dimensions unpinned or pin them. The "Dimension Pinnings dialog" only shows the dimensions that are not pinned in the definition of the KPI, as set in the "KPI editor: Dimensionality page." See "What Are Dimensions and Pinned Dimension Values?" for additional information.

If you do not have privileges to edit a dashboard, you can temporarily affect the display of a KPI contribution wheel by changing the focus node to explore different dimensions or by selecting different prompt values (when the dimension is not pinned). Your changes are not saved. This is supported in browsers and on mobile devices, such as the iPad.

> **Note:** If a KPI watchlist, KPI contribution wheel, or scorecard object containing a KPI is added to a dashboard with prompts, and the KPI is not dimensioned by a specific prompt's dimension in the KPI definition, that prompt is ignored. Additionally, if the KPI is pinned to a specific dimension value in its definition, a prompt on that dimension is ignored. Refer to "Adding a Dashboard Prompt to a Dashboard or Dashboard Page" and to the "Dashboard Properties dialog" when adding a KPI watchlist, KPI contribution wheel, or scorecard object containing KPIs to a dashboard that contains prompts.

Refer to "Managing Presentation Services Privileges" in *Security Guide for Oracle Business Intelligence Enterprise Edition* for general information.

From a KPI contribution wheel on a dashboard, you can:

- Add to Briefing Book

- Export to Excel (Note that only an image is exported to Excel.)

- Print to PDF or HTML

- Create a Bookmark or Prompted Link

- Right-click to open a context menu of options:

  - In the standalone editor on the desktop, if you right-click on the background, you can explore a dimension, open the KPI contribution wheel in the stand alone editor, or revert your pinnings and focus node to those previously saved in the diagram. Revert only affects the pinnings and focus node. It does not affect all properties.

  - If you right-click on a KPI contribution wheel diagram node, you can contact the business owner of the KPI, invoke an action link, change the focus of the center node, revert your pinnings and focus node to those previously saved in the diagram, or pin and explore a different dimension.

13

Scorecarding

This chapter provides information on Oracle Scorecard and Strategy Management in Oracle Business Intelligence Enterprise Edition. It describes scorecards and explains how to work with them to describe and communicate your business strategy. It provides details on the scorecard objects that you work with, including vision and mission statements, perspectives, objectives, initiatives, strategy trees, strategy maps, cause & effect maps, custom views, and watchlists.

This chapter includes the following sections:

- What Is Oracle Scorecard and Strategy Management?

- What Is a Balanced Scorecard?

- What Is the Scorecard Editor?

- What Are Scorecard Objects?

- How Do I Create a Scorecard?

- About Scorecard Privileges and Permissions

- Using the Edit and View Modes in the Scorecard Editor

- Creating Scorecards

- Opening or Editing Scorecards

- Viewing Overview Information

- About the Point of View Area

- Setting Up the Point of View Controls

- What Are Vision Statements?

- Defining Vision Statements

- What Are Mission Statements?

- Defining Mission Statements

- What Are Perspectives?

- Creating Custom Perspectives

- What Are Key Performance Indicators (KPIs)?

- What Are KPI Contribution Wheels?

- What Are Objectives?

- Creating Objectives

- What Are Initiatives?

- Creating Initiatives
- Contacting Business Owners
- About Comments
- Working with Comments
- Understanding Initiative or Objective Performance Assessment
- Defining Assessment Mappings for Scorecards
- Assigning Weights to Child Objectives, Initiatives and KPIs
- About Status Overrides
- Working with Status Overrides
- What Are Strategy Trees?
- Creating Strategy Trees
- What Are Strategy Maps?
- Creating Strategy Maps
- What Are Cause & Effect Maps?
- Creating Cause & Effect Maps
- Understanding Watchlists
- Customizing Watchlists
- What Are KPI Watchlists?
- Working with KPI Details
- What Are Smart Watchlists?
- Creating Smart Watchlists
- What Are Custom Views?
- Creating Custom Views
- Opening Scorecard Objects
- Editing Scorecard Objects
- Deleting Scorecard Objects
- Adding Scorecard Objects to Dashboards
- Troubleshooting

What Is Oracle Scorecard and Strategy Management?

Oracle Scorecard and Strategy Management is a performance management tool that lets you describe and communicate your business strategy. You can drive and assess your corporate strategy and performance from the top of your organization down, or from the bottom up.

Oracle Scorecard and Strategy Management also enables you to either align your objectives and initiatives with traditional balanced scorecard perspectives, or to create your own to reflect your fundamental business competencies. See "What Is a Balanced Scorecard?" for additional information.

Use Oracle Scorecard and Strategy Management to:

- Simultaneously define the objectives (that is, goals such as Decreased Operational Costs) and initiatives (that is, processes or tasks such as Form Cost Minimization Team) that form your strategy to which you assign KPIs to measure progress and performance. For more information on:

  - Objectives, see "What Are Objectives?"

  - Initiatives, see "What Are Initiatives?"

  - KPIs, see Chapter 12, "Using KPIs and KPI Watchlists"

- Align objectives and initiatives with customized or traditional perspectives (fundamental business competencies and areas such as finance or customer relations). This later enables you to depict the extent to which corporate strategy supports these perspectives. See "What Are Perspectives?" for additional information.

- Define target numeric ranges to evaluate the values of KPIs within corporate or department-level objectives and initiatives. See "Defining Assessment Mappings for Scorecards" for additional information.

- Graphically communicate strategy and strategic dynamics using strategy maps, cause & effect maps, custom views, and strategy trees. For additional information, see:

  - "What Are Strategy Trees?"

  - "What Are Strategy Maps?"

  - "What Are Cause & Effect Maps?"

  - "What Are Custom Views?"

- Discuss the implementation and status of objectives and initiatives by adding, reading, and replying to comments. See "About Comments" for additional information.

> **Best Practice:** Because you use KPIs in scorecards to measure progress and performance over time, you should include appropriate time dimensions when defining KPIs to be used within scorecards. For information on time dimensions, see your administrator.

What Is a Balanced Scorecard?

Traditionally, companies focus heavily on financially driven strategies without sufficiently considering other contributing perspectives. Because financial goals are usually backward looking, tending to be defined in terms of growth over historic numbers, they do not account for future market conditions or leverage objectives. Balanced Scorecard is a strategic management system that maps an organization's strategy into clear objectives, measures, targets, and initiatives, which are organized into four perspectives: Financial, Customer, Internal Business Processes, and Learning and Growth. These perspectives are typically framed by questions, such as "To achieve our vision, how should we appear to our customers?" or "To succeed financially, how should we appear to our shareholders?" As a methodology, Balanced Scorecard provides businesses with the language to define strategies that cater to multiple, relevant perspectives. Much in the way that financial statements (income statement, cash flow statement, and balance sheet) describe the financial health of an organization, Balanced Scorecard provides a framework to communicate the strategy in a consistent and insightful way. Figure 13–11 depicts a representation of these four perspectives.

Figure 13–1   Representation of the Four Perspectives of Balanced Scorecard
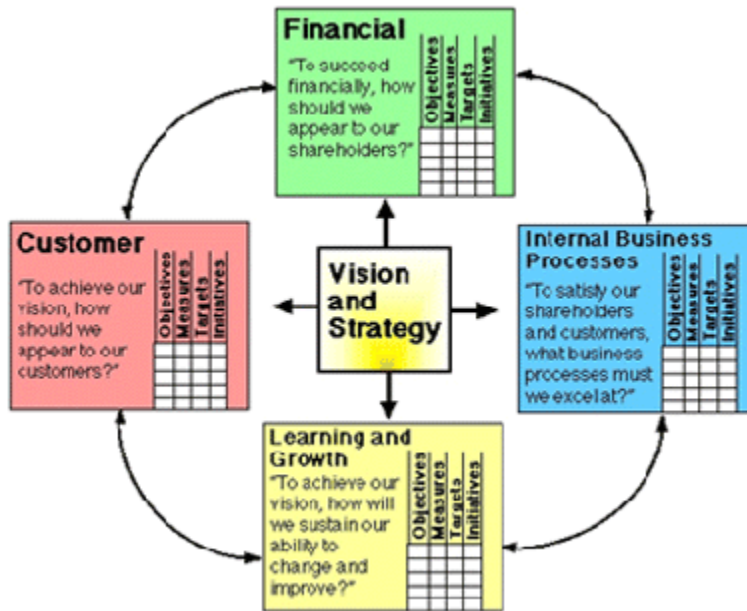
"The four perspectives of the scorecard permit a balance between short-term and long-term objectives, between desired outcomes and the performance drivers of those outcomes, and between hard objective measures and softer, more subjective measures." (Robert S. Kaplan, David P. Norton, "Linking the Balanced Scorecard to Strategy," California Management Review Reprint Series, 1996 by the Regents of the University of California CMR, Vol 39, Number 1, Fall 1996).

Oracle Scorecard and Strategy Management provides four default perspectives that you can use to define strategies that holistically include all relevant perspectives and to define strategy structures that ensure stability and success in all perspectives.

These four default perspectives, which are in support of the Balanced Scorecard methodology devised by Dr. Robert Kaplan and Dr. David Norton, are:

- **Financial** —Used to identify financial measures that help to answer this question: "How do we look to our shareholders?"

- **Customer** — Used to identify measures that help to answer this question: "How do customers see us?"

- **Internal Process** — Used to identify measures that help to answer this question: "At what processes must we excel?"

- **Learning and Growth** — Used to identify measures that help to answer this question: "How can we continue to improve and create value?"

You can customize the perspectives provided or create your own to best align objectives, key initiatives, and KPIs with your business competencies.

> **Note:**   Kaplan and Norton's four perspectives reflect a specific organizational strategy. These perspectives and strategies would not necessarily be suitable for government, public-sector, or nonprofit organizations; therefore, the objectives and key questions should be amended and supplemented to capture the desired strategies.

See "What Is Oracle Scorecard and Strategy Management?" for more information on Oracle Scorecard and Strategy Management.

> **Best Practice:** Treat the balanced scorecard as a living document. The process of assessing objectives, initiatives, and so on is reiterative. The process should provide not only quantitative, but qualitative insight into the health of your organization and should guide your organization in a timely fashion to achieving your desired results.

What Is the Scorecard Editor?

The "Scorecard editor" lets you create a scorecard of your entire organization or of individual departments. It consists of numerous panes and tabs:

- On the left side of the editor are the panes that you use to create the objects that comprise your scorecard. For example, it includes the Strategy pane, which you use to create, organize, and leverage the objectives that form the strategic structure (also called the strategy tree) of the corporate entity (department, for example) that you want to evaluate.

- On the right side of the editor is the tab area. When you first create a scorecard, you are presented with the Overview tab. This tab enables you to view summary information for the selected initiative, objective, or KPI.

  As you create your scorecard objects, detailed tabs are generated dynamically for each object. For example, when you create an objective, a tab is generated for that objective. You use this tab to define the objective and to view detailed information about the objective, such as which KPIs are to be used to evaluate it and which initiatives drive it.

- At the top of the editor are toolbar buttons and the point of view area. The point of view area displays the dimensions of the KPIs that are used in the scorecard to measure the progress and performance of initiatives and objectives. You use this area to pin (or set) values for the dimensions. When you pin a dimension, the data in the scorecard is filtered to give you a new point of view (that is, a new view of the data). See "About the Point of View Area" for additional information.

Figure 13–2 shows an example of the Scorecard editor for Sample Scorecard-Lite.

Figure 13–2   Example of the Scorecard Editor
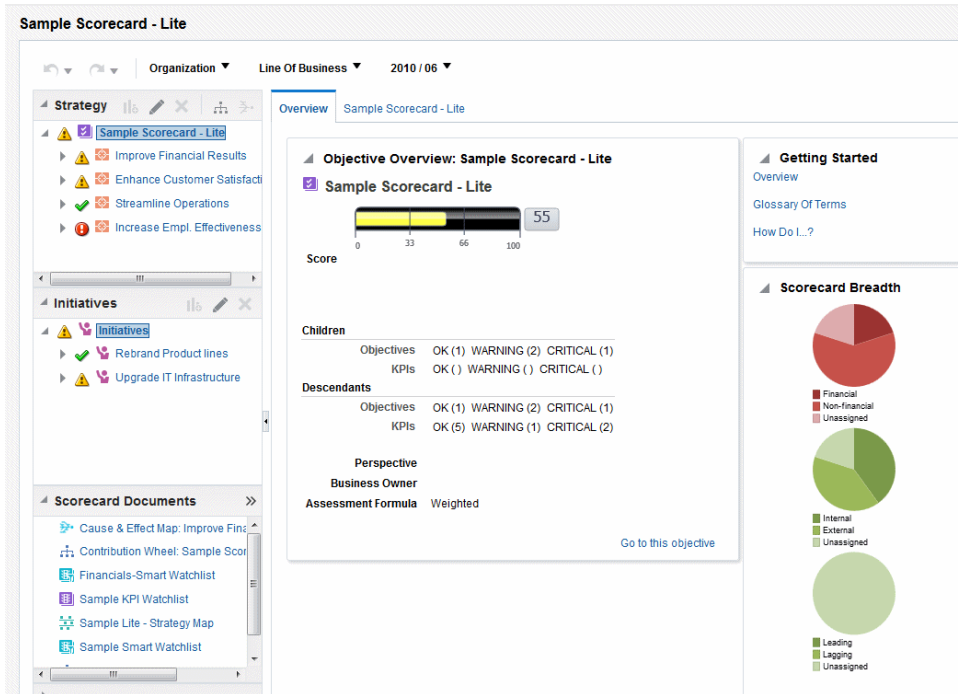
What Are Scorecard Objects?

Scorecard objects are items that you create or arrange to:

- Represent and evaluate corporate strategy, including:

    - Objectives

      See "What Are Objectives?" for additional information.

    - Initiatives

      See "What Are Initiatives?" for additional information.

    - Perspectives

      See "What Are Perspectives?" for additional information.

    - KPIs

      See "What Are Key Performance Indicators (KPIs)?" for additional information.

- Present and analyze corporate strategy, including:

    - Vision statements

      See "What Are Vision Statements?" for additional information.

    - Mission statements

      See "What Are Mission Statements?" for additional information.

    - Strategy trees

      See "What Are Strategy Trees?" for additional information.

    - Strategy maps

See "What Are Strategy Maps?" for additional information.

- – Cause & effect maps

    See "What Are Cause & Effect Maps?" for additional information.

- – Custom views

    See "What Are Custom Views?" for additional information.

- – KPI watchlists

    See "What Are KPI Watchlists?" for additional information.

- – Smart watchlists

    See "What Are Smart Watchlists?" for additional information.

- – Agents

    See "Creating Agents from KPIs" for additional information.

How Do I Create a Scorecard?

Because Oracle Scorecard and Strategy Management provides you with a wealth of scorecard objects with which to build your scorecard, an overall process flow and description is provided to guide you. It is recommended that you perform each task within the process flow in order. Figure 13–3 shows a graphic representation of the overall process flow to build a scorecard.

Figure 13–3   Create New Scorecard Task Flow for Content Designers
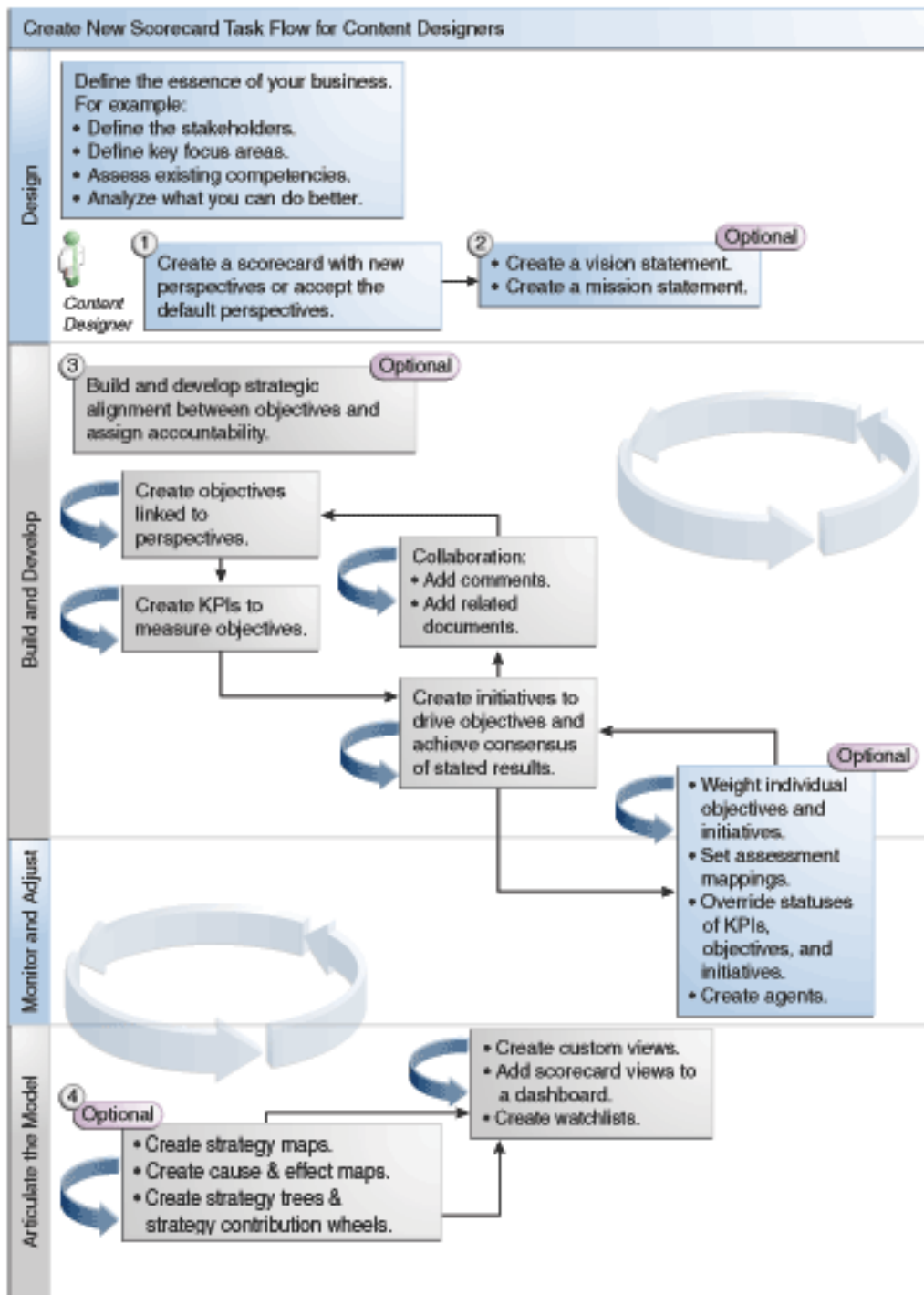
To create a scorecard, you perform the following tasks.

1. Create a new scorecard to contain the scorecard objects that you choose to represent, evaluate, present, and analyze your corporate strategy, such as objectives, initiatives, perspectives, and so on. See "Creating Scorecards" for additional information.

   a. When you create a scorecard, you can accept the four default perspectives (see "What Is a Balanced Scorecard?") or you can create your own perspectives.

Perspectives represent your key business competencies (for example, Research and Development or Financial) that you can use to align initiatives and objectives. See "What Are Perspectives?" and "Creating Custom Perspectives" for additional information.

2. Define the vision and mission statements that translate your corporate direction into over-arching strategic themes and thrusts that you later support by creating objectives. See "What Are Vision Statements?," "Defining Vision Statements," "What Are Mission Statements?," and "Defining Mission Statements" for additional information.

3. Create and arrange the objectives (goals or desired outcomes) for your entire organization, or for a department to develop a strategic alignment or causality between objectives. This includes assigning the KPIs that measure the progress and performance of objectives. Note that the top-level objective (that is, the root objective) in the Strategy pane represents the entity (your entire organization or a department) that you are scorecarding. See "What Are Objectives?" and "Creating Objectives" for additional information.

4. Create the KPIs that gather core business data (Product Sales, for example) and specify the KPI targets, target ranges, and actions. See "What Are Key Performance Indicators (KPIs)?" and "Creating KPIs" for additional information.

5. Create the KPI watchlists that you want to use to monitor KPIs. See "What Are KPI Watchlists?" for additional information.

6. Create and arrange the initiatives required to meet objectives. You also can assign KPIs to initiatives. See "What Are Initiatives?" and "Creating Initiatives" for additional information.

7. Use comments (also know as annotations) to associate explanatory text with the values of KPIs, objectives, or initiatives for a specific set of dimension values. See "About Comments" for additional information.

8. Refine and reiterate objectives and initiatives:

    a. Weight individual objectives and initiatives to specify how they impact the overall performance of the entity that you are scorecarding. See "Understanding Initiative or Objective Performance Assessment" and "Assigning Weights to Child Objectives, Initiatives and KPIs" for additional information.

    b. Set assessment mappings. See "Defining Assessment Mappings for Scorecards" for additional information.

    c. If appropriate, override the status of KPIs, initiatives, and objectives. See "Working with Status Overrides" for additional information.

    d. Create agents from KPIs. (Agents enable you to automate your business processes.) See "Creating Agents from KPIs" for additional information.

9. Depict relationships between objectives and articulate models by using strategy maps, cause & effect maps, KPI contribution wheels, and strategy trees.

    See "What Are Strategy Maps?," "Creating Strategy Maps," "What Are Cause & Effect Maps?," "Creating Cause & Effect Maps," "About KPI Contribution Wheel Diagrams," "What Are Strategy Trees?," and "Creating Strategy Trees," and for additional information.

10. Create custom views to further refine your strategy to help capture the essence of your business. See "What Are Custom Views?" and "Creating Custom Views" for additional information.

11. Create views into a scorecard based on criteria that you specify by creating smart watchlists. See "What Are Smart Watchlists?" and "Creating Smart Watchlists" for additional information.

12. Add scorecard views to dashboards. See "Adding Scorecard Objects to Dashboards" for additional information.

About Scorecard Privileges and Permissions

The ability to perform certain tasks when building KPIs, KPI contribution wheels, and KPI watchlists, or within Oracle Scorecard and Strategy Management (such as, creating scorecards or contacting owners) is controlled by privileges. Privileges are managed by the administrator. Refer to "Managing Presentation Services Privileges" in *Security Guide for Oracle Business Intelligence Enterprise Edition* for general information.

Many tasks require a combination of privileges. Three tables, "Privileges Required for KPI Tasks," "Privileges Required for KPI Watchlist and KPI Contribution Wheel Tasks," and "Privileges Required for Scorecard and Scorecard Object Tasks" in *Security Guide for Oracle Business Intelligence Enterprise Edition*:

- List the task object (for example, action link or related document).

- List the tasks and corresponding privileges that you can manage.

- Assume that your administrator has given your user ID or group the permissions to read or write to the necessary catalog objects and folders.

> **Note:** These tables do not address permissions. To alter the permissions for the scorecard or elements within the scorecard (that is, which users have access to the scorecard or elements within the scorecard), you need Full Control permission on the scorecard. For information about permissions, see Chapter 14, "Managing Objects in the Oracle BI Presentation Catalog."

You should:

- Review "Privileges Required for KPI Tasks," "Privileges Required for KPI Watchlist and KPI Contribution Wheel Tasks," and "Privileges Required for Scorecard and Scorecard Object Tasks" in *Security Guide for Oracle Business Intelligence Enterprise Edition* to ensure that you have sufficient privileges to accomplish your task, and if necessary contact your administrator to grant you additional privileges.

- Have the appropriate permissions for the Oracle BI Presentation Services layer object to delete any of the scorecard, KPI watchlist, or KPI objects using the catalog browser. See "Setting Permissions for Presentation Layer Objects" in *Metadata Repository Builder's Guide for Oracle Business Intelligence Enterprise Edition*.

Using the Edit and View Modes in the Scorecard Editor

The "Scorecard editor" has two modes:

- **Edit mode** — Enables you to create or edit mission statements, vision statements, initiatives, perspectives, objectives, KPIs, KPI watchlists, smart watchlists, and views, and create agents from KPIs.

> **Note:** You should not delete scorecard objectives, initiatives, or perspectives outside of "Scorecard editor" as that may result in scorecard issues.

- **View mode** — Enables you to navigate and view mission statements, vision statements, initiatives, perspectives, objectives, KPIs, KPI watchlists, and views but not add or modify them. You also can add comments, override statuses, create agents from KPIs, view KPI contribution wheels, and interact with smart watchlists.

In addition, the information that you can access and the tasks that you can perform in these modes depends on the following:

- The privileges that are assigned to your account
- The permissions that are associated with the individual scorecard objects and folders

See "About Scorecard Privileges and Permissions" for additional information.

Creating Scorecards

To create a scorecard:

1. In the global header, click **New** and then select **Scorecard**.

   The "New Scorecard dialog" is displayed.

2. Specify a name for the scorecard.

3. (optional) Specify a description of the scorecard.

4. Select the location in which to save the scorecard.

5. Specify whether to use the default Balanced Scorecard perspectives. If you deselect the **Use Default Perspective?** check box, you must create your own custom perspectives with which you will associate initiatives and objectives. See "Creating Custom Perspectives" for additional information.

6. Click **OK**. The new scorecard is created. You can now perform the remaining tasks for creating a scorecard, as described in "How Do I Create a Scorecard?"

Opening or Editing Scorecards

To open or edit a scorecard:

1. In the global header, click **Catalog** to display the "Catalog page."

2. Navigate to the scorecard that you want to open or edit and click one of the following links:

   - **Open** — The scorecard is displayed in the "Scorecard editor" in view mode.
   - **Edit** — The scorecard is displayed in the "Scorecard editor" in edit mode.

   See "Using the Edit and View Modes in the Scorecard Editor" for additional information on the view and edit modes.

3. Make the desired changes.

4. Save the scorecard.

> **Best Practice:** If you need your administrator to make a change to your metadata (for example, rename a dimension or delete a subject area), remove all references to the object within your KPIs and scorecards prior to contacting your administrator.

Viewing Overview Information

You can view summary information for initiatives, objectives, or KPIs.

To view overview information:

1. Open or edit the scorecard. See "Opening or Editing Scorecards" for additional information.

    The "Scorecard editor: Overview tab" is displayed. Figure 13–4 shows an example of the Overview tab for an objective.

Figure 13–4   The Scorecard Editor: Overview Tab
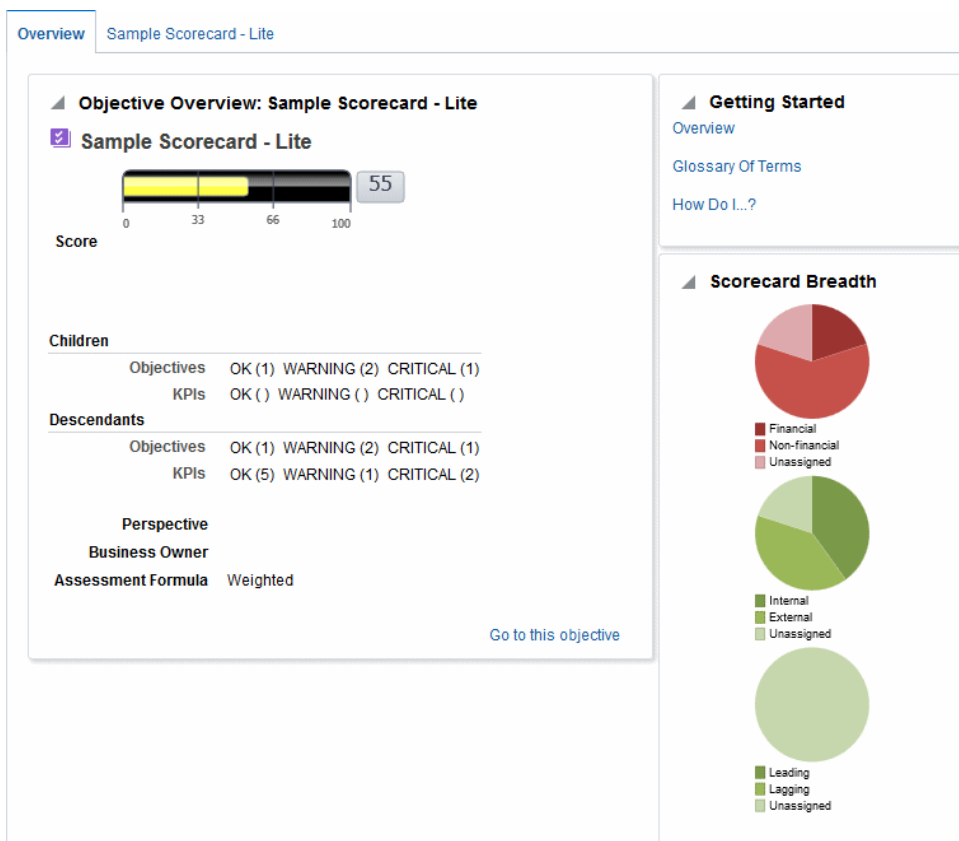
The Overview tab shows summary information for the root objective, which represents the entity that you are scorecarding, that is, the entire organization or a department.

2. To show summary information for:

    -   A KPI, in the "Initiatives pane" or in the "Strategy pane," click the KPI.

    -   An initiative, in the "Initiatives pane," click the initiative.

    -   An objective, in the "Strategy pane," click the objective.

About the Point of View Area

The point of view area of the "Scorecard editor" displays controls for the dimensions of KPIs that are used in the scorecard to measure the progress and performance of initiatives and objectives. See "What Are Dimensions and Pinned Dimension Values?" for additional information on KPI dimensions.

Controls are displayed for each KPI dimension that is referenced in a scorecard with the exception of those that you explicitly prevent from being displayed. If the same dimension is referenced in more than one KPI, then a control can be shared by the KPIs. See "Setting Up the Point of View Controls" for additional information on how to set up the controls in the point of view area.

Figure 13–5 shows a point of view area that displays the Region Hierarchy, Customer Segments, Offices Hierarchy, Products Hierarchy, and 2010/Q3 dimensions.

Figure 13–5   Example of a Point of View Area

Each control includes a label and a down-arrow button that displays a list of the dimension values from which you can select, and a **Search** link (see "Search Members dialog" for additional information). The label is either the database name for the dimension (by default), a user-friendly label (if specified for the control), or one or more values (if the dimension is pinned to a specific value or multiple values).

You use this area to temporarily pin or set values for the dimensions. When you pin a dimension, the data in the scorecard is filtered to give you a new point of view (that is, a new view of the data). This enables you to focus on specific data of interest to you, such as the area of business for which you are responsible.

The point of view area settings are temporary and are not persisted when the scorecard is saved. To persist pinnings, you can use the:

- "Settings dialog: Dimension Settings tab" to affect all KPI usages within a scorecard.

- **Dimensionality** area in the "Analytics pane" of the "Scorecard editor: KPI Details tab" to pin the values for a particular KPI usage.

- "Add KPI dialog" (also displayed as the Edit Watchlist Entry dialog) in the "KPI Watchlist editor" to pin values for individual KPIs.

- "Dimension Pinnings dialog" to pin values in a view that has been added to a dashboard.

- "KPI editor: Dimensionality page" (also displayed as the Scorecard editor: KPI tab) to pin values in a KPIs definition. This approach is less flexible than when you let a KPI's definition be reusable in different contexts and pin only within views that reference the KPI.

The Scorecard editor also contains the **Back** and **Forward** buttons that enable you to move forward or backward through your point of view history to select a previous point of view or the point of view with which you started.

To temporarily pin a dimension:

1. Click the down-arrow button to the right of the dimension.

2. To:

- - Select a specific single value, click the value.

  - Select multiples values, click the **Search** link to display the "Search Members dialog," make your selections, and then click the **OK** button. Note that you can also select multiple values by pressing and holding the Ctrl key, and then clicking the desired values.

  - If the value is a hierarchical column, click the sideways triangle button to expand the levels. Press and hold the Ctrl key, and then click the desired values.

3. Click the down-arrow or outside the dialog box to close it.

The data is filtered and a new point of view is displayed.

Setting Up the Point of View Controls

You use the "Settings dialog: Dimension Settings tab" to set up the controls for dimensions in the point of view area of a scorecard.

Specifically, you can specify:

- One or more default values for the dimension.

- Whether a control for the dimension is to be displayed in the point of view area

- The label to be displayed in the point of view area for the dimension.

See "About the Point of View Area" for additional information on the point of view.

To set up the point of view controls:

1. Edit the scorecard for which you want to set up the point of view controls. See "Opening or Editing Scorecards" for additional information.

2. Click the **Scorecard Settings** toolbar button in the Scorecard editor.

The "Settings dialog: Assessment Mappings tab" is displayed.

3. Click the Dimension Settings tab.

4. Set up the controls for each dimension as desired. To set up the control for a dimension:

   a. Select the dimension and then click the **Edit Row** button to display the "Edit Dimension Settings dialog."

   b. Specify the settings that you want.

   c. Click **OK**.

5. Click **OK**.

What Are Vision Statements?

A vision statement is a short statement that describes what your organization wants to become sometime in the future. For example, it might be to become the most successful business in the South America Polypropylene Market. (A vision statement is optional.)

Often, from this statement, you define the key goals and priorities that form your mission statement. See "What Are Mission Statements?" for additional information.

See "Defining Vision Statements" for additional information on defining a vision statement.

> **Note:** Creating vision and mission statements requires a very specific set of privileges. If the vision or mission statement toolbar button is disabled, contact your administrator. See "Identifying Privileges for KPIs, KPI Watchlists, and Scorecarding" in *Security Guide for Oracle Business Intelligence Enterprise Edition* for additional information.

Defining Vision Statements

To define a vision statement:

1. Edit the scorecard for which you want to define a vision statement. See "Opening or Editing Scorecards" for additional information.

2. In the "Scorecard Documents pane," click the **Create Object** toolbar button and then select **Create Vision**.

   The "Vision tab: Document tab" is displayed. Figure 13–6 shows the New Vision tab.

Figure 13–6   The Vision Tab: Document Tab
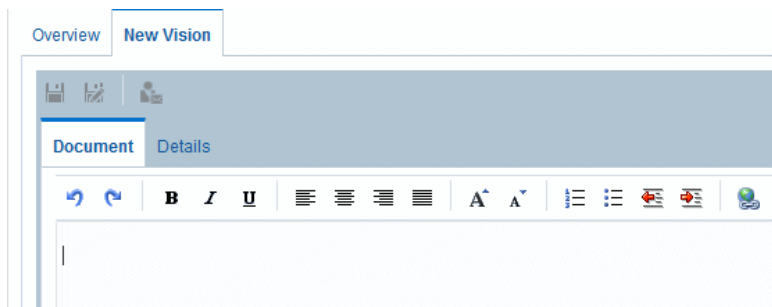
3. Enter and format the vision statement. You can apply such formatting options as bold, italic, underlining, indents, justification, and font size changes.

4. Click the "Vision tab: Details tab."

5. Assign the business owner and specify related documents, as appropriate. See "Related Documents area" for additional information.

6. Click **Save** to display the "Save As dialog." In the Save As dialog, you can rename the vision statement rather than use the default name.

What Are Mission Statements?

A mission statement specifies the key business goals and priorities that are required to achieve your vision. (A mission statement is optional.)

See "Defining Mission Statements" for additional information.

You define your vision in a vision statement. See "What Are Vision Statements?" for additional information on vision statements.

Defining Mission Statements

To define a mission statement:

1. Edit the scorecard for which you want to define a mission statement. See "Opening or Editing Scorecards" for additional information.

2. In the "Scorecard Documents pane," click the **Create Object** toolbar button and then select **Create Mission**.

   The "Mission tab: Document tab" is displayed. Figure 13–7 shows an example of a mission statement.

Figure 13–7   The Mission Tab: Document Tab
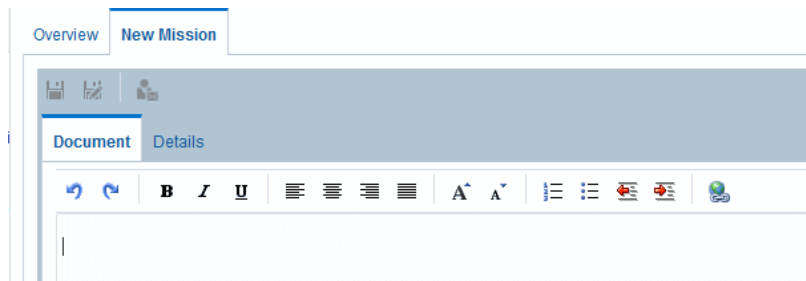
3. Enter and format the mission statement. You can apply formatting options such as bold, italic, underlining, indents, justification, and font size changes.

4. Click the "Mission tab: Details tab."

5. Assign the business owner and specify related documents, as appropriate. See "Related Documents area" for additional information.

6. Click **Save** to display the "Save As dialog." In the Save As dialog, you can rename the mission statement rather than use the default name.

What Are Perspectives?

Perspectives are categories in your organization with which to associate initiatives, objectives, and KPIs. A perspective can represent a key stakeholder (such as a customer, employee, or shareholder/financial) or a key competency area (such as time, cost, or quality).

You associate an initiative and objective with a perspective when you create or edit it. See "Creating Initiatives" and "Creating Objectives" for additional information. You associated a KPI with a perspective when you edit the details of the KPI. See "Working with KPI Details" for additional information.

For example, when you create an objective called Improved Client Response Time, you might associate it with the Customer perspective as the objective sustains and supports customer-related operations.

There are four standard perspectives that are defined by the Balanced Scorecard Methodology:

- **Financial** — Groups objectives, initiatives, and KPIs that relate to or support the monetary or economic health and development of your organization.

- **Customer** — Groups objectives, initiatives, and KPIs that pertain to or support your client base.

- **Internal Process** — Groups objectives, initiatives, and KPIs that categorize and support your corporate internal policies and procedures.

- **Learning and Growth** — Groups objectives, initiatives, and KPIs that relate to or support employee training and advancement.

In addition, you can create custom perspectives for your scorecard.

See "Creating Custom Perspectives" for additional information.

Creating Custom Perspectives

When you create a scorecard, you specify whether you want to use the default perspectives that are defined by the Balanced Scorecard Methodology (using the **Use Default Perspectives?** check box. If you:

- Do not use the default perspectives, then you must create your own custom perspectives.

- Do use the default perspectives, then you can create one or more custom perspectives to use along with the default perspectives.

To create custom perspectives:

1. Edit the scorecard for which you want to create a custom perspective. See "Opening or Editing Scorecards" for additional information.

2. In the "Perspectives pane," click the **New Perspective** toolbar button.

   The "Scorecard editor: Perspective tab" is displayed. Figure 13–8 shows an example of a financial perspective displayed on the Perspective tab.

Figure 13–8 The Scorecard Editor: Perspective Tab

3. In the **Perspective Name** field, enter the name of the perspective.

4. (optional) In the **Description** field, enter a description of the perspective.

5. Click the **Set User** button to display the "Select Business Owner dialog," where you select the business owner. (By default, the business owner is the creator of the scorecard.)

6. In the **Focus** area, specify whether the focus of the perspective is financial or internal facing. See "Scorecard editor: Perspective tab" for additional information.

7. Add related documents, as appropriate. See "Related Documents area" for additional information.

8. Click **Save**.

   The perspective displays in the "Perspectives pane."

You can now associate initiatives, objectives, and KPIs with this custom perspective. You associate an initiative and objective with a perspective when you create or edit the initiative or objective. See "Creating Initiatives" and "Creating Objectives" for

additional information. You associated a KPI with a perspective when you edit the details of the KPI. See "Working with KPI Details" for additional information.

What Are Key Performance Indicators (KPIs)?

A KPI represents the result of a business measure (for example, Product Sales or Operational Costs) evaluated against a target for that measure. You can use KPIs to assess the progress of the objectives and initiatives that form levels of organizational strategy.

You can create KPIs that you need:

- Within a scorecard. This enables you to create the KPIs as you are creating or editing the scorecard.

- Outside a scorecard. This enables you to create the KPIs in advance of creating or editing a scorecard.

For information on KPIs and how to create them, see Chapter 12, "Using KPIs and KPI Watchlists."

What Are KPI Contribution Wheels?

A KPI contribution wheel diagram allows you to explore a specific KPI along one of its dimensions to visually convey the relative importance and performance for the various dimension members.

You can view a KPI contribution wheel from within any scorecard view that contains a KPI node, such as strategy tree diagrams, strategy contribution wheel diagrams, smart watchlists, and KPI watchlists. Right-click on the KPI in a watchlist or on a diagram node and select **View KPI Contribution Wheel**. The KPI contribution wheel will open in a new browser window or tab and will not be embedded or viewed within the Scorecard editor window.

> **Note:** Viewing a KPI contribution wheel from a scorecard diagram, a watchlist or tree pane within a scorecard, or a KPI watchlist, simply creates a new view of the KPI contribution wheel for the KPI without any context (dimension pinnings) transferred from the scorecard or KPI watchlist.

For information on KPI contribution wheels and how to create them, see "Creating KPI Contribution Wheels."

What Are Objectives?

Objectives are the required or desired outcomes that form your corporate strategy. You can create an objective for:

- An entire organization, for example, Oracle Corporation

- A department, for example, Sales department

When you create an objective, you assign it one or more KPIs that are to be used to measure its progress and performance. For example, you can measure the progress and performance of an objective named Improved Customer Satisfaction by assigning it the following KPIs:

- Average Customer Survey Satisfaction Score

- Number of Customer Complaints KPIs

For more information on KPIs, see Chapter 12, "Using KPIs and KPI Watchlists."

Within a scorecard, you also create the initiatives that are required to meet the objectives. See "What Are Initiatives?" for additional information on initiatives.

Objectives that you create are displayed hierarchically in the "Strategy pane." The root objective represents the entity that you are scorecarding, that is the entire organization or a department. The KPIs that are assigned to assess the performance of objectives are displayed below the objectives in the Strategy pane.

The Strategy pane also shows the statuses of objectives and KPIs using the appropriate colors and icons that you specified for assessment mappings. See "Defining Assessment Mappings for Scorecards" for additional information on assessment mappings.

> **Best Practice:** When creating objectives, if possible, use subobjectives measured by KPIs to monitor results. Corrective action becomes incremental, reiterative, and more achievable. For example: the objective, Improve Financial Results, might include Increase Sales, Reduce Costs, Increase Employee Effectiveness, and Streamline Operations as subobjectives.
>
> Use related documents to provide supporting information for the objective, initiative, and so on.

See "Creating Objectives" for additional information on creating objectives.

Creating Objectives

You can create one or more objectives. Objectives that you create should be strategically relevant and measurable using KPIs.

See "What Are Objectives?" for additional information about objectives.

To create an objective:

1. Edit the scorecard for which you want to create an objective. See "Opening or Editing Scorecards" for additional information.

2. In the "Strategy pane":

   - If the objective that you want to create can be independently achieved, then select the root objective.

   - If the objective that you want to create is required to meet a higher-level objective, then select the higher-level objective.

3. Click the **Create Objective** toolbar button or right-click and select **Create Objective**.

   The "Scorecard editor: Objective Details tab" is displayed. Figure 13–9 shows an example of an objective displayed on the Objective Details tab.

Figure 13–9 The Scorecard Editor: Objective Details Tab
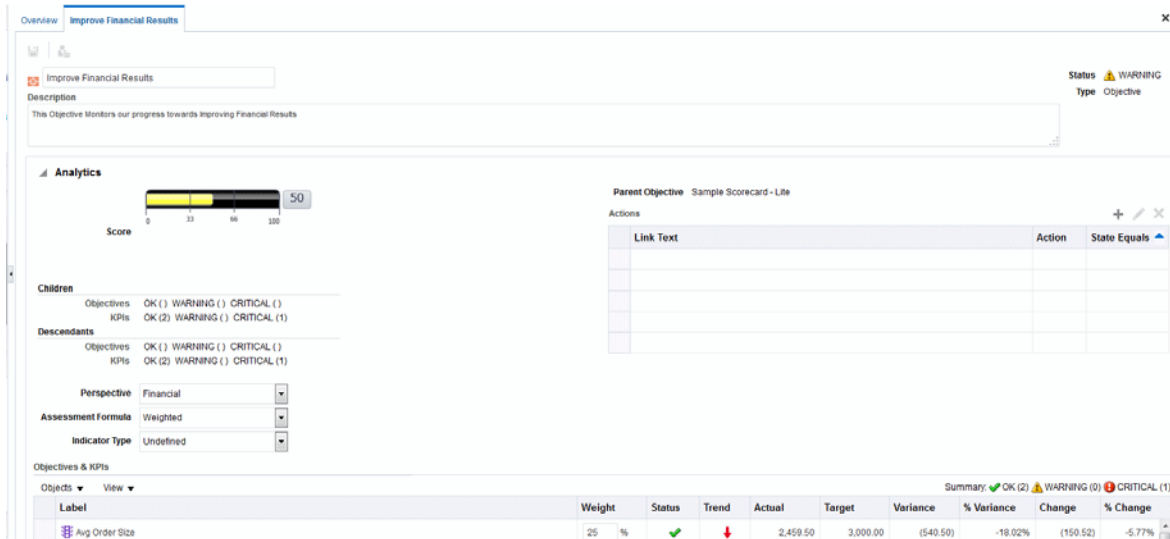
4. Highlight the default objective name in the top left corner and enter a new name for the objective.

5. In the **Description** field, enter a description of the objective.

6. Specify the analytic information (including the KPIs to be used to measure the progress and performance of the objective) by completing the "Analytics pane." See "Completing the Analytics Pane for Objectives or Initiatives" for additional information.

7. Specify the collaboration information by completing the "Collaboration pane" as follows:

   a. (optional) Add comments by clicking the **Add Comment** button to display the "Add Comment dialog." See "About Comments" for additional information.

   b. Specify the business owner that users can contact by clicking the **Set User** button to display the "Select Business Owner dialog." (By default, the business owner is the creator of the scorecard.)

   c. (optional) Add related documents by clicking the **New Row** button to display the "New Related Document dialog." Also see "Related Documents area" for additional information.

8. Add related items by completing the "Related Items pane" as follows:

   a. Add one or more objectives that impact or support (that is, help achieve or hinder progress on) this objective. To do so, drag the objective from the Strategy pane and drop it in the **Causes** table.

      The "Causal Linkage dialog" is displayed, where you specify how closely the objectives are related and whether changes to the values in this causal objective have a direct or inverse impact on this objective.

      For example, for an Increased Client References objective, you might drag and drop the following objectives that could cause (or help or hinder) it: Decreased Client Response Time and Increase Customer Issue Resolutions.

   b. Add one or more initiatives (that is, the tasks that are required to meet the objective). To add an initiative, drag it from the "Initiatives pane" and drop it in the **Initiatives Driving This Objective** table.

The "Initiative Linkage dialog," where you specify how closely the initiative and the objective are related and whether changes to the values in this initiative have a direct or inverse impact on this objective.

c. Add one or more objectives that this objective impacts or supports. To do so, drag the objective from the Strategy pane and drop it in the **Effects** table.

The "Causal Linkage dialog" is displayed, where you specify how closely the objectives are related and whether changes to the values in this causal objective have a direct or inverse impact on this objective.

9. Click **Save**.

Completing the Analytics Pane for Objectives or Initiatives

When you create an objective or initiative, you must specify the analytics for the objective or initiative by completing the "Analytics pane."

To complete the Analytics pane:

1. In the **Perspective** box, select the perspective with which the objective or initiative is to be aligned.

Best Practice: Assign a perspective to each objective or initiative. This facilitates in the definition of causal linkages when building strategy maps.

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2. In the **Assessment Formula** box, select the rule to be used to assess the overall performance of the initiative or objective. For example, select **Worst case** to specify that the status of the worst performing child KPI or objective is to be used.

3. (for an objective only) In the **Indicator Type** box, indicate whether the performance of the objective drives other objectives, or is affected by the performance of other objectives or other data or processes (for example, leading or lagging).

4. (for an initiative only) In the **Priority** box, select the priority that indicates the importance and urgency of an initiative.

5. (for an initiative only) Specify the start date, due date, and completion date.

6. In the **Actions** area, add any action links that you want to provide to users to let them take actions that are relevant for the status of the objective or initiative. See "Adding Actions to Initiatives and Objectives in Scorecards" for additional information. Also see "What Are Actions?" for additional information.

7. In the **Objectives & KPIs** or **Initiatives & KPIs** watchlist, add the KPIs to be used to measure the progress and performance of the objective or initiative. (See "Watchlists" for additional information on watchlists.)

Note: If no KPIs have been defined, or if you want to define another KPI to meet your needs, then you can create the KPI from within the Scorecard editor. See "Creating KPIs" for additional information.

> **Tip:** You can modify the columns that are displayed in the
> **Objectives & KPIs** or **Initiatives & KPIs** watchlist. To do so, select
> **View**, then **Show More Columns** to display the "Show More Columns
> dialog," where you can add or remove columns.

To add a KPI:

a. Click **Save**. You must save the new objective or initiative before you can add a KPI.

b. Click **Objects** in the **Objectives & KPIs** or **Initiatives & KPIs** watchlist and then select **Add KPI**. The "Select a KPI dialog" is displayed.

> **Note:** You can drag the KPI from the "Catalog pane for Scorecard" or
> from the "Scorecard Documents pane" (if the KPI has been saved to
> the current scorecard folder) and drop it in the watchlist. If you choose
> this method, the "Add KPI dialog" is displayed.

c. Choose a KPI and click **OK**. The "Add KPI dialog" is displayed.

d. If the KPI is dimensioned, then for each dimension, specify one or more values, select **Use Variable** and specify the variable, or select **Use Point-of-View** to use the value or values selected in the point of view area. See "About the Point of View Area" for additional information on the point of view area.

e. In the **Label** field, enter the name to be displayed for the KPI in the "Strategy pane."

f. Click **OK**.

> **Note:** A KPI that you have added to the Strategy pane or Initiatives
> pane obtains many of its properties from the base KPI as it was
> originally defined in the KPI editor. You can override some of the base
> KPI's properties to customize them for use within scorecard. The KPI
> properties that you can override are the label, description, and
> business owner. You can assign a perspective and an indicator type.
> You can also set dimension pinnings for dimensions that are left
> unpinned in the KPI definition. See "Working with KPI Details" for
> additional information on overriding KPI properties.

What Are Initiatives?

Initiatives are time-specific tasks or projects that are necessary to achieve objectives. As such, you can use initiatives that support objectives as milestones as they reflect progress toward strategy targets. For example to implement an objective called Improve Customer Satisfaction, you might create these initiatives:

- Create online feedback forum
- Form response team

Generally, an initiative supports multiple objectives.

When you create an initiative, you assign it KPIs that are to be used to measure its progress. For more information on KPIs, see Chapter 12, "Using KPIs and KPI Watchlists."

Initiatives that you create are displayed hierarchically in the "Initiatives pane." The root initiative represents all the initiatives that you implement to achieve objectives and goals. The KPIs that are assigned to an initiative are displayed below the initiative in the Initiatives pane.

The Initiatives pane also shows the statuses of initiatives and KPIs using the appropriate colors and icons that you specified for assessment mappings. See "Defining Assessment Mappings for Scorecards" for additional information on assessment mappings.

See "Creating Initiatives" for additional information on creating initiatives.

Creating Initiatives

You can create one or more initiatives. Initiatives that you create should be measurable using KPIs and strategically relevant.

See "What Are Initiatives?" for additional information about initiatives.

To create an initiative:

1. Edit the scorecard for which you want to create an initiative. See "Opening or Editing Scorecards" for additional information.

2. In the "Initiatives pane":

   - If the initiative that you want to create can be independently implemented, then select the root initiative.

   - If the initiative that you want to create is required to meet a higher-level initiative, then select the higher-level initiative.

3. Click the **Create Initiative** toolbar button or right-click and select **Create Initiative**.

   The "Scorecard editor: Initiative Details tab" is displayed. Figure 13–10 shows an example of an initiative displayed on the Initiative Details tab.

Figure 13–10   The Scorecard Editor: Initiative Details Tab
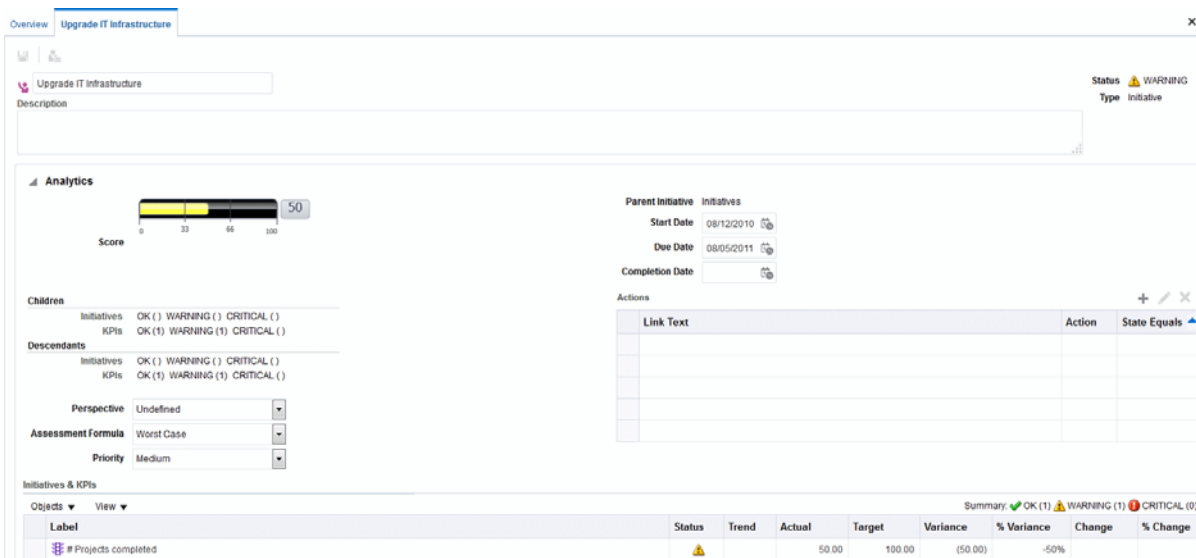
4. Highlight the default initiative name in the top left corner of the tab and enter a new name for the initiative.

5. In the **Description** field, enter a description of the initiative.

6. Specify the analytic information (including the KPIs to be used to measure the progress of the initiative) by completing the "Analytics pane." See "Completing the Analytics Pane for Objectives or Initiatives" for additional information.

7. Specify the collaboration information by completing the "Collaboration pane" as follows:

    a. (optional) Add comments by clicking the **Add Comment** button to display the "Add Comment dialog." See "About Comments" for additional information.

    b. Specify the business owner that users can contact by clicking the **Set User** button to display the "Select Business Owner dialog." (By default, the business owner is the creator of the scorecard.)

    c. (optional) Add related documents by clicking the **New Row** button in the Related Documents toolbar to display the "New Related Document dialog." Also see "Related Documents area" for additional information.

    d. (optional) Add the key resources by clicking the **New Row** button in the Key Resources toolbar to display the "Key Resource dialog."

8. In the "Related Items pane," add one or more objectives that require this initiative in order to succeed.

To add an objective, drag the objective from the "Strategy pane" and drop it in the **Objectives** table.

The"Objective Linkage dialog" is displayed, where you specify how closely the initiative and the objective are related and whether changes to the values in this initiative have a direct or inverse impact on this objective.

9. Click **Save**.

> **Best Practice:**   Use initiatives to track major milestones as a closed loop by assigning strategic objectives, taking remedial action by monitoring KPI targets and metric results, and using annotations and related documents for collaboration.

Contacting Business Owners

You can send a message to the business owner of a scorecard object. The business owner is the person who is responsible for managing and improving the business value and performance of a scorecard object. (The business owner might or might not be the same as the person who creates the scorecard or creates the KPI.) You specify the business owner of an object when you create it.

You use the **Contact Owner** button or menu option to contact the business owner. This button is available in many places in a scorecard, for example, on the toolbar of most tabs, such as the "Scorecard editor: Objective Details tab."

Oracle BI EE uses an agent and the delivery devices and profiles that the business owner specified in the "My Account dialog: Delivery Options tab" to determine where to deliver the message (for example, email, phone, or pager).

To contact a business owner:

1. Click the **Contact Owner** button or menu option. The "Contact Owner dialog" is displayed.

2. In the **Subject** field, enter a the subject of the message.

3. In the **Priority** field, select the priority of the message.

4. In the **Message** field, enter the message that you want to send to the business owner.

5. Click **Send**.

About Comments

Collaboration between users is essential to gain a consensus in order achieve the stated and desired results. Comments (also known as annotations) enable you to discuss changes in performance and progress for an initiative, objective, or KPI for a specific set of dimension values (that is, for a specific point of view).

> **Note:** Before you can work with comments, your administrator must enable this feature. See "Configuring the Repository for Oracle Scorecard and Strategy Management" in *Metadata Repository Builder's Guide for Oracle Business Intelligence Enterprise Edition* for additional information.

You can add, view, and reply to comments in many places in a scorecard. For example, you can add a comment directly to an objective in the "Scorecard editor: Objective Details tab." You can also add a comment to an objective in the Diagram tab of a view, a smart watchlist, and a perspective in which its referenced. You cannot delete KPI annotations.

A comment is associated with:

- An initiative, objective, or KPI that measures the progress of an initiative and objective.

  When an initiative, objective, or KPI that has a comment associated with it is referenced elsewhere in a scorecard and the point of view being displayed matches that of the comment, a comment indicator is displayed as follows:

  - In a watchlist, a blue triangle is displayed in the row containing the initiative, objective, or KPI. See "Watchlists" for additional information.

  - In a node in the Diagram tab of a view, the Comment button is displayed in the upper-right corner of the node.

- A certain column.

  A comment is normally associated with the Status column of an objective, initiative, or KPI, unless (for KPIs only) the comment is added to another column such as Trend or Variance.

- A specific point of view.

  Comments are filtered by the values in the point of view area in the "Scorecard editor" that are currently in effect for the object being viewed. As a result, the comment for Eastern Region Sales can be different than the comment for Western Region Sales. (See "About the Point of View Area" for additional information.)

- Any dimension pinnings on the KPI.

  Comments are filtered by any other dimension pinnings that are in effect (on a KPI, scorecard, scorecard diagram, dashboard prompt, or KPI watchlist).

> **Best Practice:** Use annotations and overrides to increase employee collaboration, participation, and accountability, and to prevent future occurrences of identified deficiencies.

See "Working with Comments" for additional information about how to work with comments.

Working with Comments

You can work with comments in many places in a scorecard, including in:

- The "Collaboration pane" of the "Scorecard editor: Initiative Details tab," "Scorecard editor: Objective Details tab," and the "Scorecard editor: KPI Details tab."

  See "Working with Comments in the Collaboration pane" for additional information.

- Watchlists

  See "Working with Comments in Watchlists" for additional information.

- The Diagram tab of a view.

  See "Working with Comments in the Diagram Tab of a View" for additional information.

  > **Note:** Before you can add comments to an initiative or objective, the initiative or objective must have at least one KPI assigned to it.

As you work with comments, remember that a comment is associated with a specific point of view. See "About the Point of View Area" for additional information on the point of view.

See "About Comments" for additional information about comments.

Working with Comments in the Collaboration pane

In the "Collaboration pane" of the "Scorecard editor: Initiative Details tab," "Scorecard editor: Objective Details tab," and "Scorecard editor: KPI Details tab," you can view, add, or reply to comments for that particular initiative, objective, or KPI.

To work with comments in the Collaboration pane:

1. Open or edit the scorecard. See "Opening or Editing Scorecards" for additional information.

2. Open the initiative, objective, or KPI and navigate to the Collaboration pane. See "Opening Scorecard Objects" for additional information about how to open an object.

3. Ensure that the values that are displayed in the point of view area reflect the desired context for the comment. (For example, you might want to comment on a KPI status for the Eastern region.)

4. Do one of the following:

   - To add a new comment, click the **New Comment** button. The "New Comment dialog" is displayed.

Comments added by clicking the **New Comment** button are associated with the status (that is, the Status column) of the objective, initiative, or KPI.

For KPIs only, you can also associate a comment with other columns such as Trend, Target, or Variance. To do so, edit the parent object, right-click on the relevant cell in the "Watchlists" and select **Add Comment**.

- To reply to a comment, locate the comment to which you want to reply and click the **Reply** link. The "Reply dialog" is displayed.

5. Enter the subject of your comment (for a new comment only) and the text of your comment.

6. Click **OK**.

Working with Comments in Watchlists

In a watchlist, you can view, add, and reply to comments for initiatives, objectives, and KPIs that are displayed in the watchlist. See "Watchlists" for additional information about watchlists.

To work with comments in a watchlist:

1. Open or edit the scorecard. See "Opening or Editing Scorecards" for additional information.

2. Open the object in which you want to work with comments and navigate to the appropriate pane or tab. See "Opening Scorecard Objects" for additional information about how to open an object.

3. Ensure that the values that are displayed in the point of view area reflect the desired context for the comment. (For example, you might want to comment on a KPI status for the Eastern region.)

4. To add a new comment:

    a. In the watchlist, right-click the Status cell to which you want to add the comment and select **Add Comment**. The "Add Comment dialog" is displayed.

    b. Complete the Add Comment dialog and click **OK**.

5. To work with the comments that were previously added to an object, hover the mouse pointer over the **Blue triangle** in the upper-right corner of the cell in the Status column or, for a KPI, one of its columns.

    The "Status window" is displayed. From this window, you can:

    - Read the comments that were previously added.

    - Display the "New Comment dialog" to add a new comment by clicking **New Comment**.

    - Display the "Reply dialog" to reply to a comment by clicking the **Reply** link.

    - Pin the window so that it stays open by clicking the **Pin** button.

Working with Comments in the Diagram Tab of a View

In the Diagram tab of a view, you can view, add, and reply to comments for objectives and KPIs that are displayed in the view. For example, you can work with comments in the "Strategy Tree tab: Diagram tab".

> **Note:** You can also work with comments in this same way when a view is rendered as a diagram in a dashboard.

To work with comments in the Diagram tab of a view:

1. Open or edit the scorecard. See "Opening or Editing Scorecards" for additional information.

2. Open the view in which you want to work with comments and navigate to the Diagram tab. See "Opening Scorecard Objects" for additional information about how to open an object.

3. Ensure that the values that are displayed in the point of view area reflect the desired context for the comment. (For example, you might want to comment on a KPI status for the Eastern region.)

4. To add a new comment:

   a. Click the **Options** button on the right side of the node to which you want to add the comment and select **Add Comment** from the "Node Options Menu." The "New Comment dialog" is displayed.

   b. Complete the Add Comment dialog and click **OK**.

5. To work with the comments that were previously added to an object, hover the mouse pointer over the **Comment** button in the upper-right corner of the node.

   The "Status window" is displayed with all the comments that are attached to the initiative, objective, or KPI. From this window, you can:

   - Read the comments that were previously added.

   - Display the "New Comment dialog" to add a new comment by clicking **New Comment**.

   - Display the "Reply dialog" to reply to a comment by clicking the **Reply** link.

   - Pin the window so that it stays open by clicking the **Pin** button.

Understanding Initiative or Objective Performance Assessment

Oracle Business Intelligence assesses the performance of an initiative or objective by aggregating the assessments of its children. In the process, it uses:

- Scorecard assessment mappings that you define. See "About Assessment Mappings" for additional information.

- Assessment formulas (such as **Weighted** or **Best Case**) assigned to all objectives and initiatives. The assessment formulas include:

  - **Worst case** — Specifies that the status of the worst performing child KPI or objective is to be used.

  - **Best case** — Specifies that the status of the best performing child KPI or objective is to be used.

  - **Most Frequent (Worst Case)** — Specifies that, if half the child KPIs and objectives have high performance and half have low performance, then use the status of the worst performing child KPI or objective.

- **Most Frequent (Best Case)** — Specifies that, if half the child KPIs and objectives have high performance and half have low performance, then use the status of the best performing child KPI or objective.

- **Weighted** — Specifies to use a weighted average based on the weights you have assigned to the child KPIs and objectives. See "Assigning Weights to Child Objectives, Initiatives and KPIs" for additional information.

  If a child KPI has no data, it will not be included in the aggregation. Instead, its weight will be distributed among the other child KPIs and objectives.

You assign assessment formulas when you create an objective or initiative. See "Creating Objectives" or "Creating Initiatives" for additional information on how to create an objective or initiative.

- Weights that you assign to child initiatives, objectives, and KPIs (but only if the parent's assessment rule is set to **Weighted**) to identify the extent to which each child contributes to the overall performance of the parent. See "Assigning Weights to Child Objectives, Initiatives and KPIs" for additional information.

See "Example of Determining the Performance Assessment for an Objective Based on Child Objectives" and "Example of Determining the Performance Assessment for an Objective Based on a Child KPI" for examples of performance assessments.

About Assessment Mappings

Assessment mappings are the score thresholds and assessment ranges that Oracle Business Intelligence uses to assess the performance of objectives and initiatives.

Oracle Business Intelligence uses these score thresholds and assessment ranges to:

- Determine the status and score of an objective or initiative based on the aggregation of the assessments of its children.

  > **Note:** If the assessment formula of an objective or initiative is Best Case, Worst Case, Most Frequent (Worst Case), or Most Frequent (Best Case), the score will be one of the defined score thresholds, for example, 0, 33, or 66. If the assessment formula is Weighted, the score is computed based on the weights assigned to the children.

- Map the KPI scores of KPIs that are used to measure the progress of initiatives and objectives to scorecard scores so that they can be used to measure the performance of the objectives or initiatives.

Figure 13–11 shows an example of score thresholds falling in specific assessment ranges. The assessment ranges are defined as follows:

- 67 to 100 falls in the **OK** assessment range
- 34 to 66 falls in the **Warning** assessment range
- 0 to 33 falls in the **Critical** assessment range

Figure 13–11   Example of Assessment Mappings for a Scorecard

See "Understanding Initiative or Objective Performance Assessment" for additional information on initiative and objective performance assessment.

See "Defining Assessment Mappings for Scorecards" for how to define assessment mappings.

Example of Determining the Performance Assessment for an Objective Based on Child Objectives

Suppose the following about an objective named Improve Financial Results:

- It has an assessment rule of Worst Case.

- The assessment mappings defined for the scorecard that contains it are the same as those in Figure 13–11.

- It has the following two child objectives:

  - Increase Sales, whose status is Critical and score is 0.

  - Reduce Cost, whose status is Warning and score is 50.

In this case, the performance assessment of the Improve Financial Results objective would be the status and score of the child with the worst status and score, that is, Increase Sales, which has a scorecard status of Critical and a score of 0.

Example of Determining the Performance Assessment for an Objective Based on a Child KPI

Suppose the following about an objective named Enhance Stockholder Satisfaction:

- It has an assessment formula of Best Case.

- The assessment mappings defined for the scorecard that contains it are the same as those in Figure 13–11.

■ It has a child KPI named Revenue KPI, whose scorecard status is OK and score is 66.

Note that Revenue KPI has a KPI status of 4 Stars and score of 80 based on the following KPI thresholds and scores displayed in Figure 13–12:

Figure 13–12   KPI States for Revenue KPI

When Revenue KPI was added to the Enhance Stockholder Satisfaction objective, Oracle Business Intelligence mapped the KPI score to a scorecard score so that it could be used to measure the performance of the objective. Since the KPI score of 80 fell in the scorecard assessment range of 66 to 100, it mapped to a scorecard score of 66 and status of OK.

In this case, the performance assessment of the Enhanced Stockholder Satisfaction objective would be the status and score of the child with the best status and score, that is, Revenue KPI (in this case the only child), which has a scorecard status of OK and a score of 66.

Defining Assessment Mappings for Scorecards

You use the "Settings dialog: Assessment Mappings tab" to define the assessment mappings for a scorecard.

See "Understanding Initiative or Objective Performance Assessment" for additional information on initiative and objective performance assessment.

To define assessment mappings:

1. Edit the scorecard for which you want to define assessment mappings. See "Opening or Editing Scorecards" for additional information.

2. Click the **Scorecard Settings** toolbar button in the Scorecard editor.

   The "Settings dialog: Assessment Mappings tab" is displayed.

3. In the **Score Threshold** fields, enter the numeric values that set the boundaries for the assessment ranges.

For example, you might enter 33 and 66 to set the boundaries for three assessment ranges — Critical, Warning, and OK. Any KPI score from 0 to 33 would fall in the Critical assessment range, any KPI score from 34 to 66 would fall in the Warning assessment range, and any KPI score from 66 to 100 would fall in the OK assessment range.

> **Best Practice:**   Accept scores automatically assigned by the KPI editor, which are based on the number of thresholds. See "Creating KPIs" for additional information.

4. In the **Assessment Range** boxes, specify the name of each assessment range (for example, Critical) and, for each range, specify the icon and the color to be used to represent the range.

5. Click **OK**.

Assigning Weights to Child Objectives, Initiatives and KPIs

You assign weights to the child objectives, initiatives, and KPIs of an objective or initiative to indicate how much it affects the performance of its parent objective.

To assign weights to child objectives, initiatives, and KPIs, the Assessment Rule for the parent objective or initiative must be set to **Weighted**.

See "Understanding Initiative or Objective Performance Assessment" for additional information on objective and initiative performance.

To assign weights to child objectives, initiatives and KPIs of an objective or initiative:

1. Edit the scorecard that contains the parent objective or initiative of the objectives, initiatives, and KPIs to which you want to assign weights. See "Opening or Editing Scorecards" for additional information.

2. Open the parent objective or initiative. To do so, double-click the objective in the in the "Strategy pane" or the initiative in the "Initiatives pane."

3. In the **Objectives & KPIs** or **Initiatives and KPIs** watchlist of the "Analytics pane," enter a weight for each child objective, initiative, or KPI.

For example, assign the following objectives to the four child objectives of the root objective of the scorecard:

- Improve Financial Results: 50%

- Enhance Customer Satisfaction: 25%

- Streamline Operations: 15%

- Increase Empl Effectiveness: 10%

4. Click **Save**.

About Status Overrides

You can override the statuses of initiatives, objectives, or KPIs that measure the performance of initiatives and objectives. To override a status, you must be the business owner of the initiative, objective, or KPI. You can also cancel an override.

> **Note:** Before you can work with status overrides, your administrator must enable this feature. See "Configuring the Repository for Oracle Scorecard and Strategy Management" in *Metadata Repository Builder's Guide for Oracle Business Intelligence Enterprise Edition* for additional information.

You can work with status overrides in many places in a scorecard. For example, you can apply a status override to an objective in the "Scorecard editor: Objective Details tab." You can also apply a status override to an objective in the Diagram tab of a view, a smart watchlist, and a perspective in which its referenced.

A status override is associated with:

- An initiative, objective, or KPI that measures the progress of an initiative and objective.

  When an initiative, objective, or KPI that has a status override associated with it is referenced elsewhere in a scorecard, and the point of view being displayed matches that of the status override, a status override indicator — a red asterisk (*) — is displayed as follows:

  – In a watchlist, it is displayed to the right of the status symbol in the row containing the initiative, objective, or KPI. (See "Watchlists" for additional information.

  – In a node in the Diagram tab of a view, it is displayed to the right of the status symbol in the lower-left corner of the node.

- The status column of an objective, initiative, or KPI.

- A specific point of view.

  Status overrides are filtered by the values in the point of view area in the "Scorecard editor" that are currently in effect for the object being viewed. As a result, the status override for Eastern Region Sales can be different than the status override for Western Region Sales. (See "About the Point of View Area" for additional information on the point of view.)

- Any dimension pinnings on the KPI.

  Status overrides are filtered by any other dimension pinnings which are in effect (on a KPI, scorecard, scorecard diagram, dashboard prompt, or KPI watchlist).

See "Working with Status Overrides" for additional information about how to work with status overrides.

Working with Status Overrides

You can work with status overrides in many places in a scorecard, including in:

- Watchlists

  See "Working with Comments in Watchlists" for additional information

- The Diagram tab of a view.

See "Working with Status Overrides in the Diagram Tab of a View" for additional information

As you work with status overrides, remember that a status override is associated with a specific point of view. See "About the Point of View Area" for additional information.

> **Tip:** Prior to overriding a status, ensure that the business owner has been set for the KPI, initiative, or objective. See "Creating KPIs" for additional information on how to add a business owner to a KPI.

See "About Status Overrides" for additional information about status overrides.

Working with Status Overrides in Watchlists

In a watchlist, you can view status overrides and override cancellations that were previously applied, and apply new overrides and override cancellations to the initiatives or objectives, and KPIs in the watchlist. See "Watchlists" for additional information.

To work with status overrides in a watchlist:

1. Open or edit the scorecard. See "Opening or Editing Scorecards" for additional information.

2. Open the object in which you want to work with status overrides and navigate to the appropriate pane or tab. See "Opening Scorecard Objects" for additional information about how to open an object.

3. Ensure that the values that are displayed in the point of view area reflect the desired context for the status override. (For example, you might want to override the status of a KPI for the Eastern region.)

4. To override a status or to cancel an override:

   a. In the watchlist, right-click the **Status** cell in which you want to override the status or cancel an override and select **Override Status**. The "Status Override dialog" is displayed.

   b. Complete the Status Override dialog and click **OK**.

5. To view status overrides or override cancellations that were previously applied to an object, hover the mouse pointer over the red asterisk to the right of the status symbol.

   The "Status window" is displayed. From this window, you can:

   ■ View status overrides or override cancellations that were previously applied.

   ■ Display the Status Override dialog to apply a new override or to cancel an override by clicking **New Override**.

   ■ Pin the window so that it stays open by clicking the **Pin** button.

Working with Status Overrides in the Diagram Tab of a View

In the Diagram tab of a view, you can view status overrides and override cancellations that were previously applied, and apply new overrides and override cancellations to objectives and KPIs that are displayed in the view. For example, you can work with status overrides in the "Strategy Tree tab: Diagram tab."

To work with status overrides in the Diagram tab of a view:

1. Open or edit the scorecard. See "Opening or Editing Scorecards" for additional information.

2. Open the view in which you want to work with status overrides and navigate to the Diagram tab. See "Opening Scorecard Objects" for additional information about how to open an object.

3. Ensure that the values that are displayed in the point of view area reflect the desired context for the status override. (For example, you might want to override the status of a KPI for the Eastern region.)

4. To apply a new status override:

   a. Click the **Options** button on the right side of the node to which you want to apply the status override and select **Override Status** from the "Node Options Menu." The "Status Override dialog" is displayed.

   b. Complete the Status Override dialog and click **OK**.

5. To view status overrides that were previously applied to an object, hover the mouse pointer over the red asterisk to the right of the status symbol.

   The "Status window" is displayed. From this window, you can:

   - View status overrides that were previously applied.

   - Display the Status Override dialog to apply a new override by clicking **New Override**.

   - Pin the window so that it stays open by clicking the **Pin** button.

What Are Strategy Trees?

A strategy tree shows an objective and its supporting child objectives and KPIs hierarchically. It also provides supporting information for the objective, such as business owner and related documents.

A strategy tree lets you explore and navigate:

- The strategy for an entire scorecard (that is, the root objective) for example, ABC Corporation

- The strategy for an individual objective, for example, Decrease Support Turnaround.

There are two types of diagrams for a strategy tree:

- Strategy tree diagram. See "Understanding a Strategy Tree Diagram" for additional information.

- Strategy contribution wheel diagram. See "Understanding a Strategy Contribution Wheel Diagram" for additional information.

See "Creating Strategy Trees" for additional information on creating a strategy tree.

Understanding a Strategy Tree Diagram

You use a strategy tree diagram to view an objective and its supporting child objectives and KPIs hierarchically in a tree diagram. It contains the following components:

- **The tree diagram** — Consists of nodes that represent an objective and its supporting objectives and KPIs. Each node shows the status of the objective or KPI

by displaying the icon and color that represents the assessment range. A KPI node also displays the actual value of the KPI and the percent variance from the target.

- **The bird's eye view** — Provides an overhead view of the tree diagram.

Figure 13–13 shows an example of a strategy tree diagram.

Figure 13–13   Example of a Strategy Tree Diagram
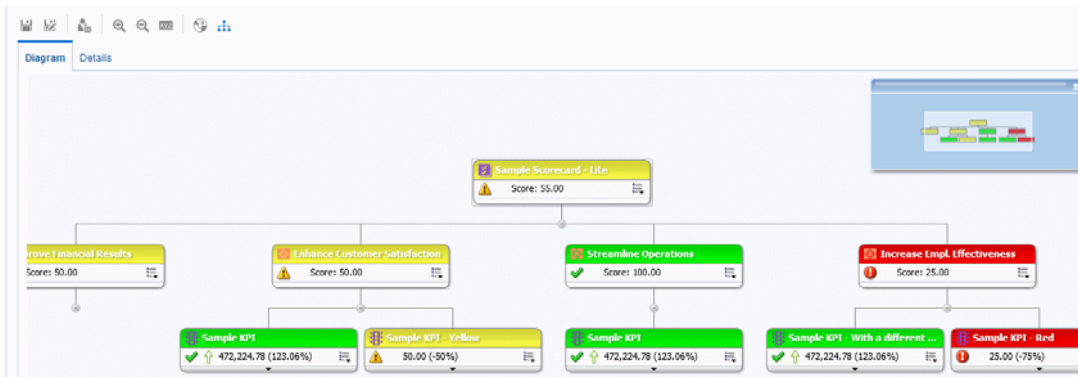
Understanding a Strategy Contribution Wheel Diagram

You use a strategy contribution wheel diagram to hierarchically view an objective and its supporting child objectives and KPIs in a circular diagram called a strategy contribution wheel diagram. The strategy contribution wheel diagram makes it easy to see the contribution (or impact) a specific objective or KPI has on a parent objective. It contains the following components:

- **Strategy contribution wheel** — Consists of a center circle (or focus node) that represents the starting objective of the diagram. It is surrounded by concentric circles that are divided into sectors. Each sector is a node that represents a child objective or KPI.

  The size of a sector is determined by the weight assigned to the represented objective or KPI in its parent's weighted assessment rule. See "Assigning Weights to Child Objectives, Initiatives and KPIs" for additional information on assigning weights. If the parent has no weighted assessment rule, then the child sectors of a parent are all the same size.

- **Information pane** — Displays the following information about the current node:

  - The status icon and either the score (for an objective) or the actual values and variance percentage (for a KPI)

  - The status of its children

  - The weight assigned to it in its parent's weighted assessment rule

- **Focus trail** — Consists of a group of small circles that represent the node in the center of the strategy contribution wheel and any of its ancestors that are included in the diagram. Each circle displays the status color of its corresponding node.

Figure 13–14 shows an example of a strategy contribution wheel diagram for the Improve Financial Results objective. The Reduce Cost subordinate objective is highlighted.

Figure 13–14   Example of a Strategy Contribution Wheel Diagram
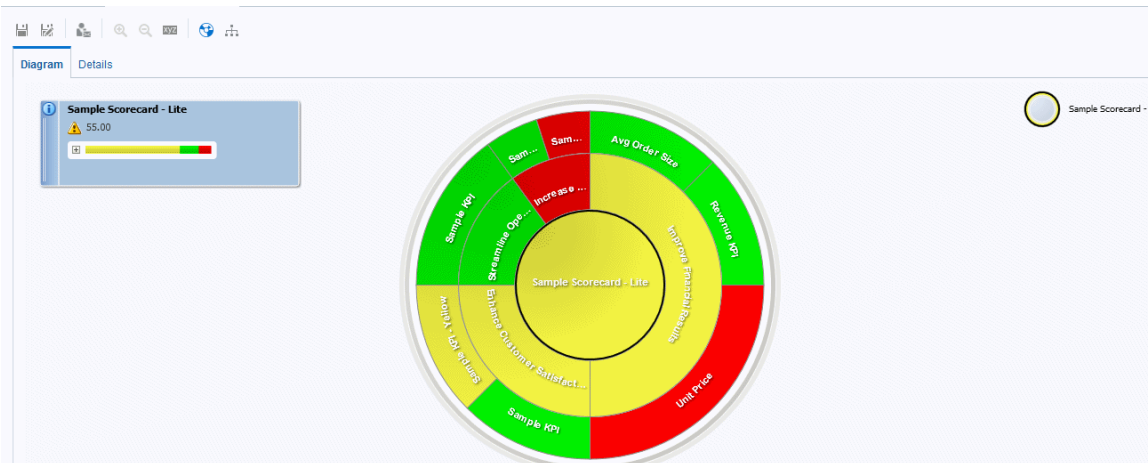
Creating Strategy Trees

You can create a strategy tree for the entire scorecard or for a specific objective as follows:

- In Edit mode, you can create and save a strategy tree for an entire scorecard and for specific objectives.

- In View mode, you can create a temporary, read-only strategy tree only for specific objectives. You cannot save the strategy tree.

  See "Using the Edit and View Modes in the Scorecard Editor" for additional information about the Edit and View modes.

To create a strategy tree:

1. If you want to:

    - Create and save a strategy tree for an entire scorecard or for a specific objective, edit the scorecard in which you want to create the strategy tree. See "Opening or Editing Scorecards" for additional information.

    - Create but not save a temporary, read-only strategy tree only for a specific objective, open the scorecard. See "Opening or Editing Scorecards" for additional information.

2. To create a strategy tree for:

    - The entire scorecard (the root objective), in the "Scorecard Documents pane," click the **New Object** toolbar button and select **Create Strategy Tree**.

    - For a specific objective, in the "Strategy pane," right-click the objective and then select **View Strategy Tree**.

    The "Strategy Tree tab: Diagram tab" is displayed, showing the objective and its supporting child objectives and KPIs hierarchically in a diagram.

3. In a strategy tree diagram, to:

    - Display options that enable you to work with a node, click the **Options** button (on the right side of the node) to display the "Node Options Menu."

    - Display additional performance data for a KPI, such as target value or variance, click the down arrow at the bottom center of the node. To collapse this data, click the up arrow.

- Expand or collapse a node, click the plus (+) or minus (-) icon beneath the node.
- Zoom in and out of the diagram, use the toolbar buttons on the "Scorecard editor: Strategy Tree tab."
- Work with comments:
  - Hover the mouse pointer over the **Comment** button in the upper-right corner of a node to display the "Status window," where you can read the comments that were previously added, add another comment, or reply to a comment.
  - Click the **Options** button on the right side of the node to which you want to add a comment and select **Add Comment** from the "Node Options Menu." The "New Comment dialog" is displayed, where you can add a comment or read any comments that were previously added.

  See "About Comments" and "Working with Comments" for additional information.
- Work with status overrides on nodes for which you are the business owner:
  - Hover the mouse over the red asterisk (if available) in a node to display the "Status window," where you can view the overrides that were previously applied or apply another override.
  - Click the **Options** button on the right side of the node to which you want to apply the status override and select **Override Status** from the "Node Options Menu." The "Status Override dialog" is displayed, where you apply another override or view any overrides that were previously applied.

  See "About Status Overrides" and "Working with Status Overrides" for additional information.
- Change the type of diagram to a strategy contribution wheel diagram, right-click in the background outside the tree and select **View as Wheel Diagram** or click the **Wheel Diagram Type** toolbar button in the "Scorecard editor: Strategy Tree tab."
- View a KPI contribution wheel diagram, right-click the KPI, and then select **View KPI Contribution Wheel** from the context menu (see "About KPI Contribution Wheel Diagrams" for additional information). Note that you can also click the **Options** button on the right side of the node and select **View KPI Contribution Wheel** from the "Node Options Menu."

4. In a strategy contribution wheel diagram, to:

- Display information specific to a node (such as the weight assigned to it in its parent's assessment rule), hover the mouse over the node.
- Display options that allow you to work with a node, right-click the node to display the "Node Options Menu." For example, you can change the focus of the wheel using the **Focus on** *Node* and **Focus up to** *Node* options.
- Change the focus of the wheel down to a descendant, double-click the descendant node.
- Zoom in and out of the diagram or set properties for the strategy tree, use the toolbar buttons on the "Scorecard editor: Strategy Tree tab."

- Drill to the next level or collapse a level, hover the mouse over the concentric rings on the outer border of the wheel and click the **Drill to next level** or **Collapse Level** triangle.

- Expand or collapse a node or group of nodes that appear as slivers (that is, appear very thin) in the diagram, click the **Expand Section** triangle or the **Collapse Section** triangle that displays when you hover over it. You can expand only slivers in the second concentric circle around the center and farther out.

- Work with comments (if any), click the **Comment** button in a node to display the "Status window," where you can read the comments that previously have been added, add another comment, or reply to a comment. See "About Comments" for additional information.

- Work with status overrides (if any), click the white dashed line around the border of a node to display the "Status window," where you can view the overrides that previously have been applied or apply another override. See "About Status Overrides" for additional information.

- Change the type of diagram to a strategy tree diagram, right-click in the background outside the wheel and select **View as Tree Diagram** or click the **Tree Diagram Type** toolbar button in the "Scorecard editor: Strategy Tree tab."

- View a KPI contribution wheel diagram, right-click the KPI, and then select **View KPI Contribution Wheel** from the context menu (see "About KPI Contribution Wheel Diagrams" for additional information).

5. To set properties that control the appearance of the diagrams, click the **Properties** toolbar button on the "Scorecard editor: Strategy Tree tab."

   The "Strategy Tree View Properties dialog" is displayed.

6. Specify the property settings to achieve the desired appearance, and then click **OK**.

7. Click the "Strategy Tree tab: Details tab."

8. Specify a description, assign the business owner, and specify related documents, as appropriate. (By default, the business owner is the creator of the scorecard.)

9. Click **Save** to display the "Save As dialog." In the Save As dialog, you can rename the strategy tree rather than use the default name.

What Are Strategy Maps?

A strategy map shows how the objectives that have been defined for a scorecard and the KPIs that measure their progress are aligned by perspectives. It also indicates cause and effect relationships between objectives and other objectives or KPIs with connecting lines. You create cause and effect relationships when you create (or edit) an objective (see "Creating Objectives") or work with KPI details (see "Working with KPI Details"). You also can create cause and effect relationships in a strategy map.

Figure 13–15 shows an example of a strategy map.

Figure 13–15   Example of a Strategy Map
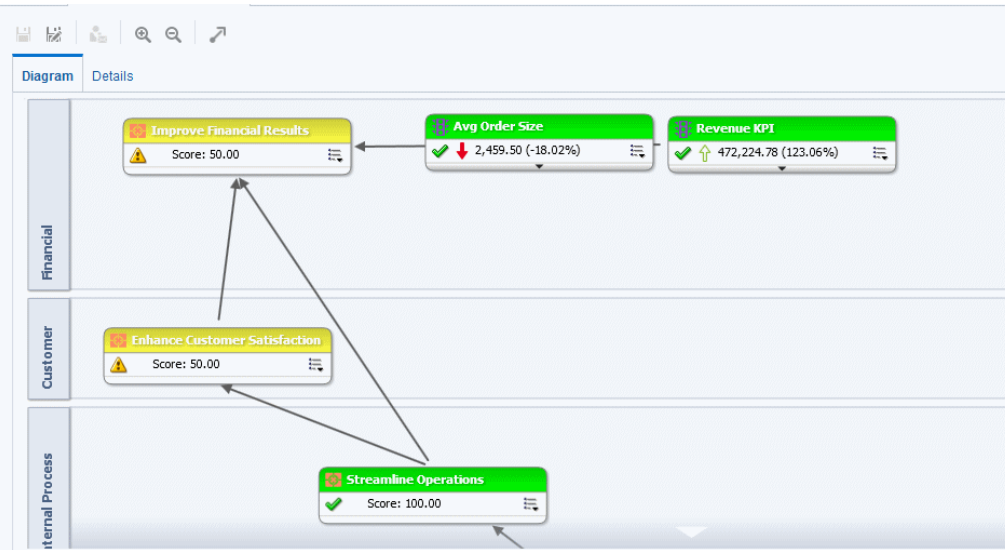
You can create multiple strategy maps to represent the strategy of different areas of your organization.

You can create strategy maps in Edit mode only. See "Using the Edit and View Modes in the Scorecard Editor" for additional information about the Edit and View modes.

See "Creating Strategy Maps" for additional information on creating strategy maps.

> **Best Practice:**   Ensure that associated objectives and KPIs relate to each other and identify cause and effect relationships. Review these relationships periodically to identify areas that might need improvement to increase collaboration and communication, thus impacting existing objectives and KPIs.

Creating Strategy Maps

To create a strategy map:

1. Edit the scorecard in which you want to create the strategy map. See "Opening or Editing Scorecards" for additional information.

2. In the "Scorecard Documents pane," click the **New Object** toolbar button and select **Create Strategy Map**.

   The "Strategy Map tab: Diagram tab" is displayed.

3. Build the map as follows:

   ■ Add objectives and KPIs that measure their progress by dragging them from the "Strategy pane" and dropping them in the diagram as follows:

   – If the objective or KPI is aligned with a specific perspective, then drop it anywhere in the diagram. It is displayed automatically in the section for the perspective to which the objective or KPI is associated.

     You align an objective or KPI with a perspective when you create (or edit) the objective or KPI. See "Creating Objectives" for additional information. See "What Are Perspectives?" for additional information about perspectives.

–   If the objective or KPI is not associated with a perspective, then you drop it in the section for the perspective to which the objective or KPI is to be associated. Note that this does not permanently assign the perspective to this objective or KPI.

■   (optional) Add the direct cause and effect objects for the selected node (that is, the representation of an objective or KPI) to the diagram by right-clicking and selecting **Add Related Strategy Nodes**.

■   Add cause and effect relationships, as needed.

    To add a cause and effect relationship, click the **Draw A Casual Linkage Between Two Objectives** button on the "Scorecard editor: Strategy Map tab" toolbar, select one of the nodes, and then select the second node. A line connecting the nodes is displayed.

If you want to delete a node from the map, then right-click the node and select **Remove From Diagram**.

4. To:

■   Display options that enable you to work with a node, click the **Options** button (on the right side of the node) to display the "Node Options Menu."

■   Edit a causal linkage, right-click the linkage line and select **Edit Causal Linkage**. The "Causal Linkage dialog" is displayed.

■   Delete a causal linkage, right-click the linkage line and select **Delete Causal Linkage**.

■   Display additional performance data for the KPI, such as target value or variance, click the down arrow at the bottom center of the representation. To collapse this data, click the up arrow.

■   Zoom in and out of the diagram, use the toolbar buttons on the "Scorecard editor: Strategy Map tab."

■   Work with comments:

    –   Hover the mouse pointer over the **Comment** button in the upper-right corner of a node to display the "Status window," where you can read the comments that were previously added, add another comment, or reply to a comment.

    –   Click the **Options** button on the right side of the node to which you want to add a comment and select **Add Comment** from the "Node Options Menu." The "New Comment dialog" is displayed, where you can add a comment or read any comments that were previously added.

    See "About Comments" and "Working with Comments" for additional information.

■   Work with status overrides on nodes for which you are the business owner:

    –   Hover the mouse over the red asterisk (if available) in a node to display the "Status window," where you can view the overrides that were previously applied or apply another override.

    –   Click the **Options** button on the right side of the node to which you want to apply the status override and select **Override Status** from the "Node Options Menu." The "Status Override dialog" is displayed, where you apply another override or view any overrides that were previously applied.

See "About Status Overrides" and "Working with Status Overrides" for additional information.

- View a KPI contribution wheel diagram, right-click the KPI, and then select **View KPI Contribution Wheel** from the context menu (see "About KPI Contribution Wheel Diagrams" for additional information). Note that you can also click the **Options** button on the right side of the node and select **View KPI Contribution Wheel** from the "Node Options Menu."

5. Click the "Strategy Map tab: Details tab."

6. Specify a description, assign the business owner, and specify related documents, as appropriate. (By default, the business owner is the creator of the scorecard.)

7. Click **Save** to display the "Save As dialog." In the Save As dialog, you can rename the strategy map rather than use the default name.

What Are Cause & Effect Maps?

A cause & effect map lets you illustrate the cause and effect relationships of an objective or KPI that is listed in the "Strategy pane." (Note that cause & effect maps are diagrams that are used in scorecard and are not related to map views that are described in Chapter 4, "Adding Views for Display in Dashboards.")

Figure 13–16 shows an example of a cause & effect map for the Improve Financial Results objective.

Figure 13–16   Example of a Cause & Effect Map
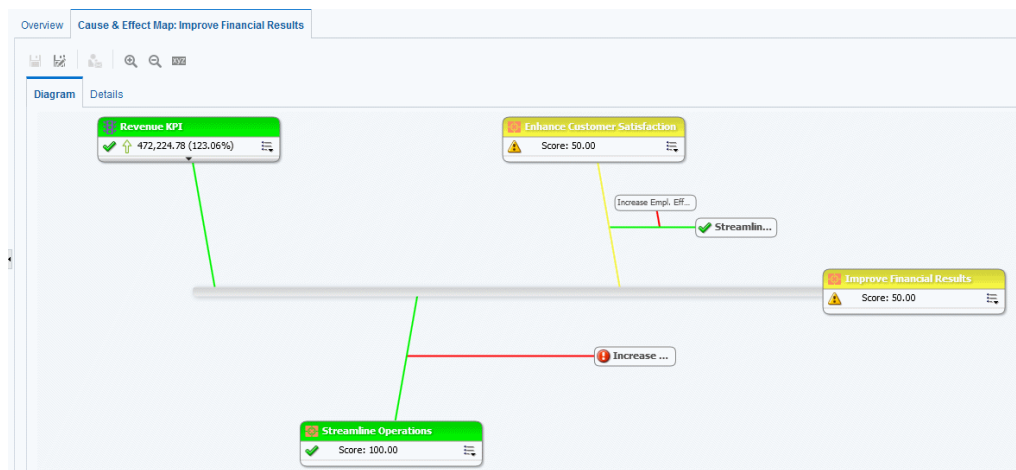
You create cause and effect relationships for:

- An objective when you create or edit the objective and identify:
  - Other objectives or KPIs that impact or support the objective (causes)
  - Other objectives or KPIs that this objective impacts or supports (effects)

  See "Creating Objectives" for additional information.

- A KPI when you work with KPI details.
  - Other objectives or KPIs that impact or support the KPI (causes)
  - Other objectives or KPIs that this KPI impacts or supports (effects)

  (See "Working with KPI Details" for additional information.

A cause and effect map also indicates the proportionality (that is, whether changes in performance or value in the cause and effect relationship are directly proportional (direct) or inversely proportional (inverse) and strength (strong, moderate, or weak) of cause & effect relationships using symbols.

A cause & effect map helps you to better understand the implications of future strategic changes.

You can create a cause & effect map in either Edit or View mode:

- In Edit mode, you can create and save a cause & effect map.

- In View mode, you can create a temporary, read-only cause & effect map. You cannot save it.

  See "Using the Edit and View Modes in the Scorecard Editor" for additional information about the Edit and View modes.

Best Practice: Create cause and effect linkages to automatically show operational metrics and dependencies.

See "Creating Cause & Effect Maps" for additional information on creating cause & effect maps.

Creating Cause & Effect Maps

You can create a cause & effect map for any objective or KPI that is listed in the "Strategy pane." See "What Are Cause & Effect Maps?" for additional information on cause & effect maps.

To create a cause & effect map:

1. If you want to:

    - Create and save a cause & effect map, edit the scorecard in which you want to create the cause & effect map. See "Opening or Editing Scorecards" for additional information.

    - Create but not save a temporary, read-only cause & effect map, open the scorecard in which you want to create the cause & effect map. See "Opening or Editing Scorecards" for additional information.

2. In the "Strategy pane," right-click the objective or KPI and then select **View Cause & Effect Map**.

    The "Cause & Effect Map tab: Diagram tab" is displayed.

3. To:

    - Display options that enable you to work with a node, right-click the node or click the **Options** button (on the right side of the node) to display the "Node Options Menu."

    - Display additional performance data for a KPI, such as target value or variance, click the down arrow at the bottom center of the node. To collapse this data, click the up arrow.

    - Edit a causal linkage, right-click the linkage line and select **Edit Causal Linkage**. The "Causal Linkage dialog" is displayed.

    - Delete a causal linkage, right-click the linkage line and select **Delete Causal Linkage**.

- Zoom in and out of the diagram or to set preferences, use the toolbar buttons on the "Scorecard editor: Cause & Effect Map tab."

- Work with comments:

  – Hover the mouse pointer over the **Comment** button in the upper-right corner of a node to display the "Status window," where you can read the comments that were previously added, add another comment, or reply to a comment.

  – Click the **Options** button on the right side of the node to which you want to add a comment and select **Add Comment** from the "Node Options Menu." The "New Comment dialog" is displayed, where you can add a comment or read any comments that were previously added.

  See "About Comments" and "Working with Comments" for additional information.

- Work with status overrides on nodes for which you are the business owner:

  – Hover the mouse over the red asterisk (if available) in a node to display the "Status window," where you can view the overrides that were previously applied or apply another override.

  – Click the **Options** button on the right side of the node to which you want to apply the status override and select **Override Status** from the "Node Options Menu." The "Status Override dialog" is displayed, where you apply another override or view any overrides that were previously applied.

  See "About Status Overrides" and "Working with Status Overrides" for additional information.

- View a KPI contribution wheel diagram, right-click the KPI, and then select **View KPI Contribution Wheel** from the context menu (see "About KPI Contribution Wheel Diagrams" for additional information). Note that you can also click the **Options** button on the right side of the node and select **View KPI Contribution Wheel** from the "Node Options Menu."

4. To specify how cause and effect relationships are to be displayed on the cause & effect map, click the **Cause & Effect Map Preferences** toolbar button on the "Scorecard editor: Cause & Effect Map tab."

   The "Cause & Effect Map Preferences dialog: General tab" is displayed.

5. Specify how you want cause and effect relationships displayed and then click **OK**.

6. Click the "Cause & Effect Map tab: Details tab."

7. Specify a description, assign the business owner, and specify related documents, as appropriate. (By default, the business owner is the creator of the scorecard.)

8. Click **Save** to display the "Save As dialog." In the Save As dialog, you can rename the cause & effect map rather than use the default name.

Understanding Watchlists

"Watchlists" are tables that list scorecard objects (that is, initiatives, objectives, and KPIs) that are related to a particular aspect of a scorecard or that are grouped together for a particular purpose.

Some watchlists are components of scorecard objects. These include the following watchlists:

- **Initiatives & KPIs watchlist** — Lists the child initiatives and the KPIs that are used to evaluate the performance of an initiative.

  This watchlist is displayed in the "Analytics pane" of the "Scorecard editor: Initiative Details tab."

- **Objectives & KPIs watchlist** — Lists the child objectives and the KPIs that are used to evaluate the performance of an objective or that are displayed in a view (that is, cause & effect map, custom view, strategy tree, or strategy map).

  This watchlist is displayed in the following tabs:

  - "Analytics pane" of the "Scorecard editor: Objective Details tab"
  - "Cause & Effect Map tab: Details tab"
  - "Custom View tab: Details tab"
  - "Strategy Map tab: Details tab"
  - "Strategy Tree tab: Details tab"

- **Objectives, Initiatives & KPIs watchlist** — Lists the initiatives, objectives, and KPIs that are associated with a perspective.

  This watchlist is displayed in the "Scorecard editor: Perspective tab."

Other watchlists you create to serve a particular purpose. These include the following watchlists:

- **KPI watchlist** — Lists the KPIs whose performance you want to monitor.

  This watchlist is displayed in the "KPI Watchlist editor: Performance tab."

  See "What Are KPI Watchlists?" for additional information on KPI watchlists.

- **Smart watchlist** — Lists the initiatives, objectives, and KPIs within a scorecard that meet criteria that you specify.

  This watchlist is displayed in the "Scorecard editor: Smart Watchlist tab."

  See "What Are Smart Watchlists?" for additional information on smart watchlists.

- **Breakdown watchlist** — Lists the child or descendant initiatives or objectives and KPIs that are used to evaluate the performance of an initiative or objective.

  This watchlist is displayed in the "Scorecard editor: Breakdown tab."

A watchlist includes columns that describe the scorecard objects (such as Status, % Variance, and so on) and components (such as **View** or **Summary**) that allow you to view and manage these objects.

For example, you can create an Objectives & KPIs watchlist consisting of two objectives — % Early Shipped and Fulfillment Days — that are used to evaluate the performance of an objective named Enhance Customer Satisfaction.

Customizing Watchlists

You can use the Scorecard "Settings dialog: Watchlist Styles tab" to customize watchlists used on Scorecards, Objectives, Initiatives, Perspectives, Smart Watchlists, Custom Views, Strategy Tree Views, Strategy Maps, and Cause Effect Maps.

For each watchlist in a scorecard, you can customize watchlist styles, change the column order, display or hide columns, and change column labels at the following levels:

- Scorecard: Applies to all watchlists for the scorecard that do not have their own individual styles or column customizations.

- Individual Watchlist: Applies to an individual watchlist. The individual watchlist style overrides the scorecard level style

If no watchlist styles are set, the default style is used.

You can include the following format options to customize the watchlists:

- Font Name - You must enter the font name manually. You must a font name supported by a web browser used in your environment.

- Bold - Yes or No or Default

- Italic - Yes, or No or Default

- Border Style

- Border Color

- Font Color

- Background Color

You can set the above formats for individual cell (row and column) types independently and can apply different styles for alternate rows of the watchlist.

You can copy and paste styles from one cell to another, and with one click can apply a cell's style to the entire row. You can also set the styles for the header row and the selected (clicked on) row.

To customize watchlists:

1. Edit the scorecard for which you want to customize the watchlists. See "Opening or Editing Scorecards" for additional information.

2. Click the **Scorecard Settings** toolbar button in the Scorecard editor.

3. Click the **Watchlist Styles** tab.

   The "Settings dialog: Watchlist Styles tab" is displayed.

4. **Optional:** From the Preset Styles list, select a style for your organization.

5. **Optional:** Check **Show Object Type Icon** to display the icon for KPI, Objective, or Initiative node types in the watchlist rows.

6. **Optional:** Check **Enable Alternate Row Styling** if you want to customize alternate row styles.

7. Use the View list, to show or hide columns or change column names.

   > **Note:** You can similarly use the View list above each watchlist to customize individual watchlists.

8. Use the Edit icons to format the following cell (row or column) types:

   - Summary - information displayed above the watchlist table

   - Various columns in the Column Header Row

   - Various columns in the Body Rows

   - Various columns in the Alternate Body Rows

   - The Selected (clicked on) Row

9. For each cell (row or column) type, choose the following:

   ■ Font Name - Manually enter the font name that is supported by your browser

   ■ Bold - Yes or No or Default

   ■ Italic - Yes or No or Default

   ■ Border Style

   ■ Font Color

   ■ Background Color

   ■ Border Color

10. Click **Apply Styles** and then click **OK**.

What Are KPI Watchlists?

A KPI watchlist is a collection of KPIs whose performance you want to monitor.

You can create KPI watchlists:

■ Within a scorecard. You create a KPI watchlist within a scorecard to help you view and investigate the progress of the objectives and initiatives. KPI watchlists that you create within a scorecard are saved as part of the scorecard. See "What Are Smart Watchlists?" for additional information.

■ Outside a scorecard. This enables you to create a KPI watchlist in advance of creating or editing a scorecard. KPI watchlists that you create outside a scorecard are saved as standalone objects in the Oracle BI Presentation Catalog.

For information on KPI watchlists and how to create them, see Chapter 12, "Using KPIs and KPI Watchlists."

Working with KPI Details

When you create initiatives and objectives, you can assign KPIs to them to measure their progress and performance. You can work with these KPIs within a Scorecard using the "Scorecard editor: KPI Details tab."

Specifically, you can:

■ View basic KPI settings as well as a graph that presents actual values and target values.

■ Override the label, description, and business owner that are defined for the KPI.

■ Pin dimensions. See "What Are Dimensions and Pinned Dimension Values?" for additional information on KPI dimensions and dimension pinning.

■ View documents that provide supporting information to the KPI.

■ Run actions that are associated with the KPI.

■ Associate the KPI with a perspective.

■ Specify an indicator type (for example, Leading) to indicate whether the performance of the KPI drives other KPIs, or is affected by the performance of other KPIs, or other data or processes.

■ View, add, or reply to comments.

■ Identify initiatives and KPIs (for a KPI listed in the "Initiatives pane") or objectives and KPIs (for a KPI listed in the "Strategy pane") that cause or effect the KPI.

To work with KPI details:

1. Edit the scorecard that contains the KPI. See "Opening or Editing Scorecards" for additional information.

2. If the KPI is assigned to an:

   ■ Initiative, double-click the KPI in the "Initiatives pane"

   ■ Objective, double-click the KPI in the "Strategy pane"

   The Scorecard editor: KPI Details tab is displayed.

3. Perform any of the following tasks:

   ■ Override one of the following items:

       – Label, using the *Label* field

       – Description, using the **Description** field

       – Business Owner, using the **Business Owner** field in the "Collaboration pane"

   ■ Pin dimensions using the **Dimensionality** area in the "Analytics pane."

   ■ Run actions that are associated with the KPI, using the action links in the **Actions** area of the Analytics pane.

   ■ Associate the KPI with a perspective, using the **Perspective** field in the Analytics pane.

   ■ Specify the indicator type, using the **Indicator Type** field in the Analytics pane.

   ■ View, add, or reply to comments, using the Collaboration pane. See "About Comments" for additional information on comments.

   ■ View documents that provide supporting information to the KPI, using the **Related Documents** area in the Collaboration pane.

   ■ Identify objectives that cause or effect the KPI, using the "Related Items pane."

4. If you made any changes, then click **Save**.

What Are Smart Watchlists?

A smart watchlist is a view into a particular scorecard based on criteria that you specify. For example, a smart watchlist might show the top ten KPIs in a scorecard based on best performance or all the objectives, initiatives, and KPIs in a scorecard that are owned by a specific business owner.

Figure 13–17 shows an example of a smart watchlist for the Improve Financial Results objective and all its descendants.

Figure 13–17   Example of a Smart Watchlist

A smart watchlist consists of the following components:

- **Filter pane** — This pane is displayed as a control panel, as a text summary, or is hidden, depending on the setting of the **Filter Criteria Display** component in the "Smart Watchlist Properties dialog." If displayed as a:

  - Control panel, it contains tabs that let you specify the criteria to be used to filter the smart watchlist. You can filter by object relationships, by object types, by perspective associations, by performance, and by business owner assignments.

  - Text summary, it displays a read-only text summary of the current filter criteria.

- **Smart watchlist** — Lists the objectives, initiatives, and KPIs in a scorecard that meet the criteria specified in the Filter pane.

- **Smart watchlist toolbar** — Contains buttons that allow you to save the smart watchlist and to specify smart watchlist properties, such as how the Filter pane is to be displayed (that is, as a control panel, a read-only text summary, or hidden).

You can create smart watchlists in Edit mode only.

In View mode, you can view a smart watchlist and, if the smart watchlist was saved with the Filter pane displayed as a control panel, you can specify filter criteria to dynamically change what is shown in the smart watchlist.

See "Using the Edit and View Modes in the Scorecard Editor" for additional information.

> **Best Practice:**   Create smart watchlists as a conduit to properly align performance drivers (objectives and initiatives) with their proper business owners and to assist in arriving at a consensus between stakeholders that will build commitment to move goal and target setting along to achieve the stated and desired results.

You can also add smart watchlists to dashboards. If the smart watchlist was saved with the Filter pane displayed as a control panel, end users will be able to specify filter criteria to dynamically change what is shown in the smart watchlist.

See "Creating Smart Watchlists" for additional information.

Creating Smart Watchlists

To create a smart watchlist:

1. Edit the scorecard in which you want to create the smart watchlist. See "Opening or Editing Scorecards" for additional information.

2. In the "Scorecard Documents pane," click the **New Object** toolbar button and select **Create Smart Watchlist**.

   The "Scorecard editor: Smart Watchlist tab" is displayed. Figure 13–18 shows an example of a smart watchlist.

Figure 13–18   The Scorecard Editor: Smart Watchlist Tab

3. In the Filter pane, specify the filter criteria as follows:

   a. In the "Filter pane: Relationship tab," specify the object relationships by which the scorecard objects are to be filtered. You can add objectives, initiatives, or KPIs by dragging the objects from the Strategy and Initiatives panes and dropping them in the "Filter pane: Relationship tab."

   b. In the "Filter pane: Type tab," specify the object types by which the scorecard objects are to be filtered.

   c. In the "Filter pane: Perspective tab," specify the perspective associations by which the scorecard objects are to be filtered.

   d. In the "Filter pane: Performance tab," specify the performance criteria (status, score, or ranking) by which the scorecard objects are to be filtered.

   e. In the "Filter pane: Ownership tab," specify the business owner assignments by which the scorecard objects are to be filtered.

4. Set smart watchlist properties. To do so, click the **Properties** toolbar button to display the "Smart Watchlist Properties dialog."

5. Manage the smart watchlist, as appropriate. See "Watchlists" for additional information.

6. Right-click a KPI row and select **View KPI Contribution Wheel**. See "About KPI Contribution Wheel Diagrams" for additional information.

7. Click **Save** to display the "Save As dialog." In the Save As dialog, you can rename the smart watchlist rather than use the default name.

What Are Custom Views?

A custom view lets you show a customized view of your business and strategy data. For example, you might present information about objectives and KPIs on a background image of your choice, such as your company logo.

You can create custom views in Edit mode only. See "Using the Edit and View Modes in the Scorecard Editor" for additional information.

See "Creating Custom Views" for additional information.

Creating Custom Views

To create a custom view:

1. Edit the scorecard in which you want to create the custom view. See "Opening or Editing Scorecards" for additional information.

2. In the "Scorecard Documents pane," click the **New Object** toolbar button and select **Create Custom View**.

The "Custom View tab: Diagram tab" is displayed.

3. Drag objectives and KPIs from the "Strategy pane" and drop them on the diagram.

4. Specify how you want each objective or KPI to be displayed on the diagram. For each objective or KPI, select it on the diagram and specify whether you want it displayed as:

- Its full version. To do so, click the **Full** toolbar button.

- Its simple version. To do so, click the **Simple** toolbar button.

- One of its properties. To do so, click the *Property* toolbar button and select the property.

5. (optional) Specify a background image, a background color, or both by clicking the **Properties** toolbar button to display the "Custom View Properties dialog."

6. To:

- Display options that enable you to work with a node, click the **Options** button (on the right side of the node) to display the "Node Options Menu."

- Display additional performance data for the KPI, such as target value or variance, click the down arrow at the bottom center of the node. To collapse this data, click the up arrow.

- Zoom in and zoom out of the diagram, use the toolbar buttons on the "Scorecard editor: Custom View tab."

- Work with comments:

  – Hover the mouse pointer over the **Comment** button in the upper-right corner of a node to display the "Status window," where you can read the comments that were previously added, add another comment, or reply to a comment.

  – Click the **Options** button on the right side of the node to which you want to add a comment and select **Add Comment** from the "Node Options Menu." The "New Comment dialog" is displayed, where you can add a

comment or read any comments that were previously added.

See "About Comments" and "Working with Comments" for additional information.

- Work with status overrides on nodes for which you are the business owner:

  - Hover the mouse over the red asterisk (if available) in a node to display the "Status window," where you can view the overrides that were previously applied or apply another override.

  - Click the **Options** button on the right side of the node to which you want to apply the status override and select **Override Status** from the "Node Options Menu." The "Status Override dialog" is displayed, where you apply another override or view any overrides that were previously applied.

  See "About Status Overrides" and "Working with Status Overrides" for additional information.

- View a KPI contribution wheel diagram, right-click the KPI, and then select **View KPI Contribution Wheel** from the context menu (see "About KPI Contribution Wheel Diagrams" for additional information). Note that you can also click the **Options** button on the right side of the node and select **View KPI Contribution Wheel** from the "Node Options Menu."

7. Click the "Custom View tab: Details tab."

8. Specify a description, assign the business owner, and specify related documents, as appropriate. (By default, the business owner is the creator of the scorecard.)

9. Click **Save** to display the "Save As dialog." In the Save As dialog, you can rename the cause & effect map rather than use the default name.

Opening Scorecard Objects

To open a scorecard object:

1. Open or edit the scorecard that contains the object. See "Opening or Editing Scorecards" for additional information.

2. To open:

   - An objective, double-click it in the "Strategy pane." "Scorecard editor: Objective Details tab" is displayed.

   - An initiative, double-click it in the "Initiatives pane." The "Scorecard editor: Initiative Details tab" is displayed.

   - A view (for example, a Strategy Map), a mission or vision statement, a KPI watchlist, or a smart watchlist, double-click it in the "Scorecard Documents pane." Depending on the object you double-clicked, one of the following tabs is displayed:

     - "Scorecard editor: Cause & Effect Map tab"

     - "Scorecard editor: Custom View tab"

     - "Scorecard editor: Strategy Map tab"

     - "Scorecard editor: Strategy Tree tab"

     - "Scorecard editor: KPI Watchlist tab"

     - "Scorecard editor: Smart Watchlist tab"

- "Scorecard editor: Mission tab"

- "Scorecard editor: Vision tab"

■ A perspective, double-click it in the "Perspectives pane." The "Scorecard editor: Perspective tab" is displayed.

■ A KPI, double-click it in the:

- "Strategy pane" or the "Initiatives pane." The "Scorecard editor: KPI Details tab" is displayed.

- "Catalog pane for Scorecard." The "Scorecard editor: KPI tab" is displayed.

Alternatively, you can select the object and click the **Open** button on the tab toolbar or right-click the initiative or objective and select the **Open** option.

Editing Scorecard Objects

You can edit scorecard objects in the "Scorecard editor."

(You also can edit scorecard objects from the "Catalog page." See "Managing Objects in the Oracle BI Presentation Catalog" for additional information.)

To edit a scorecard object in the Scorecard editor:

1. Edit the scorecard that contains the scorecard object that you want to edit. See "Opening or Editing Scorecards" for additional information.

2. Double-click the object. For example, to edit an objective, double-click it in the "Strategy pane," or, to edit a strategy map, double-click it in the "Scorecard Documents pane."

    Note, for a strategy tree, you can edit only the details of a strategy tree, not the diagram.

3. Make your changes.

4. Click **Save**.

Deleting Scorecard Objects

You can delete scorecard objects from the "Scorecard editor."

(You also can delete scorecard objects from the "Catalog page." See "Managing Objects in the Oracle BI Presentation Catalog" for additional information.)

> **Caution:**   Before deleting an initiative, ensure that it has been completed or is no longer required to achieve an objective. Before deleting an objective, examine any child objectives or other objectives with which it is linked to ensure that its removal does not negatively impact these objectives.

To delete a scorecard object from the Scorecard editor:

1. Edit the scorecard that contains the scorecard object that you want to delete. See "Opening or Editing Scorecards" for additional information.

2. Right-click the object and select **Delete**. For example, to delete a Strategy Map, right-click it in the "Scorecard Documents pane" and select **Delete**.

3. In the confirmation dialog, confirm that you want to delete the object.

Adding Scorecard Objects to Dashboards

You can add the following scorecard objects to dashboards:

- Cause & effect maps. See "What Are Cause & Effect Maps?"

- Custom views. See "What Are Custom Views?"

- Strategy maps. See "What Are Strategy Maps?"

- Strategy trees. See "What Are Strategy Trees?"

- KPI watchlists. See "What Are KPI Watchlists?"

- Smart watchlists. See "What Are Smart Watchlists?"

Best Practice: Embed scorecard visualizations (for example, smart watchlists or cause and effect maps) into dashboards for fostering interactive analysis.

See "Adding Content to Dashboards" for additional information.

Troubleshooting

In solving problems that you might encounter while using Oracle Scorecard and Strategy Management, you might find the following information helpful:

- For information on logging, see "Diagnosing and Resolving Issues in Oracle Business Intelligence" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

- If the features to add comments and to override statuses are not enabled, see "Configuring the Repository for Oracle Scorecard and Strategy Management" in *Metadata Repository Builder's Guide for Oracle Business Intelligence Enterprise Edition*.

- For problems with the ability to create or access scorecard objects, see the information on privileges and permissions in Chapter 14, "Managing Objects in the Oracle BI Presentation Catalog" and "Managing Presentation Services Privileges" in *Security Guide for Oracle Business Intelligence Enterprise Edition*.

14

Managing Objects in the Oracle BI Presentation Catalog

This chapter provides information about using the Oracle BI Presentation Catalog in Oracle Business Intelligence Enterprise Edition to store and manage business intelligence objects. It describes how to search for objects, work with favorites, assign permissions to objects, assign or take ownership of objects, and archive objects.

This chapter includes the following sections:

- What is the Oracle BI Presentation Catalog?
- Who Uses the Catalog?
- Saving Business Intelligence Objects
- How Can I Search for Objects?
- Searching for Objects in the Catalog
- Object-Specific Tasks
- What Are Favorites?
- Adding Objects to Favorites
- Accessing Favorite Objects
- Organizing Favorites
- Removing Objects From Favorites
- Exporting Analyses, KPIs, and Analysis Prompts Data
- Accessing Properties
- Levels of Oracle BI EE Security
- What Are Permissions?
- How Are an Object's Permission Assigned?
- Access Control Lists and Permissions
- Permission Definitions
- Permissions Available by Object Type
- Recommendations for Setting Permissions
- Assigning Permissions
- Who Owns an Object?
- Assigning Ownership of Objects

- Taking Ownership of Objects

- What is Archiving?

- Archiving Objects

What is the Oracle BI Presentation Catalog?

The Oracle BI Presentation Catalog (the catalog) stores business intelligence objects and provides an interface where users create, access, and manage objects, and perform specific object-based tasks (for example, export, print, and edit). The catalog is organized into folders that are either shared or personal.

If Oracle BI EE is integrated with other Oracle applications, then the objects that are created within those applications are also stored within the catalog. For example, if Oracle BI Publisher is integrated with Oracle BI EE, data models, reports, and style templates and sub-templates are also stored in and accessible from the catalog.

Many of the operations that you can perform in the Oracle BI Presentation Catalog can also be performed in the Catalog Manager, which resides outside of Oracle BI Presentation Services. For more information, see "Working with Objects in Catalog Manager" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

Who Uses the Catalog?

Within Oracle BI EE, there are three primary users: content consumers, content designers, and catalog administrators. Each user performs different tasks within the catalog, and, therefore, each user sees a different version of the catalog interface. Functionality that is available for one user might not be available for another. Furthermore, the catalog functionality and objects that are available to a user depend upon the privileges that are specified by the Presentation Services Administrator and the object's individual permissions, which are usually set by the content designer.

Content consumers can use the Catalog page to view the business intelligence objects that are necessary to perform their day-to-day tasks. For example, a sales manager must access an analysis that monitors the weekly sales of a specific brand of beverage in the Central and Eastern regions. The permissions that are set by the content designer and catalog administrator determine what tasks the content consumers can perform both on an individual piece of content and within the catalog. For example, content consumers at Company A can search for, view, and interact with only those objects that have been assigned to them, but content consumers at Company B can search for and interact with content as well as create content and store it to their personal folders.

Content designers are the individuals who create the content for the content consumers. Content designers need broader access to the catalog to efficiently create, edit, test, and troubleshoot objects. Their access to the catalog's functionality is more comprehensive than that of the content consumers. However, like the content consumer, the content designer's permissions are set by the administrator. For example, a content designer must store content in and retrieve content from the public folders for the Sales functional area, but not the Operations functional area. Or a content designer must be assigned to several groups so that the content designer can sign in to Presentation Services as different users to test the new or revised content.

Administrators need the most comprehensive access to the catalog; however, their access is still determined by the privileges that are assigned to their role by the Presentation Services administrator. In general, the catalog tasks that the administrator

performs include setting permissions on catalog objects and folders, archiving the catalog, creating and managing directory structures, and managing system and user data.

> **Note:** Over time, inconsistencies can develop in the catalog as links are broken, users are deleted, or NFS file system issues are encountered. You can periodically validate the catalog, to be informed of and to take corrective action on inconsistencies. For information on validation, see "Validating the Catalog" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

Saving Business Intelligence Objects

You can save objects that you create in folders in the catalog. For complete information on naming conventions, see "Guidelines for Object Names" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

Use the following procedure to save objects to the catalog:

To save an object to the catalog:

1. Create or edit a business intelligence object and click **Save** or **Save As** from the editor's toolbar. The Save As dialog is displayed.

2. Select the catalog location to which you want to save the object. Note the following items:

   - You can create sub-folders for storage within your My Folders folder or within the system folder for which you have the permissions to modify.

   - Oracle BI EE enables you to save any type of business intelligence object to any location within the catalog. However, for some object types, Oracle BI EE's Save As dialog suggests the best catalog location. For example, if you are creating a named filter, then it should be saved to a subject area folder (/My Folders/Subject Area Contents/Paint) so that it is available when you create an analysis using the same subject area and to which you want to add the saved filter.

   - You can save the following objects to any location within the catalog: actions, agents, analyses, BI Publisher objects, briefing books, conditions, KPIs, and prompts.

   - Oracle recommends that you save the following objects to the subject area folder: calculated items, custom groups, and filters. If a subject area folder does not exist in your /My Folders folder or within the /Shared Folders folder, then Oracle BI EE creates a subject area folder and the Save As dialog defaults a save path to /My Folders/Subject Area Contents/*<subject area>*. Saving these objects to the subject area folders ensures that they are available when you build an analysis for the same subject area.

   - Dashboards can be saved to any catalog location. However, if you want the dashboard to display in the global header's Dashboards menu, then you must save the dashboard to a first level dashboard folder. For example, save the dashboard to the following location to *include* the dashboard in the Dashboard menu: /Shared Folders/Sales Projections/Dashboards. Save the dashboard to the following location to *exclude* the dashboard from the Dashboard menu: /Shared Folders/Sales Projections/Dashboards/Design Time. For more information about saving dashboards, see "Saving Dashboards by Other Names and in Other Locations."

3. Click **OK**.

Use the following procedure to create a sub-folder within your My Folders or, if you have the required permissions, to create a sub-folder.

To create a folder or sub-folder:

1. On the "Catalog page," go to the desired location in the "Folders pane."

2. In the catalog toolbar, click **New** and select **Folder**. The New Folder dialog is displayed.

3. Enter the folder name and click **OK**.

How Can I Search for Objects?

Depending upon whether your system has been configured to use BI Search configure crawl, you will use either the basic catalog search or the full-text catalog search to find objects in the Oracle BI Presentation Catalog. Note the following information:

- **Basic catalog search** — This is the standard search option. This search type allows you to search for an object by its exact name, description, location, and object type only. For more information, see "Basic Catalog Search."

- **Full-Text catalog search** — To allow the full-text catalog search, your administrator must configure and enable the BI Search indexing (crawling). This search type allows you to search for an object by exact name, description, location, object type, object attribute, data column name, data column values, and so on. For more information, see "Full-Text Catalog Search."

Basic Catalog Search

The basic catalog search enables users with the proper privilege to search for objects from the global header or the Catalog page. In the Catalog page, you can use the basic catalog search to locate an object by searching for its exact name, description, location, and type, only. You find only those objects for which you have the appropriate permissions. When the desired object is located, you can click it to display it for viewing or editing, as your permissions allow.

Full-Text Catalog Search

You can use the full-text search to find objects by entering various search values, such as name, description, author, and the names and values of columns of data that the object references.

Full-text catalog search enables users with the proper privilege to conduct an expanded search for an object. This expanded search functionality is only available if your administrator configured and enabled the BI Search configuration crawl. When configured, the full-text catalog search, like the basic catalog search, is available from the global header or the Catalog page.

When users perform the full-text catalog search, it locates those objects that have been crawled and indexed and for which the individual users have the appropriate permissions. Note that objects such as dashboards and reports with the **Do Not Index** attribute selected are not indexed. For more information, see "Properties dialog."

The list of full-text search results includes any objects that match the criteria, for which the user has at least the "Open" permission. If an object is stored in a folder, then the user must have the "Traverse" folder and "Open" object permissions. Note that objects with the "No Access" permission are not available.

Note the following additional information about the full-text search:

- While you search using keywords, the search results include both data and metadata. For each catalog object, both the metadata (such as the name, path, author, modification date, last accessed date, type, and description) and the data (such as column name, header names, column values, prompt formulas, column formulas, and prompt values) are indexed and available as search results.

- The default search operator is OR. You can specify multiple search terms and the highest search hit includes the largest number of search terms.

You can search for nearly all types of objects in the Oracle BI Presentation Catalog, with a few exceptions such as Marketing Segmentation objects and hierarchical columns.

Searching for Objects in the Catalog

Depending upon how your system is configured, you will use the basic search or the full-text search capabilities. For more information, see "How Can I Search for Objects?"

Note that for the full-text search, a newly created object that is included in the index cannot be located until a crawl has occurred.

To search for objects from the global header:

You can use the global header to perform a search.

1. In the global header's **Search** field, click the down arrow and select the object type for which you want to search.

2. Place your cursor in the field next to the **Search** field and enter part or all of the object's name or description.

3. Click **Search** to begin the search. The Catalog page is displayed with the results that match your search criteria. For more information about how to search, see "Search pane."

Use the Catalog page's functionality to provide search criteria. This searching method is useful when you know the object's name, location, or type. Use the following task for the basic search and the fully integrated full-text search.

To search the catalog from the Catalog page:

Use this task to search the catalog.

1. In the global header, click **Catalog**. The "Catalog page" is displayed.

2. Click the **Search** button to display the Search pane.

3. In the "Search pane," specify the search criteria. Consider the following options:

   - Search: All objects and folders whose names contain the letters that you enter are displayed. For more information about how to search, see "Search pane."

   - Location: This option is only available for the basic search. Select the folders to search. Administrators and users with administrative permissions can search the catalog root folder. However, before you can search the root folder, you must be in Admin View.

   - Type: This option is only available for the basic search. Select the kind of object for which you are searching (for example, KPI, Scorecard, or Filter).

> **Note:** To search for Hidden Items, you must select the **Show Hidden Items** box, which is located on the Catalog page's header.

4. Click **Search**.

   Folders or objects that satisfy the search criteria are displayed in the "Catalog area."

Object-Specific Tasks

The tasks that you can perform for an object that you select from the "Catalog pane" are determined by both the selected object's type (for example, a dashboard or KPI) and the permissions that were set for the object. The list of available tasks is displayed in the "Tasks pane," which is located within the "Catalog page" or from the object's **More** link.

Figure 14–1 shows the available tasks for the analysis that was selected from the catalog. This graphic illustrates that the object's available tasks are: Expand, RSS, Delete, Copy, Rename, Create Shortcut, Archive, Unarchive, Upload, Properties, and Permissions.

Figure 14–1   Tasks Pane within the Catalog Page
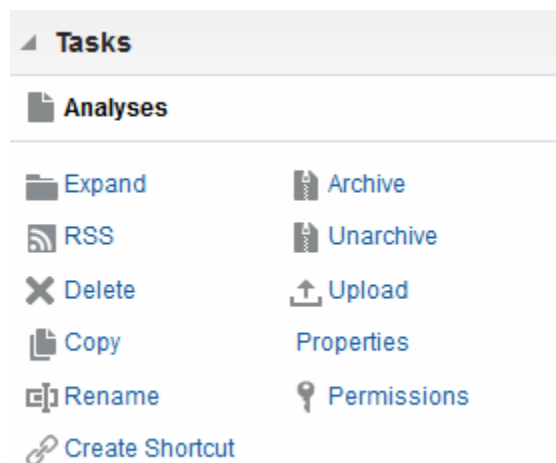
In most cases, you can open or copy an object. However, if you selected an analysis, then you can create an agent for the analysis or export the analysis. If you selected a dashboard, then you can publish the dashboard or archive it, depending upon the permissions that were assigned to the object.

What Are Favorites?

The favorites functionality allows you to bookmark as favorites the catalog objects that you view regularly or want to view again at another time. After you flag objects as favorites, you can use the "Manage Favorites dialog" to organize your favorites by creating categories and rearrange your favorites into the order that you find most intuitive. You can access a list of the objects that you marked as favorites and any categories that you created by clicking **Favorites** in the global header.

You can use Oracle Business Intelligence Mobile to access your list of favorites as well as add objects to and remove objects from your favorites list. However, you cannot organize and manage your favorites from Oracle BI Mobile. Your Oracle BI EE desktop and Oracle BI Mobile favorites lists will synchronize your changes when you log into either Oracle BI EE instance. For more information about favorites in Oracle Business Intelligence Mobile, see *User's Guide for Oracle Business Intelligence Mobile for Apple iOS*.

Adding Objects to Favorites

Use the following tasks to add an object to your favorites list. After you add an object to your favorites list, the object's icon is updated to include a gold star.

You can also use Oracle Business Intelligence Mobile to add objects to your favorites list. For more information about using favorites with Oracle Business Intelligence Mobile, see "What Are Favorites?" and *User's Guide for Oracle Business Intelligence Mobile for Apple iOS*.

To add an object to your favorites list by using the Home page or Catalog page:

1. Go to the "Home page" or "Catalog page" and browse for the object that you want to add to your favorites list.

2. Click the **More** link, and then click **Add to Favorites**. The object is added to your favorites list.

To add an object to your favorites list while viewing or editing the object:

1. Open the object in its designated viewer or editor.

2. In the global header, hover over **Favorites** and click **Add to Favorites**. The object is added to your favorites list.

Accessing Favorite Objects

After you tag objects as favorites, you can use the **Favorites** menu in the global header to view your list of favorites and browse for and select a favorite object. For information about adding objects, see "Adding Objects to Favorites."

You can also use Oracle Business Intelligence Mobile to access your favorites list. For more information about using favorites with Oracle Business Intelligence Mobile, see "What Are Favorites?" and *User's Guide for Oracle Business Intelligence Mobile for Apple iOS*.

To view your favorites list:

1. In the global header, hover over the **Favorites** menu. The list of the objects that you marked as favorites displays.

2. Scroll through the list of objects and categories to find a specific object. Click the object to select it.

   Oracle BI EE displays the selected object based on your permissions. For example, if you open an analysis to which you have write permission, then Oracle BI EE opens the object in the "Analysis editor."

Organizing Favorites

Use the following tasks to organize the items on your favorites list.

You can organize favorites from the Oracle BI EE desktop, only. Any changes that you make to your favorites list will synchronize to your Oracle Business Intelligence

Mobile favorites list when you log in from the mobile device. For more information about using favorites with Oracle BI Mobile, see "What Are Favorites?" and *User's Guide for Oracle Business Intelligence Mobile for Apple iOS*.

To create a favorites category:

1. In the global header, hover over the **Favorites** menu. The list of the objects that you marked as favorites displays.

2. Click **Manage Favorites**. The "Manage Favorites dialog" displays.

3. In the Category Tree or the Selection Category area, browse to and select the location where you want to add a new category.

4. On the toolbar, click **New Category**. The "New Category dialog" displays.

5. Enter a unique name for the category. Click **OK**.

6. The new category displays.

To rearrange your favorite objects:

1. In the global header, hover over the **Favorites** menu. The list of the objects that you marked as favorites displays.

2. Click **Manage Favorites**. The "Manage Favorites dialog" displays.

3. In the Category Tree or the Selection Category area, browse to the location of the categories or objects that you want to rearrange. You can perform the following actions to rearrange your favorites.

   - Select an object or category and click the move buttons to move the object up or down in your favorites list.

   - Drag and drop objects into categories. Drag and drop categories into other categories to nest them.

   - Copy objects or categories from one location and paste them into another location.

   - Rename categories.

   - Sort the selected categories or objects within a category by ascending or descending alphabetic order.

   For more information, see the "Manage Favorites dialog."

4. Click **OK**. Your rearranged objects and categories are saved and display in your favorites list.

Removing Objects From Favorites

Use the following tasks to remove an object from your favorites list. Note that if you have flagged an object as a favorite and you or someone else deletes that object from the Catalog, then the object will be removed from your favorites list.

You can also use Oracle Business Intelligence Mobile to remove objects from your favorites list. For more information about using favorites with Oracle Business Intelligence Mobile, see "What Are Favorites?" and *User's Guide for Oracle Business Intelligence Mobile for Apple iOS*

After you remove an object from your favorites list, the object's icon changes from an icon with a gold star to the object's standard icon.

To remove an object from your favorites list by using the Home page or Catalog page:

1. Go to the "Home page" or "Catalog page" and browse for the object that you want to remove from your favorites list.

2. Click the **More** link, and then click **Remove from Favorites**. The object is removed from your favorites list.

To remove an object from your favorites list while viewing or editing the object:

1. Open the object in its designated viewer or editor.

2. In the global header, hover over the **Favorites** menu. The list of the objects that you marked as favorites displays.

3. Click **Remove from Favorites**. The object is removed from your favorites list.

To remove an object from your favorites list by using the Manage Favorites dialog:

1. In the global header, hover over the **Favorites** menu. The list of the objects that you marked as favorites displays.

2. Click **Manage Favorites**. The "Manage Favorites dialog" displays.

3. Browse for and select the object that you want to remove.

4. Click **Delete**.

5. Click **OK**. The object is removed from the list.

Exporting Analyses, KPIs, and Analysis Prompts Data

To leverage your data and use it in other applications, you can export analyses, KPIs, and analysis prompt values and data as a PDF, Web Archive, spreadsheet, Powerpoint presentation, and data file.

To export data:

1. In the global header, click **Catalog**. The "Catalog page" is displayed.

2. Search for the object to export. For more information about searching, see "Searching for Objects in the Catalog."

3. In the "Folders pane," select the object to export.

4. Select the object and perform a task:

   - Below the document, select **More** and then **Export**

   - Select the **Export** button in the "Tasks pane."

5. Select the format. Note that the **Data** list contains the **CSV Format**, **Tab delimited Format**, and **XML Format** options.

Note: You can export Oracle Business Intelligence Publisher reports if they are embedded in a dashboard or dashboard page. See "About Exporting Dashboards and Dashboard Pages" for additional information.

Accessing Properties

Administrative users can access the properties of any object or folder to perform tasks such as view system information or change access levels. Users can access and modify the properties of the objects that they create or own.

To access properties:

1. In the global header, click **Catalog**. The "Catalog page" is displayed.

2. Search for the object to which you want to assign properties. For more information about searching, see "Searching for Objects in the Catalog."

3. In the "Folders pane," select an object or folder.

4. Perform a task:

   - Below the document, select **More** and then **Properties**

   - Click the **Properties** button in the "Tasks pane."

5. Review or change the settings displayed in the "Properties dialog."

Levels of Oracle BI EE Security

Oracle BI EE supports security mechanisms that allow users to access only the data for which they are authorized. For specific information about setting up and maintaining security, see *Security Guide for Oracle Business Intelligence Enterprise Edition*. The following types of security are typical:

- **Subject Area security.** This security mechanism controls access to objects, such as subject areas, folders, and columns. For example, content designers in a particular department can view only the subject areas that belong to their department when using the Analysis editor.

- **Catalog object security.** This security mechanism provides security for objects that are stored in the Oracle BI Presentation Catalog, such as dashboards, dashboard pages, folders, and analyses. Users can view only the objects for which they are authorized. For example, a mid-level manager might not be granted access to a dashboard that contains summary information for an entire department. For more information about catalog object security, see "What Are Permissions?"

- **Data level security.** This security mechanism controls the type and amount of data that is available in analyses. When multiple users run the same analysis, the results that are returned to each user depend on their access rights and roles in the company. For example, a sales vice president sees results for all regions, while a sales representative for a particular region sees only data for that region.

The security mechanisms in Oracle Business Intelligence can use security hierarchies that are defined in operational applications, such as Siebel CRM applications, which minimizes the need for administrators to manage multiple security systems. The security mechanisms also allow a high degree of control over access to elements in Oracle Business Intelligence applications.

What Are Permissions?

An object's owner or a user who has been given the proper privileges and permissions can assign permissions to catalog objects. Permissions are authorizations that you grant to a user or role to perform a specific action or group of actions on a catalog object. For example, if you work in the sales department and created a dashboard that contains quarterly sales projections, then you can give read access to this dashboard to

all sales people, but give read, write, and delete access to sales directors and vice presidents.

Permissions are a part of the Oracle BI EE security model, and how permissions are initially assigned is based on how users, roles, and groups were set up on your system, and which privileges the Oracle BI EE administrator granted those users, roles, and groups.

How Are an Object's Permission Assigned?

The permissions for a folder, Oracle BI Publisher object, or other objects are assigned by either the object owner, the content designer, or the catalog's administrator. Before someone other than the content designer can assign permissions to an object, that person must have been given ownership of the object, granted the Change Permissions privilege by the Presentation Services administrator, and have been given the Change Permissions object permission, which is listed in the "Custom Permissions dialog." For more information about setting the Change Permissions privileges, see "Managing Presentation Services Privileges" in *Security Guide for Oracle Business Intelligence Enterprise Edition*.

When the content designer creates an object and saves it to a folder, the object inherits the permissions that are set on the folder. After the object is saved, the content designer can display either the catalog's "Tasks pane" or the object's **More...** link, locate the object, access the "Permissions dialog," and modify the object's permissions. If the object's Read-Only property, which is set on the "Properties dialog," is selected, then no one other than the owner can modify the object's permissions. This read-only setting essentially trumps any permissions that are set in the Permission dialog.

When working with an object, you use the Permissions dialog to assign who gets which object permissions in the following ways:

- **To Application roles** — This is the recommended way of assigning permissions. Application roles provide much easier maintenance of users and their assignments. An Application role defines a set of permissions granted to a user or group that has that role in the system's identity store. An Application role is assigned in accordance with specific conditions. As such, Application roles are granted dynamically based on the conditions present at the time authentication occurs.

  For information on Application roles, see *Security Guide for Oracle Business Intelligence Enterprise Edition*.

- **To individual users** — You can assign permissions and privileges to specific users, but such assignments can be more difficult to maintain and so this approach is not recommended.

- **To Catalog groups** — This approach is maintained for backward compatibility with previous releases (prior to 11*g*) only. For information about Catalog groups, see "Working with Catalog Groups" in *Security Guide for Oracle Business Intelligence Enterprise Edition*.

Access Control Lists and Permissions

Access control lists define the ability of an account to access a shared object in the Oracle BI Presentation Catalog. An account is an Application role, a Catalog group, or an individual user. Permissions describe the type of access to an object that an account is permitted. Examples are Open and Full Control.

Each catalog object has an access control list that defines which accounts have which permissions to access the object. The access control list is stored in the object's corresponding attribute (.atr) file. An access control list has the general form that is shown in Table 14–1.

Table 14–1   Access Control List for a Catalog Object

Account	Permission
ApplicationRole1	Open
ApplicationRole4	Full Control
ApplicationRole3	Open
User 4	Open
User 9	Full Control
User 11	Full Control

Permission Definitions

To control access to objects (such as a folder in the catalog or a section in a dashboard), you assign permissions to Application roles, Catalog groups, and users. The permissions that you can assign vary depending on the type of object with which you are working.

The permissions that are available from the "Permissions dialog" are usually parent permissions, meaning that each parent permission contains several child permissions (for example, if the Open permission is applied to a folder, the users of that folder can read, traverse, and run Oracle BI Publisher reports located in that folder). Applying parent permissions, rather than building custom permissions for every object, is an easy way to consistently assign and maintain permissions. The available parent permissions differ based on the object type with which you are working: folders, BI Publisher objects, or business intelligence objects. BI Publisher objects include reports, data models, sub templates, and style templates. Business intelligence objects include analyses, dashboards, KPIs, scorecards, filters, and prompts.

If in the "Permissions dialog" you select the Custom permission, then the "Custom Permissions dialog" is displayed where you can select the permissions to apply to the object. For example, if you are working with a folder object, then you can select the traverse, read, and delete permissions.

Table 14–2 includes the name of each permissions and its definition. For more information about the parent permissions that you can assign to an object and what the parent permission includes based on the type of object with which you are working, see "Permissions Available by Object Type."

Table 14–2   Permission Descriptions

Permission	Description
Read	Use this option to give authority to access, but not modify, the object.
Write	Use this option to give authority to edit the object.
Delete	Use this option to give authority to delete the object.

Table 14–2   (Cont.) Permission Descriptions

Permission	Description
Traverse	Use this option to give authority to access objects within the selected folder when the user does not have permission to the selected folder. Access to these objects is required when the objects in the folder, such as analyses, are embedded in a dashboard or WebCenter Portal application page that the user has permission to access. For example, if you grant users the **Traverse** permission to the /Shared Folders/Test folder, then they *can* access objects, through the Catalog or embedded in dashboards or WebCenter Portal application pages, stored in the/Shared Folders/Test folder and stored in sub-folders, such as the /Shared Folders/Test/Guest folder. However, users *cannot* access (meaning view, expand, or browse) the folder and sub-folders from the Catalog.
Run Publisher Report	Use this option to give authority to read, traverse the folder that contains the object, and regenerate the report so that it includes the most recent data.
Schedule Publisher Report	Use this option to give authority to read, traverse the folder that contains the object, and schedule the report.
View Publisher Report	Use this option to give authority to read, traverse the folder that contains the object, and view, but not regenerate, the report.
Execute	Use this option to give authority to run an object, such as an action, agent, or a briefing book.
Change Permissions	Use this option to give authority to change the object's permissions.
Set Ownership	Use this option to give authority to reassign ownership of the object.
Full Control	Use this option to give authority to perform all tasks (modify and delete, for example) on the object.
No Access	Use this option to deny access to the object. Explicitly denying access takes precedence over any other permission.
Modify	Use this option to give authority to read, write, and delete the object.
Open	Use this option to give authority to access, but not modify, the object. If you are working with an Oracle BI Publisher object, this option enables you to traverse the folder that contains the object.
Custom	Use this option to display the "Custom Permissions dialog," where you grant read, write, execute, and delete permissions.
Granted	Use this option to give authority to access a section in a dashboard. This permission can be set in the dashboard, only. This permission overrides any catalog permissions set on the section's objects that would prevent the corresponding roles, Catalog groups, and users from accessing them (for example, No Access). For more information, see "Changing the Properties of a Dashboard and its Pages."
Denied	Use this option to deny access to a section in a dashboard. This permission can be set in the dashboard, only. This permission overrides any catalog permissions set on the section's objects that would allow the corresponding roles, Catalog groups, and users to access them (for example, View). For more information, see "Changing the Properties of a Dashboard and its Pages."

Permissions Available by Object Type

The permissions that are available from the "Permissions dialog" are usually parent permissions, meaning that each parent permission contains several child permissions. For example, if the Open permission is applied to a folder, then the users of that folder can read, traverse, and run the BI Publisher reports that are located in that folder. The available parent permissions differ based on the object with which you are working.

Table 14–3 includes a listing of the parent permissions and the corresponding child permissions by object type. For a description of each permission, see "Permission Definitions."

Table 14–3   Permissions by Object Type

Parent Permission	Folders	Oracle BI Publisher Objects	Objects
Full Control	Includes all permissions	Includes all permissions	Includes all permissions
Modify	Read, write, and delete	Read, write, and delete	Read, write, and delete
Open	Read, traverse, run BI Publisher report	Run Oracle BI Publisher report	Read
Schedule Oracle BI Publisher Reports	Schedule BI Publisher reports that are contained in the folder, read, and traverse	Schedule Oracle BI Publisher reports	Not available
View Oracle BI Publisher Output	View BI Publisher reports that are contained in the folder, read, and traverse	View Oracle BI Publisher reports	Not available
Traverse	Traverse folder	Not available	Not available
No Access	Object is not accessible	Object not accessible	Object not accessible

Recommendations for Setting Permissions

Follow these recommendations when setting permissions:

- Use care when assigning permissions to ensure that you do not lock the object by preventing you, an administrator, or any other user from modifying the object.

- Assign permissions through Application roles, even if you must assign permissions only for a single user. A less recommended alternative to using Application roles is to use Catalog groups, also known as Presentation Services groups. Application roles are central to Oracle BI EE while Catalog groups are specific to Presentation Services and are included in this release for backward compatibility.

  For information on Application roles, see *Security Guide for Oracle Business Intelligence Enterprise Edition*.

  For information on Catalog groups, see "Working with Catalog Groups" in *Security Guide for Oracle Business Intelligence Enterprise Edition*.

- For Application roles (Catalog groups or users, if necessary) that are going to be modifying the dashboards and dashboard content accessible to the role, set the permissions for the role to Full Control. While allowing change and delete control, Full Control also enables the specified role to set permissions and to delete the object, folder, or dashboard.

  If you plan to have numerous or varying users that create and modify dashboard content for a given group, then create a separate, corresponding "builder" role that has all the back-end permissions of the primary role, but with a different name. For example, you can create a Sales role and a SalesBuilder role. By giving the SalesBuilder role appropriate permissions to the Oracle BI Presentation Catalog, you can control and change who can make changes to dashboards and content.

Assuming session variable security is in place, you can make a user a dashboard builder or content creator by changing the user's role from "Sales" to "SalesBuilder" in the database table that holds security information.

- For each Subject Area, ensure that the AuthenticatedUser role has No Access permission to the Subject Area folder.

- For roles that should be able to save analyses for public use against a given Subject Area, grant them Full Control to the Subject Area folder and everything it contains, and likewise for the Common folder.

- To ensure that only members of the designated roles have access to Oracle BI Presentation Catalog folders, folder content, and dashboards, do not set explicit permissions for the AuthenticatedUser role.

  > **Tip:** To provide a place for all users within an Application role to share analyses with each other, create a folder under the Subject Area folder called, for example, Share or Publish, and give the entire role Change/Delete permission to just that folder.

Assigning Permissions

Permissions determine who can access folders, BI Publisher objects, or other catalog objects. The permissions that you can assign vary depending on the type of object with which you are working. To change permissions, you must have been granted the Change Permission privilege.

> **Note:** To access an object in the catalog, users must have appropriate ACL (Access Control List) entries for that object. All objects in the catalog except for alerts use ACL entries. See "Working with Objects in Catalog Manager" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition* for information on ACL entries.

Use the following procedure to assign permissions to an object. For more information about permissions, see "Permission Definitions," "Permissions Available by Object Type," and "Recommendations for Setting Permissions."

To assign permissions to an object:

1. In the global header, click **Catalog**. The "Catalog page" is displayed.

2. Search for the object to which you want to assign permissions. For more information about searching, see "Searching for Objects in the Catalog."

3. Go to the "Catalog area" and locate an object or folder.

4. Select **More** and then **Permissions**, or go to the "Tasks pane" and click **Permissions**. The "Permissions dialog" is displayed.

5. Click the **Add users/roles** button to access the "Add Application Roles, Catalog Groups, and Users dialog" to add any required accounts.

6. In the Permissions dialog, click the **Permissions** list to select permissions. Most of the items that are displayed in the list are parent permissions and contain several child permissions. To build a specific list of permissions, click **Custom**. The "Custom Permissions dialog" is displayed.

7. Specify how the permissions are to be applied using these options: **Apply permissions to sub-folders**, **Apply permissions to items within a folder**, or **Apply permissions to all descendants**.

8. In the **Replace Options** list, specify how the entries in the Access Control List (ACL) are to be replaced for the object and also for its children (but only if one or more of these options are selected): **Apply permissions to sub-folders**, **Apply permissions to items within a folder**, or **Apply permissions to all descendants**).

   If you select either **Replace Listed Accounts** or **Remove Listed Accounts**, then make sure that you also remove from the list in the Permissions area the entries that you do not want changed.

9. Click **OK**.

Who Owns an Object?

Ownership of an object can either be granted by the user who created the object or taken by a user who has been granted the proper privileges. Note that the owner of an object or folder cannot automatically access the object or folder. To access an object, the user must have the proper permissions assigned in the object or folder's "Permissions dialog."

By default, the user who creates and saves a catalog object to either My Folders or a Shared folder owns the object. An object in My Folders cannot be assigned to another owner unless the object is moved to a Shared folder and the Administrator assigns the privilege allowing the owner to reassign ownership. After this privilege has been granted, the ownership of the object can then be assigned to another user, group, or role that displays in the "Permissions dialog." For example, suppose Employee A is a content designer and has created a dashboard for the Marketing department. Employee A completes the dashboard, saves it to the Marketing Department's Shared folder, and assigns ownership of the dashboard to Employee B, who is a marketing manager and responsible for updating the dashboard. For more information about assigning ownership, see "Assigning Ownership of Objects."

In some situations a user or member of a group or role must take ownership of objects located in a Shared folder. In this case, the user who wants to take ownership must be assigned the proper privilege to complete this task. After these privileges are granted, the user sees the "Take Ownership of this Item" and the "Take Ownership of this item and all subitems" options in the "Properties dialog." For example, suppose that Employee A has been granted the proper privilege to take ownership of objects and folders. When Employee B, who owns several catalog objects, leaves the company, Employee A can now access the "Properties dialog" for these objects, take ownership of the objects, and reassign ownership of the objects to Employee C. For more information about taking ownership, see "Taking Ownership of Objects."

Assigning Ownership of Objects

Use the following procedure to assign ownership of an object or folder that is saved to a Shared folder. You must have the proper privilege to access the "Permissions dialog" where you can then assign ownership of an object or folder.

For more information, see "Who Owns an Object?" and "Taking Ownership of Objects."

To assign ownership of an object:

1. In the global header, click **Catalog**. The "Catalog page" is displayed.

2. Search for the object to which you want to assign ownership. For more information about searching, see "Searching for Objects in the Catalog."

3. Go to the "Catalog area" and locate an object or folder.

4. Select **More** and then **Permissions**, or go to the "Tasks pane" and click **Permissions**. The "Permissions dialog" is displayed.

5. In the Permissions table, go to the **Owner** column and click to specify the owner.

6. Click **OK**.

Taking Ownership of Objects

Use the following procedure to take ownership of an object or folder that is saved to a Shared folder. You must have the proper privilege for the take ownership options to display in the "Properties dialog."

Note that the owner of an object or folder cannot automatically access the object or folder. To access an object, the user must have the proper permissions assigned in the object or folder's "Permissions dialog." For more information, see "Who Owns an Object?" and "Assigning Ownership of Objects."

To take ownership of an object:

1. In the global header, click **Catalog**. The "Catalog page" is displayed.

2. Search for the object to which you want to assign ownership. For more information about searching, see "Searching for Objects in the Catalog."

3. Go to the "Catalog area" and locate an object or folder.

4. Select **More** and then **Properties**, or go to the "Tasks pane" and click **Properties**. The "Properties dialog" is displayed.

5. In the Ownership area, do one the following:

   ■ If you are working with an object, click the **Set Ownership of this item** link.

   ■ If you are working with a folder or an object that contains sub-objects (for example, a dashboard or scorecard), click the **Set Ownership of this item** link to take ownership of the object only, or click the **Set Ownership of this item and all subitems** to take ownership of the object and sub-objects.

6. Click **OK**.

What is Archiving?

Archiving enables you to bundle the entire catalog, specific folders, or multi-component objects (for example, scorecards) as a .catalog file and upload the .catalog file to unarchive the data to another location in the catalog. This process enables you to transfer specific data across environments. For example, you can use this feature to transfer data from a development environment to a production environment.

If you have the necessary privileges, then you can use the Oracle BI EE Catalog Manager to archive and unarchive catalog objects and perform other Catalog maintenance tasks. For more information about Catalog Manager, see "Working with Objects in Catalog Manager" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

Archiving Objects

Before you can archive, you must have been granted the proper privilege.

To create an archive file:

1. In the global header, click **Catalog**. The "Catalog page" is displayed.

2. Search for the objects to archive. For more information about searching, see "Searching for Objects in the Catalog."

3. Go to the "Folders pane" to select the object.

4. Select **More**, then **Archive** below the object. The "Archive dialog" is displayed.

5. Specify to maintain or omit the permissions and timestamps for the folder or object. For more information, see the "Archive dialog."

6. Click **OK**.

To unarchive an archive file:

1. Locate the archive file to upload. The archive file contains the.catalog extension (for example, _portal.catalog).

2. Go to the "Folders pane" and select the location where you want to upload the archive file.

3. Go to the Tasks pane and click **Unarchive**. The "Unarchive dialog" is displayed.

4. Enter the name of the archive file or browse for the archive file. Select the archive file.

5. Click **OK**.

15

Using BI Composer to Work with Analyses

This chapter provides information on using BI Composer in Oracle Business Intelligence Enterprise Edition. It describes how to use BI Composer to quickly and easily create, edit, and view analyses.

This chapter includes the following sections:

What Is BI Composer?

BI Composer is a simple-to-use wizard that allows you to create, edit, or view analyses without the complexities of the "Analysis editor."

> **Note:** BI Composer is not a report editor for BI Publisher.

There are two modes in which BI Composer is available in an application (such as Oracle BI EE) — regular mode and accessibility mode. Accessibility mode has the same functionality as regular mode but is optimized for use with screen reader applications such as JAWS. It makes it easier for users with accessibility issues, such as visual impairments, to create, edit, and view analyses.

> **Note:** Visual cues, such as icons or check boxes, displayed on a wizard page in accessibility mode are the same as displayed in regular mode. Even though the list of text-based wizard page links is not displayed on a wizard page in accessibility mode, screen reader applications such as JAWS are able to read them.

The main components of the "BI Composer wizard" are as follows:

- At the top of the wizard is the BI Composer train, which contains buttons for each step in the wizard. For more information, see "What Are the Steps for Creating or Editing an Analysis in BI Composer?"

- On the left are the Catalog and Subject Areas tabs. (These tabs are available only when BI Composer is part of an ADF application or Oracle WebCenter Portal Framework application or WebCenter Portal and not when part of Oracle BI EE.)

- To the right of the tabs is the panel area, where the components for each step are displayed.

- To the far right are the **Back**, **Next**, **Finish**, and **Cancel** buttons.

For more information on the availability of BI Composer, see "Where Is BI Composer Available?"

Where Is BI Composer Available?

BI Composer is available in:

- Oracle BI Enterprise Edition (if your organization has installed and configured it).

  For information on how to install and configure BI Composer for Oracle BI Enterprise Edition, see "Installing and Configuring BI Composer for Oracle BI EE" for additional information.

  For more information on its availability in Oracle BI Enterprise Edition, see "Availability of BI Composer in Oracle BI Enterprise Edition."

- Any ADF application that has been modified to integrate with Oracle BI Enterprise Edition.

  For more information, see "Adding BI Composer to an ADF Application" in the *Developer's Guide for Oracle Business Intelligence Enterprise Edition*.

- Oracle WebCenter Portal Framework application or WebCenter Portal that has been modified to integrate with Oracle BI Enterprise Edition.

  For more information, see "Adding BI Composer to a WebCenter Portal Application or WebCenter Portal: Spaces" in the *Developer's Guide for Oracle Business Intelligence Enterprise Edition*.

For more information on BI Composer, see "What Is BI Composer?"

Availability of BI Composer in Oracle BI Enterprise Edition

When users work with analyses in Oracle BI EE, BI Composer may be displayed in place of the "Analysis editor," depending on the preferences users make as follows:

- BI Composer is displayed in regular mode in place of the Analysis editor, when users have specified that they want to use the BI Composer wizard as the analysis editor and have turned off accessibility mode in Oracle BI EE.

- BI Composer is displayed in accessibility mode in place of the Analysis editor, when users have turned on accessibility mode in Oracle BI EE.

Users:

- Specify that they want to use the BI Composer wizard as the analysis editor by selecting the **Wizard (limited functionality)** option for the **Analysis editor** component in the "My Account dialog: Preferences tab."

- Turn accessibility mode on or off by selecting or deselecting the **Accessibility Mode** box in the "Sign In page" or by selecting **On** or **Off** for the **Accessibility Mode** component in the My Account dialog: Preferences tab.

Comparing the Analysis Editor and BI Composer

The "Analysis editor" and BI Composer share a similar purpose, in that both are analytical components that power intelligent business process decision making. Collaboration fueled through exploration, analysis, sharing, and visualizations, allows business users at all levels to glean insight into data. BI Composer and the Analysis editor differ however, in that BI Composer is more suitable for simple analyses that do not contain advanced analytic functions such as calculated items, selection steps, and multiple conditions. Sophisticated and highly structured analyses should be edited by using the Analysis editor.

What Types of Views Can I Work with in BI Composer?

BI Composer allows you to quickly and simply create or edit analyses. Table 15–1 describes the views with which you can work and the options available in BI Composer to enhance the analyses.

Table 15–1   View or Option and Description

View or Option	Description
Table	You can have a: ■ Table ■ Summary Table ■ Pivot Table ■ Summary Pivot Table A table can have: ■ Prompts ■ Sections See "BI Composer wizard -- Create Analysis: Edit Table panel" for additional information.
Graph	You can have a: ■ Bar - Vertical, horizontal, vertical stacked, horizontal stacked, 100% vertical stacked, or 100% horizontal stacked ■ Line ■ Scatter ■ Pie ■ Line-Bar A graph can have: ■ Prompts ■ Sections ■ Group By ■ Vary Color By ■ Slices (for a pie graph) ■ Points (for a scatter graph) See "BI Composer wizard -- Create Analysis: Edit Graph panel" for additional information.
Conditional formatting	See "BI Composer wizard -- Create Analysis: Highlight panel" for additional information.
Column formula	See "BI Composer wizard -- Create Analysis: Select Columns panel" for additional information.
Filter	See "BI Composer wizard -- Create Analysis: Sort and Filter panel" for additional information.
Interaction	Allows you to specify what happens when you click a value. You can: ■ Drill ■ Navigate to Transaction ■ Do nothing by specifying None See "BI Composer wizard -- Create Analysis: Select Columns panel" for additional information.
Sort	See "BI Composer wizard -- Create Analysis: Sort and Filter panel" for additional information.

What Are the Steps for Creating or Editing an Analysis in BI Composer?

The steps for creating or editing an analysis in BI Composer are as follows:

- **Select Columns** — In this step you select the columns that are to be included in the analysis. You can also:

  - Specify column interactions

  - Specify a column formula

  - Rename a column

  - Hide a column

  See "BI Composer wizard -- Create Analysis: Select Columns panel" for additional information.

- **Select Views** — In this step you select the views that are to be included in the analysis, such as a title, table, pivot table, bar graph, and so on. (Note that not all views available in Oracle BI Enterprise Edition are supported in BI Composer.) You can also preview the results and display the associated XML code. See "BI Composer wizard -- Create Analysis: Select Views panel" for additional information.

- **Edit Table** — In this step you edit the layout of the tabular view (if you have included a tabular view). For example, you can create prompts, use a column to section the analysis, and exclude certain columns from the tabular view. You can also preview the results. See "BI Composer wizard -- Create Analysis: Edit Table panel" for additional information.

- **Edit Graph** — In this step you edit the properties and layout of the graph (if you have included a graph view). For example, you can create prompts, use a column to section the analysis, and exclude certain columns from the graph. You can also preview the results. See "BI Composer wizard -- Create Analysis: Edit Graph panel" for additional information.

- **Sort and Filter** — In this step you apply sorting and filters to the views. You can also preview the results. See "BI Composer wizard -- Create Analysis: Sort and Filter panel" for additional information.

- **Highlight** — In this step you apply conditional formatting to the tabular view (if you have included a tabular view). You can also preview the results. See "BI Composer wizard -- Create Analysis: Highlight panel" for additional information.

- **Save** — In this step you save the analysis with the same name or with a different name. You can also:

  - Create new folders in which to save the analyses

  - Rename folders and analyses

  - Delete folders and analyses

  - Expand and collapse folders

See "BI Composer wizard -- Create Analysis: Save panel" for additional information.

Creating Analyses Using BI Composer

In Oracle BI EE, you create an analysis using BI Composer when you select the **Analysis** option on the **New** menu in the global header or **Create** area of the "Home page."

For more information on BI Composer, see "What Is BI Composer?"

To create an analysis using BI Composer:

1. In Oracle BI EE:

   a. In the global header, click **New**, then **Analysis**.

   b. Select a subject area. The "BI Composer wizard" is displayed in a new window.

2. In other applications (such as an ADF application):

   a. Click the Subject Areas tab.

   b. Select a subject area.

   c. Click **Create**. The "BI Composer wizard -- Create Analysis: Select Columns panel" is displayed.

3. Use the Select Columns panel to select the columns to include in the analysis. For each column that you want to add:

   a. Select the column in the Subject Areas list.

   b. Click **Add** to move it to the Selected Columns list.

   If you want to add or remove subject areas from which to select columns, click the **Add** button in the Subject Area: *Subject_Area_Name* area to display the "Add/Remove Subject Areas dialog."

   For a column in the Selected Columns list, if you want to:

   - Change the column name or specify a formula for the column, select the column and click **Column Properties** to display the "Column Properties dialog for BI Composer."

   - Specify what happens when you click either the column heading or a value in the column or hierarchy level, select one of options in the **Interaction** list for the column.

   - Hide the column in the view, select the **Hidden** box for the column.

   - Remove the column from the list, select the column and click **Remove**.

   - Remove all columns from the list, click **Remove All**.

4. Click the **Select Views** button in the BI Composer train at the top of the wizard. The "BI Composer wizard -- Create Analysis: Select Views panel" is displayed.

5. Use the Select Views panel to specify the views to include.

6. (optional) If you included a tabular view in the analysis, click the **Edit Table** button in the BI Composer train. The "BI Composer wizard -- Create Analysis: Edit Table panel" is displayed.

7. (optional) Use the Edit Table panel to edit the layout of the tabular view.

8. (optional) If you included a graph view in the analysis, click the **Edit Graph** button in the BI Composer train. The "BI Composer wizard -- Create Analysis: Edit Graph panel" is displayed.

9. (optional) Use the Edit Graph panel to edit the properties and layout of the graph.

10. (optional) Click the **Sort and Filter** button in the BI Composer train. The "BI Composer wizard -- Create Analysis: Sort and Filter panel" is displayed.

11. (optional) Use the Sort and Filter panel to apply sorting and filters to the views.

12. (optional) If you included a tabular view in the analysis, click the **Highlight** button in the BI Composer train. The "BI Composer wizard -- Create Analysis: Highlight panel" is displayed.

> **Note:** The **Highlight** panel should only be used to format measure columns.

13. (optional) Use the Highlight panel to apply conditional formatting to the tabular view.

14. Click the **Save** button in the BI Composer train. The "BI Composer wizard -- Create Analysis: Save panel" is displayed.

15. Use the Save panel to save the analysis with the same name or with a different name by specifying the save criteria and then clicking **Submit**.

> **Note:** Suppose that a BI Composer session contains an unsaved analysis and the current Managed Server for Oracle WebLogic Server stops, which causes the system to fail over to another Managed Server. In this case, the analysis in the existing BI Composer session cannot be saved. You can recover the original analysis by opening a new BI Composer session and saving the analysis from there.

Editing Analyses Using BI Composer

In Oracle BI EE, you edit an analysis using BI Composer when you:

- Edit an analysis from the Catalog page or from the **Recent** section or the **Most Popular** section of the Home page

- Edit an analysis from within a dashboard

In other applications (such as an ADF application), you select an analysis to edit directly from the "BI Composer wizard."

For more information on BI Composer, see "What Is BI Composer?"

To edit an analysis using BI Composer:

1. Edit the analysis in one of the following ways:

    - From the Catalog or Home page in Oracle BI EE, navigate to the analysis and click **Edit**. The BI Composer wizard is displayed.

    - From the BI Composer wizard, click the Catalog tab, select the analysis, and click **Edit**.

2. Make the changes to the analysis by navigating the steps of the wizard using the buttons in the BI Composer train at the top of the wizard.

3. Click the **Save** button in the BI Composer train. The "BI Composer wizard -- Create Analysis: Save panel" is displayed.

4. Use the Save panel to save the edited analysis with the same name or with a different name by specifying the save criteria and then clicking **Submit**.

Viewing Analyses in BI Composer

If you are working in BI Composer in an application other than Oracle BI EE (such as an ADF application), then you can display an analysis for viewing in BI Composer. (In Oracle BI EE, you view an analysis in the same manner as an analysis created using the Analysis editor.)

For more information on BI Composer, see "What Is BI Composer?"

To view an analysis in BI Composer:

1. Click the Catalog tab.

2. Select the analysis.

3. Click **View**. The analysis is displayed for viewing to the right of the Catalog tab.

Editing Analyses Created by Using the Analysis Editor

As stated in "What Types of Views Can I Work with in BI Composer?" BI Composer allows you to edit specific view types. When you edit an analysis that was created in the "Analysis editor," the following is a list of many of the objects and attributes that you can use:

- Conditional format — The first conditional format defined for each column in the analysis is honored.

- Excluded columns

- Filters

- Prompts

- Sections

- Slices for pie graphs

- Sorts

- Title

- Vary measure by color and points for scatter graphs

If you edit one of these analyses in BI Composer, you may receive an error message stating that there are incompatible elements in the analysis.

This message can occur for a variety of reasons. For example:

- Green bar formatting has been applied to the analysis.

- An incompatible graph view such as, gauge or performance tile, is part of the analysis.

- An incompatible view such as, selection step or filter, is part of the analysis.

- Duplicate view type exists. For example, if the analysis contains a table, pivot table, pie graph, and bar graph, only one table and one graph are converted in BI Composer. The table or pivot table is converted as a summary table and the graph defaults to the first compatible graph type in the analysis.

To edit an analysis using BI Composer when you have received an incompatibility error message:

1. Click **Show details** to view the messages.

2. Examine the messages.

3. When you are sure that you want to proceed, click **Yes.** The "BI Composer wizard -- Create Analysis: Edit Graph panel" displays.

   To abandon the edit, click **No**.

A

Basic Information to Tell Your Users

This appendix describes the major features and functions that most end users typically work with in Oracle Business Intelligence Enterprise Edition, such as exporting results, drilling in results, sorting values, running actions, and working with map views, graphs, BI Publisher reports, scorecard objects, and KPIs.

This appendix includes the following sections:

- **About Exporting Results**

- **About Exporting Dashboards and Dashboard Pages**

- **About Sorting Values in Heat Matrix Views, Table Views, Pivot Table Views, and Trellis Views**

- **About Resizing Rows and Columns in Views**

- **About Drilling in Results**

- **About Running Actions Using Action Links and Action Link Menus in Analyses and Dashboards**

- **About Running Actions Associated with Action Links in Analyses and Dashboards**

- **Using Section Sliders in Graphs, Gauges, and Funnels**

- **About Working with Map Views on Dashboard Pages**

- **Zooming and Scrolling in Graphs**

- **About Working with Views that Are Linked in Master-Detail Relationships**

- **Modifying Data in a Table View in a Dashboard Page or Analysis**

- **Accessing BI Publisher Reports in Dashboards**

- **About Navigating With Breadcrumbs**

- **Printing Dashboard Pages**

- **About Working with Scorecard Objects**

- **Modifying a KPI's Actual and Target Values**

About Exporting Results

As you work with analyses, you might want to export them to various formats such as Excel and PowerPoint.

Exporting Results

Various options are available for exporting the results of analyses, for example, exporting to Microsoft Excel or exporting to PowerPoint. These options are available on the **Export** link that is displayed with an analysis in a dashboard, if the content designer includes the link there.

To export results:

1. Navigate to the analysis.

2. Click the **Export** link and select the appropriate export option.

   For more information on the export options, see "Export Menu Options for Views and Results."

About Exporting Dashboards and Dashboard Pages

You can export dashboards and dashboard pages to Microsoft Excel 2007+. Depending on the export options that are available for a dashboard page, you can export:

- An entire dashboard using a standard export layout.

  When you export the entire dashboard, each page is included on its own sheet in an Excel workbook, and each sheet is given the name of its corresponding dashboard page.

- A single dashboard page using a standard export layout.

- A single dashboard page using a custom export layout.

  For information on custom export layouts, see "About Creating Custom Layouts for Printing and Exporting Dashboard Pages."

Note: As you export dashboards and dashboard pages, be aware that some customizations and some views on the dashboard or dashboard page may not be supported in the export. (For example, BI Publisher reports and ticker views are not supported.) A non-supported item is skipped and replaced by an empty cell.

To export a dashboard or a dashboard page:

1. Display the dashboard or dashboard page that you want to export.

2. Click the **Page Options** button on the "Dashboard page" toolbar, select **Export to Excel**, and then **Export Current Page**, **Export Entire Dashboard**, or a custom export layout (depending on the options available).

   The File Download dialog is displayed, where you can open or save the dashboard or dashboard page as a spreadsheet file.

   Note: The default table heading format in Excel is Wrap Text. To change the Wrap settings for the table heading, perform the following steps:

   1. In the Title, click **Edit View**.

   2. To the right of the Title field, click **Title.**

      The Format Title page is displayed.

   3. Deselect **Wrap Text**, and click **OK**.

> **Note:** The analysis and dashboard font size is in pixels while the Excel font size is in points. Therefore, when you export to Excel from an analysis or dashboard, the font size decreases to 75% of the analysis or dashboard font size.

About Sorting Values in Heat Matrix Views, Table Views, Pivot Table Views, and Trellis Views

You can sort values in heat matrix, table, pivot table, and trellis views. You can sort on members, measures, and rows (where you see sideways triangles), and also on prompts and sections. For more information on sorting, see "Sorting Data in Views."

About Resizing Rows and Columns in Views

You can resize the row and column edges of table views, pivot table views, and advanced trellis views. For more information, see "Resizing Rows and Columns in Table Views, Pivot Table Views, and Advanced Trellis Views."

About Drilling in Results

Many of the results that are displayed in views represent hierarchical data structures. The metadata specifies these hierarchies, and this enables you to access the different levels of detail within them. For example, information in a sales graph might be categorized by region. Clicking a specific region in the graph might display each country within that region, if the country is the next level within the hierarchy of the metadata. Such clicking is referred to as "drilling."

If the content designer has set up views for drilling, then you can drill in them on dashboards.

What is Drilling?

Drilling is a way to navigate through data in views.

- You drill down to display data in more detail, which displays more members.

  You can drill down to an actual item in the database. For example, if you work in sales, you can drill down to the city level within a sales analysis, and observe that there is a large sale pending in Paris. If you are using an Oracle Siebel operational application, then you can then drill down on the pending sale and go directly to that opportunity in the Oracle BI application.

- You drill up to display data in less detail, in hierarchical columns.

  For example, you might drill up from a month value to see a summary for the whole year. You can drill up in the current hierarchy, either for the entire column at the header level or for individual members. For example, you can drill up from District to Region. Drilling up hides the current level (such as District) and retains the higher level (such as Region).

Where Can I Drill?

You can drill in the following types of views:

- Heat matrix, table, pivot table, and trellis — See "Drilling in Heat Matrices, Tables, Pivot Tables, and Trellises."

- Graphs — See "Drilling in Graphs."

- Maps — See "Drilling in Map Views."

Drilling in Heat Matrices, Tables, Pivot Tables, and Trellises

When you drill down in a heat matrix, table, pivot table, or trellis, the detail level data is added to the current data. For example, when you drill from a continent, the table displays data for the continent and for the countries in that continent.

The way that you drill in heat matrices, tables, pivot tables, and trellises depends on the column type, as described in the following sections.

Drilling in Attribute Columns To drill in an attribute column, click the heading or member in which you want to drill. When you hover over the value before clicking, an underline is displayed below the value to indicate that you can click to drill.

When you drill in an attribute column, you add the lower level to the view. All views are affected by drilling in an attribute column, which is equivalent to a filter drill. After you click the value, a column is added to the analysis and a filter is automatically created and listed in the Criteria tab.

You cannot drill on groups for attribute columns. To see the definition of a group for an attribute column, edit the corresponding step in the Selection Steps pane.

You can also use the "Right-Click Menu for Data Views" to drill in attribute columns.

Drilling in Hierarchical Columns To drill in a hierarchical column, click the **Expand** and **Collapse** icons beside the members. Click to expand or collapse one level. For example, expanding from Total Products to Products inserts the Product members while retaining the value for Total Products.

When you drill in a hierarchical column, you expand and collapse the nodes of data that are in the view. Drilling in a hierarchical column affects only that particular view. No other views are affected.

Drilling in level-based hierarchies and value-based hierarchies works the same. Each time you drill in a hierarchy, you expand or collapse one level. For example, if the hierarchy has a level for continents, regions, and cities, and the view shows continent data, you can expand from Australia down one level to display regions in Australia. From there, you can expand one level from a region, to cities in that region, or you can collapse one level, back to continents.

When you drill, the drill state is preserved. If you collapse at a higher level and re-expand, then the members are re-displayed at the same drill point.

When you click the **Collapse** icon, you collapse back to the current level any levels in the hierarchy that are present in the analysis, regardless of whether they were added by drilling down or by adding the levels from the Subject Areas pane.

You can perform asymmetric drilling, which enables you to drill various members to different levels. For example, if you expand World, then you might see Americas, Asia, and Australia at the same second-level for continents. You can then drill Americas to expand it and see its regions, while Asia and Australia are not expanded.

You can expand and collapse the members of a group for hierarchical columns. For example, if you have a group that includes cities and the group is included in a view, then you see the cities when you click the group name.

You can also use the "Right-Click Menu for Data Views" to expand and collapse hierarchical columns.

Drilling in Graphs

When you drill down in a graph, the detail level data replaces the current data. For example, when you drill down from a continent, the graph displays data for the countries in that continent, but not for the continent itself.

You can drill down in the following ways:

- You can click a label (for which drilling is available) on any axis or in the legend to drill down. (A change in the mouse pointer indicates that drilling is available.)

- If the graph contains only attribute columns and measure columns, then you can click a data point to drill all columns.

- If the graph contains multiple columns including at least one hierarchical column, then when you click a label or a data point, you see a menu from which you can select which columns to drill down. If there are action links available, then the menu also displays those links.

- You can right-click on a data marker, legend, or group-level (X axis) item, and then select **Drill** from the menu. See "Right-Click Interactions in Views" for additional information.

Depending on how the graph was embedded in the dashboard, you can use the breadcrumb feature, the **Back** button on the browser, the **Clear Customizations** option on the dashboard (for all views), and so on to return to a previous graph.

> **Note:** The time series line graph does not support drill down on a time column where data types other than data or date-time are used.

About Running Actions Using Action Links and Action Link Menus in Analyses and Dashboards

As you analyze data in analyses, view dashboards, or view content delivered by agents, you might want to take some action because of the business insight you gained from the data. You can do so by using action links and action link menus, if available:

- An action link is a link embedded in an analysis (on a column heading or a data value) or dashboard page that, when clicked, runs an associated action.

  For example, suppose a data value in an analysis includes an action link that sends the analysis to a specified email address. If, after analyzing the data, you decide that your manager must see this analysis, then you can send it to him directly from the analysis by clicking the action link. Figure A–1 shows an example of an action link to send an email.

Figure A–1   Sample Action Link to Send Email

- An action link menu is a menu embedded on a dashboard page that groups multiple action links as options on the menu. An action link menu lets you select, from a list of action link options, the correct action to take. Figure A–2 shows an example of an action link menu.

Figure A–2   Sample Action Link Menu
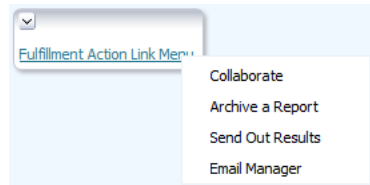
About Running Actions Associated with Action Links in Analyses and Dashboards

To run an action associated with an action link:

1. Do one of the following:

    - If the action is associated with a standalone action link, then click the action link.

    - If the action is associated with an action link on an action link menu, then click the action link menu and then select the action link option.

2. Respond to any request for more information or any confirmation prompt that is displayed.

    > **Note:**   A successful invocation message indicates only that the action that is associated with the action link ran successfully. It does not indicate that the process or operation that the action represents ran successfully.

Using Section Sliders in Graphs, Gauges, and Funnels

Some graphs, gauges, and funnels include section sliders. Section sliders let you limit the data that is shown in a graph, gauge, or funnel. For more information on section sliders, see "Defining Section Sliders in Graphs, Gauges, and Funnels."

To use a section slider in a graph, gauge or funnel:

1. Use the components of the section slider to select a value as follows:

    - To select a particular value, move the slider thumb to that value.

    - To move the slider thumb to a value to the left of the current value, click the **Decrease** button (the second button from the left on the slider).

    - To move the slider thumb to a value to the right of the current value, click the **Increase** button (the right-most button on the slider).

    - To sequentially move the slider thumb through all the values, click the **Play** button (the left-most button on the slider). The **Play** button changes to a **Pause** button to allow you to stop on a particular value.

    The data in the graph, gauge, or funnel is limited by the current value as indicated by the slider thumb.

About Working with Map Views on Dashboard Pages

A content designer can include map views on dashboard pages. A map view presents data in spatial form. Through location context, map views allow you to discover trends and transactions across regions that might not be obvious in tables or graphs. For example, a map view can show a map of the United States with the states color-coded by sales performance.

This section provides the following information on working with maps on dashboard pages:

- "Panning in Map Views"

- "Zooming in Map Views"

- "Drilling in Map Views"

- "Modifying Thresholds for Formats on a Map View"

- "Showing or Hiding Formats on a Map View"

For information on creating maps, see "Editing Map Views."

Note: Bear the following in mind when working with map views:

- When you download a map view to a Microsoft PowerPoint document, you might notice that some map format images and sliders might not be downloaded correctly or completely.

- The map view can include a background map that is configured to fetch its tiles from an external provider, such as Google Maps. A tile is an image that displays a limited portion of an entire map layer. If you print such a map view, then the output includes the formats that were applied but not the background map.

- If you receive a map view error and if you have the proper permissions, you can edit the map in an attempt to correct the issue. See "Editing Map Views" for additional information.

Panning in Map Views

You pan in map views by clicking and dragging your mouse. You can pan on the main map or on the overview map. You can also use the reticule in the overview map to move around. When you pan, a new query is not issued.

You are in Pan mode whenever you are not in one of the Zoom modes.

In Pan mode, you can do the following:

- Click and drag on the map background.

- Hover over a region of the map to display an information window for that region for the data that is directly below the mouse cursor.

- Click to display an information window. The information window can be used to drill or update a detail view. See "About Working with Views that Are Linked in Master-Detail Relationships" for additional information.

- Double-click the map to zoom.

Pan is the default mode for the map view, and the pan mode is indicated by a crossed-arrows cursor.

To pan in a map view:

1. Make sure neither the **Zoom In** button nor the **Zoom Out** button is selected.

2. Click the map background and drag and drop it to the desired location.

Zooming in Map Views

Zooming the map adjusts the detail of the geographic data that is shown on the map. Zooming in from a country level might show state and city details. Zooming out from a street-level view might show cities but not street-level information. For master-detail linking, the map view will focus on the detail feature that was selected in the master view.

When you zoom, you can do the following:

■   Click on the map background. To zoom by clicking, you must first select the zoom mode from the toolbar. The default mode is pan, which is indicated by a hand cursor. When you are in zoom mode, the mouse pointer changes to a magnifying glass and you can click-zoom directly on the map itself.

   When you are zooming in, you can either single-click or click and drag to use marquee zoom. You can draw a box that delineates the area in which you want to zoom.

■   Hover over a region of the map to display an information window for that region for the data that is directly below the mouse cursor.

■   Click to zoom in and out. When you click, the map zooms in one "increment" using the click location as the center point.

Zooming and drilling are not synonymous. When you zoom, no drill is performed (that is, no new query is issued). However, if you drill on a map layer, that drill likely results in a new zoom level being displayed, if a new layer is added to the map. If a new layer is not added, then the zoom level does not change.

You can zoom using either the buttons on the toolbar or the zoom slider. When you use the zoom slider, you zoom in or out of the map as it is currently displayed. When you hover over the zoom slider, the names of the map layers are displayed beside their mid-range zoom level. Click the names to zoom the map to that level. When you zoom, a new query is not issued.

To zoom using the Zoom In and Zoom Out tools:

1. Click the **Zoom In** or **Zoom Out** button on the toolbar.

2. Click the map background to zoom in that spot. If you are zooming in, you can click and drag to draw a rectangle to specify the area in which to zoom.

To zoom using the buttons on the zoom slider:

1. Click the plus or minus sign on either end of the slider. You can also hover over the slider, then click the name of the level to zoom to.

Drilling in Map Views

Drilling in a map enables you to navigate through the data. Drilling is available when the Pan tool is selected, as indicated by a hand cursor. If you hover over map data, then an information window is displayed with various information about that location.

When you click a region or a point on the map, one of the following occurs:

- If the column is configured as a master for another view, then that view is updated with the latest information.

- If the column or map is configured to drill into a column or to perform a single action, then the drill or action is immediately initiated.

- If the column is configured to perform multiple actions or if multiple drills are possible, then the information window that is displayed contains a list of the actions or links for the multiple columns.

All columns in which you can drill are displayed in the information window as link text. When you click the link for a simple drill, you drill in the data, the map is redrawn with a different layer, and the information window is dismissed. If action links are defined, then you see a popup window that shows additional links. For information, see "About Running Actions Associated with Action Links in Analyses and Dashboards."

Drilling updates map formatting to reflect the newly drilled data. For some drills (such as drilling on a State), the map zooms to the specified region while simultaneously updating the formatting. How you zoom and the formats and geographic levels that the map contains affect what is displayed. Formats have particular "zoom ranges" and are visible at different zoom levels. Zooming back up might display a new format, if you zoom out past the zoom level of the drilled format.

After you have drilled down, use the zoom slider to drill back up. Use the **Return** button on a dashboard page to display the original map view at the zoom or drill level that was in place before you started drilling.

Modifying Thresholds for Formats on a Map View

The content designer can give you the ability to modify the thresholds that are used for displaying formats on the map view. You know that you have this ability if you see a slider under a format name in the Map Formats pane. Modifying thresholds is a type of visual analysis of the data, which is sometimes referred to as "what-if analysis."

Format ranges are displayed as color fills on the slider background, with a "thumb" for each threshold that can be edited. Users can manipulate the slider to specify their own threshold values, as follows:

- Hovering over a thumb displays the value under that thumb.

- Dragging the thumb adjusts the threshold.

- Clicking a section on the slider moves the thumb to that section.

- Right-clicking the slider displays a menu with the following options:

  - **Edit Color** — Displays a dialog, in which you select a predefined or custom color for the threshold.

  - **Add Threshold** — Adds another threshold to the slider, including a thumb to indicate the threshold. This addition creates a new formatting bin with a new color. For example, if three bins exist (with colors red, yellow, and green) and you create a threshold, then four bins now exist. A maximum of 12 bins is supported.

  - **Remove Threshold** — Removes the threshold above where you right-clicked, including removing the thumb from the slider and a formatting bin.

- Clicking on a slider thumb number value displays a text box in which you can edit the number that corresponds to the threshold value. Press Enter or click outside the box to update the threshold value and the thumb position.

Showing or Hiding Formats on a Map View

Content designers can superimpose multiple layers of information (sometimes known as themes) on a single map view. They can create formats to enhance the layers. You can display or hide the formats for a map.

To show or hide the formats of a map view:

- In the Map Formats pane, from the View menu, select either **View All Formats** or **View Visible Formats**.

- In the Map Formats pane, deselect the box beside a format's name.

Zooming and Scrolling in Graphs

If zooming and scrolling has been enabled for a graph, then the graph includes a Zoom icon. The zoom icon enables you to zoom in and out of a graph's plot area using its axes. Once you zoom in on an axis, you can scroll the axis.

To enable zooming and scrolling in a graph, the content designer sets the zoom and scroll properties in the "Graph Properties dialog: General tab."

When you zoom in on an axis, a zoom and scroll slider is displayed. Figure A–3 shows an example of a zoom and scroll slider.

Figure A–3   Example of a Zoom and Scroll Slider

A zoom and scroll slider consists of the following components:

- **Left or bottom button** — Scrolls to the left on the X axis or to the bottom on the Y axis, revealing portions of the graph that are out of view.

- **Right or top button** — Scrolls to the right on the X axis or to the top on the Y axis, revealing portions of the graph that are out of view.

- **Scroll thumb** — Represents the visible portion of the graph in relation to the full graph. You drag the scroll thumb to dynamically scroll the graph, revealing portions of the graph that are out of view.

- **Resize handles** — Are displayed at each end of the scroll thumb when you hover over the thumb. You use the resize handles to zoom in and out on an axis.

- **Tooltip** — Is displayed only when a you hover over either the thumb or a resize handle and describes the data that is currently displayed in the scroll thumb.

To zoom and scroll in a graph:

1. Hover the mouse over the graph to display the **Zoom** button.

2. Click the **Zoom** icon and then:

   - If only one axis has zoom and scroll enabled, then select either **Zoom In** or **Zoom Out**.

   - If both axes have zoom and scroll enabled:

     - To zoom in and out and scroll on the X axis, select **Horizontal Axis** and then either **Zoom In** or **Zoom Out**. A zoom and scroll slider is displayed on the X axis.

       To unzoom the X axis and display the actual graph size, select **Actual Size**.

– To zoom in and out and scroll on the Y axis, select **Vertical Axis** and then either **Zoom In** or **Zoom Out**. A zoom and scroll bar is displayed on the Y axis.

To unzoom the Y axis and display the actual graph size, select **Actual Size**.

■ To unzoom both the X and Y axes and display the actual graph size, select **Actual Size**.

3. Once you have zoomed in or out, zoom and scroll as desired by:

■ Using the **Zoom** button to zoom in and out incrementally

■ Dragging the scroll thumb on an axis to dynamically scroll the graph, revealing portions of the graph that are out of view

■ Clicking the scroll buttons on an axis to scroll left and right (on the X axis) or up and down (on the Y axis)

■ Using the resize handles to zoom in and out on an axis

About Working with Views that Are Linked in Master-Detail Relationships

Views can be linked in master-detail relationships. When views are linked in such a relationship, you can click values in designated columns in one view (called the master view) and effect a data change in another view (called the detail view). For more information on master-detail relationships, see "What Is Master-Detail Linking of Views?" and "Linking Views in Master-Detail Relationships."

In Figure A–4, Regional Sales Master View and Regional Sales Detail View are linked in a master-detail relationship such that clicking a dollar value in Regional Sales Master View effects a data change in Regional Sales Detail View. For example, clicking the dollar value for the Eastern Region in the Regional Sales Master View, updates the Region prompt in Regional Sales Detail View to EASTERN REGION and refreshes the entire view.

Figure A–4 Example of Views Linked in a Master-Detail Relationship
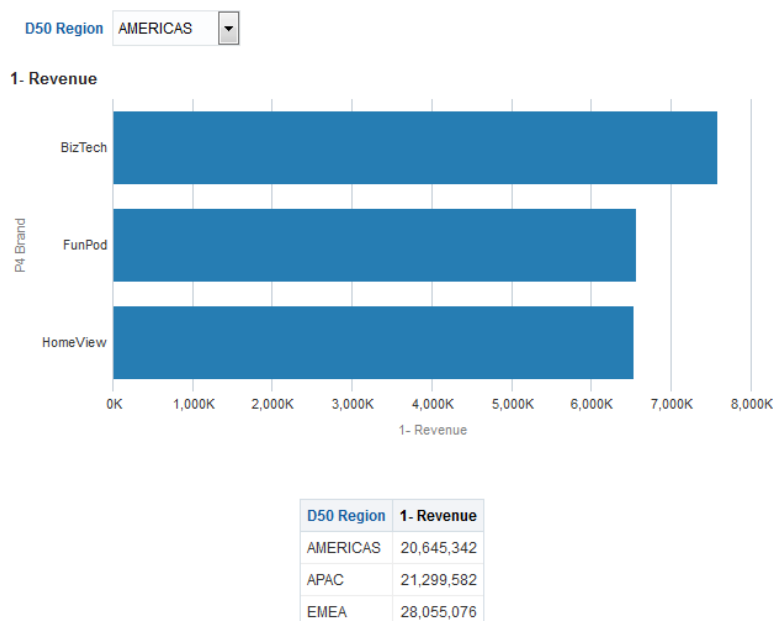
Modifying Data in a Table View in a Dashboard Page or Analysis

As a user of a dashboard page, you might have the ability to modify the data that you see in a table view. This ability is often referred to as "write back" and is available if you have the appropriate privileges and if the administrator has configured it. You can update a value in the view that is written back to the record in the data source.

If your user name has the appropriate privileges and if the administrator has configured for the modification of data values, then a write back button (often labeled **Update**) is displayed on the table view. After clicking the button, you can update or write to the data source. For example, you can enter sales targets for the current quarter in a Sales dashboard. The name that is displayed on the write back button depends on how the content designer prepared the view for write back.

To update records in table views:

1. Display the dashboard and the view in which you want to modify values.

2. Click the button that is labeled **Update** or a similar name that indicates that write back is enabled to switch to Edit mode, in which you can modify values.

   If you know that you can modify the values in the view but do not see an **Update** button or similar button, then the content designer has specified that the view always be in Edit mode. You can begin modifying values immediately and you never see an **Update** button or similar button.

   The updating capability is not available for hierarchical columns.

3. When you are in Edit mode, you can type a value in the appropriate field. Fields to which you can write back have the appearance of a text box in a dialog.

4. After you have modified values, click one of the following buttons (or buttons with similar names):

   - **Apply**: By clicking this button, you modify the values in the data source and keep the view in Edit mode with the modified values being displayed.

   - **Revert**: By clicking this button, you restore the data to its original values if you have not yet clicked **Apply** or **Done** to save the modifications. Once you have written a modified value back to the data source, you cannot revert to its original value.

   - **Done**: By clicking this button, you modify the values in the data source and return the view to View mode (if the content designer has indicated that the view is not always in Edit mode).

   When you click the **Apply** or **Done** button, the entire dashboard is refreshed from the data source, because other analyses on the dashboard might depend on that data.

   If filters are enabled in the table view and you enter a value in a record that is affected by the filter, then that record might no longer be displayed in the view after the data is refreshed from the data source.

About Handling Errors for Write Back

As you modify data values, you might encounter various errors. For example, you might enter an invalid value in a field and attempt to write it back to the data source, or the administrator might have specified the incorrect write-back template to use. If a problem occurs, then you see a basic error message. To obtain additional information about the problem, an administrator can increase the logging level of the session to

create detailed log files. The administrator can search the log files for Presentation Services for a string such as "saw.writeback.action.executeimpl".

If you are writing back multiple values simultaneously and accidentally enter invalid values, then the results depend on the rows that are affected, as described in the following list:

- If you are updating multiple values on one row and at least one of the values is invalid, then no values are written to the database.

- If you are modifying values in multiple rows and some values are invalid, then some values might not be written back while some write back successfully.

Accessing BI Publisher Reports in Dashboards

As a user of a dashboard page, you have the ability to access reports that were created in Oracle BI Publisher. The report might be embedded in the dashboard page, or you might see a link that opens the report in BI Publisher.

To access a BI Publisher report:

1. Display the dashboard page that contains the report to access.

2. Perform the following tasks:

    - If the report is embedded in the page, then use the functions from the BI Publisher toolbar to affect the report.

      If prompts are included on the dashboard, then use those prompts to specify parameters that affect the display of data in the report. Depending on the design of the report, certain prompts do not affect the display of data in the report.

    - If the page contains a link for the report, then click the link to open the report in BI Publisher.

Using the Oracle BI Publisher Toolbar on a Dashboard Page

The Oracle BI Publisher toolbar is displayed on the dashboard that contains a BI Publisher report. The options that you see depend upon your permissions. The toolbar functions are described in the Table A–1.

Table A–1   Oracle BI Publisher Toolbar Functions

Function	Description
Template	If multiple report templates are available, then you see them in the Template list. Select a new template and then click **View**.
Output Type	If multiple output types are available, then select the desired output type (HTML, PDF, RTF, Excel, data) from the list and click **View**. The output is rendered in the browser.
View	Select a template or specify an output type and click this button to view the BI Publisher report.
Export	When you click this button, you are prompted to save the BI Publisher report or to open the appropriate application for the output type.
Send	When you click this button, the Destination dialog is displayed. From this screen, select the delivery destination (for example, Email, Printer, Fax, FTP, or Web Folder) and enter the appropriate information. You can select multiple delivery destinations.

Table A–1   (Cont.) Oracle BI Publisher Toolbar Functions

Function	Description
Schedule	Click this button to schedule the BI Publisher report. For more information about scheduling a report, see *User's Guide for Oracle Business Intelligence Publisher*.

About Navigating With Breadcrumbs

Breadcrumbs enable users to know their current location within Oracle BI content and the path that they have used to navigate Oracle BI content.

Breadcrumbs are active links that users can click to return to the place from which they navigated and to the state of the content when they left it.

Breadcrumbs display at the bottom of the page in Presentation Services or from Fusion Applications. The formatting of the breadcrumbs in the trail can differ depending upon the state of the item. Table A–2 contains the various ways that breadcrumbs can display within the breadcrumb trail. Users reading this appendix need to understand these formats so that they can effectively navigate their breadcrumb trails.

Treemap breadcrumbs behave somewhat differently for page-edges. See "Editing Treemap Views" for additional information.

Table A–2   Breadcrumb Formats

Format	Description
... (Blue Ellipses)	This is the breadcrumbs overflow button. This button displays when there are many breadcrumbs in the breadcrumb trail and the page is not wide enough to display all of the breadcrumbs. When clicked, this button displays a list containing the breadcrumbs that are not shown in the trail on the bottom of the page. Click this button to view and select a location from a list of breadcrumbs.
Blue Text	This format indicates a link to a visited location.
Blue Text in Italics	This format indicates a link to a visited editor. For example, the Analysis editor.
Black Text	This format indicates your current location.
Black Text in Italics	This format indicates your current location in an editor. For example, the Analysis editor.

Printing Dashboard Pages

Depending on the print options that are available for a dashboard page, you can print a dashboard page using a:

- Standard print layout (**Printable HTML** or **Printable PDF**).
- Custom print layout.

  Using a custom print layout allows you to produce high-quality printed dashboard content. For information on custom print layouts, see "About Creating Custom Layouts for Printing and Exporting Dashboard Pages."

To print a dashboard page:

1. Display the dashboard page that you want to print.

2. Click the **Page Options** button on the "Dashboard page" toolbar and select **Printable HTML**, **Printable PDF**, or a custom print layout (depending on the options available):

- If you selected **Printable HTML**, a new window shows the dashboard page to print.

    From the File menu, select **Print**.

- If you selected **Printable PDF** or a custom print layout, an Adobe PDF window shows the dashboard page to print.

Note: If you set the column properties for a dashboard page, and then select the **Printable PDF** option, the **Width** field cannot exceed 100%.

Use the options that are available in the Adobe PDF window to save or print the file.

About Working with Scorecard Objects

The following scorecard objects can be added to a dashboard by the content designer:

- Cause & effect maps. See "What Are Cause & Effect Maps?"

- Custom views. See "What Are Custom Views?"

- Strategy maps. See "What Are Strategy Maps?"

- Strategy trees. See "What Are Strategy Trees?"

- KPI watchlists. See "What Are KPI Watchlists?"

- Smart watchlists. See "What Are Smart Watchlists?"

See "Adding Content to Dashboards" for additional information on adding a scorecard object to a dashboard.

As you work with scorecard objects, keep the following information in mind:

- If a dimension is not pinned, you can populate it by a prompt, if one is provided. See "What Are Dimensions and Pinned Dimension Values?" for additional information on dimensions.

- There are two types of diagrams for a strategy tree:

    - Strategy tree diagram. See "Understanding a Strategy Tree Diagram" for additional information.

    - Strategy contribution wheel diagram. See "Understanding a Strategy Contribution Wheel Diagram" for additional information.

    You can toggle between the two by right-clicking in the background area of the strategy tree and selecting either **View as Tree Diagram** or **View as Wheel Diagram**.

- If the content designer saved the smart watchlist with the Filter pane displayed as a:

    - Control panel, you can specify filter criteria to dynamically change what is shown in the smart watchlist.

    - Text summary, you can view a read-only summary of the current filter criteria.

Note that the content designer also has the option to hide the Filter pane.

- In Accessibility mode:
    - Views (that is, cause & effect maps, custom views, strategy maps, and strategy trees) are rendered as watchlists. See "Watchlists" for additional information.
    - The Print function is disabled.

Modifying a KPI's Actual and Target Values

Some KPIs might include target settings, for example, a content designer might include a KPI with target settings in an objective. A KPI that includes target settings allows you to update and save the KPI's actual and target values. To determine if a KPI contains target settings, look at the actual and target settings fields, and if they are surrounded by black-lined boxes, then they are writeable. If the fields are not surrounded with black-lined boxes, then they are not writeable.

Note that the content designer might have created target settings on only the actual value field or the target value field, or both the actual value field and the target value field. Even though target settings have been added to a KPI and the fields display with the black-lined box, you might not have the proper privileges to update and save the modified values.

See "User Interaction with Target Settings" for additional information about how you interact with KPIs that contain target settings.

To modify a KPI's actual and target values:

1. Navigate to the watchlist, objective, or initiative that contains the KPI for which you want to update the actual and target values.

2. For each **Actual** and **Target** field that you want to modify and that is surrounded by a black-lined box, place your cursor in the field and type the new value.

3. Save the watchlist, objective, or initiative.

   Note that if you do not have the privileges required to modify the values, Oracle BI EE changes the color of the **Actual** or **Target** fields from white to red, displays the "Insufficient dimensional slice security for slice with dimension value" error message, and does not save the modified value.

B

Accessibility Features

This chapter provides information about how to configure and use accessibility features for Oracle Business Intelligence Enterprise Edition. It describes keyboard shortcuts and how to design for accessibility.

This chapter includes the following sections:

- Using Accessibility Features
- Keyboard Shortcuts
- Designing for Accessibility
- Using Objects to Enhance Accessibility
- Installing and Configuring BI Composer for Oracle BI EE

Using Accessibility Features

This section contains the following topics:

- "What are Accessibility Features?"
- "Signing In Using Keystrokes"
- "Changing to Accessibility Mode"

What are Accessibility Features?

The accessibility features in Oracle BI EE aim to make aspects of navigating and using the product easier for persons with disabilities and for the aging population. The accessibility features support the use of standards-based assistive-technology hardware and software (such as Freedom Scientific JAWS or Microsoft Narrator). The accessibility features are grouped into these general categories:

- Features used by third-party assistive-technology products. These features center on providing a user interface that consists of standard HTML elements that can be interpreted by third-party assistive technology products.

- Accessibility mode, as described in "Changing to Accessibility Mode."

- Keyboard shortcuts that make it easier to navigate content for users with limited or no ability to use a mouse.

  For information, see "Keyboard Shortcuts."

- Content design capabilities that make it possible for content creators to create content that supports users with accessibility needs. While Oracle BI EE provides accessibility mode that offers many features automatically, you as the designer

must create content that meets the accessibility requirements of your user community.

For information, see "Designing for Accessibility" and "Using Objects to Enhance Accessibility."

Signing In Using Keystrokes

Use the following procedure to sign into Oracle BI EE using keystrokes rather than the mouse.

To sign into Oracle BI EE using keystrokes:

1. In a browser, display the Sign In page for Oracle BI EE.

2. If you want to change the language that Oracle BI EE uses, press Tab to place the insertion point in the **Language** field and use the arrow keys to select the desired language. The insertion point is then placed in the **User ID** field.

3. Enter the ID and press Tab to place the insertion point in the **Password** field.

4. Enter the password.

5. Perform one of the following actions:

   - If you want content for Oracle BI EE to be rendered in a browser in a way that facilitates the use of a screen reader or want to change the language that Oracle BI EE uses, press Tab twice to place the insertion point in the **Accessibility Mode** box.

   - If you are ready to complete the sign-in process, then press Enter to activate the **Sign In** button.

6. If you want content for Oracle BI EE to be rendered in a browser in a way that facilitates the use of a screen reader, press the spacebar to select the **Accessibility Mode** box.

7. Press Shift+Tab twice to place the insertion point on the **Sign In** button, then press Enter to activate the **Sign In** button.

Changing to Accessibility Mode

Accessibility mode in Oracle BI EE makes the rendering of the user interface more compatible with screen readers while allowing only that functionality that is supported for users with disabilities to be visible. The following list provides information on accessibility mode:

- The "BI Composer wizard" is displayed in place of the "Analysis editor." For more information on BI Composer, see Chapter 15, "Using BI Composer to Work with Analyses."

- The Home page does not contain links for accessing the Administration page or for performing most editing functions, such as for editing dashboards.

- Graphs and map views are not displayed but are instead converted to one or more annotated tables.

- Tables and pivot tables are rendered with appropriate internal annotations to enable screen readers to describe the contents of cells.

  Refer to your assistive-technology documentation for all applicable table navigation shortcuts.

- You cannot use the mouse to modify the layout of a table or pivot table.

- Performance tiles, heat matrices, and treemaps are rendered as pivot tables.

- The collapse icon is included in the upper-left corner of each section on a dashboard page, even if that section is marked as not collapsible in the Dashboard builder. This allows the icon to be the first element that receives focus when using the keyboard to navigate on a dashboard page.

- The **Page Options** toolbar button on a dashboard page, which displays a menu of page options, is not available.

- If the dashboard page is refreshed, even if you navigate to another page, then the location of the focus is not preserved. You must press Tab to navigate through the focusable items.

- A KPI contribution wheel diagram is rendered as a standard interactive analysis for the KPI, rather than as a wheel diagram. The dashboard view is interactive, but you cannot save your changes.

- Trellis views, when displayed on dashboards, are converted to pivot table views with the following changes:

  - Attribute columns of the inner graph are not included in the pivot table views.

  - Measure values are aggregated to the new grain of the pivot table views.

By default, Oracle BI EE does not use accessibility mode. Each user can decide whether to enable accessibility mode during sign in as described in "Signing In Using Keystrokes" or after sign in by using the following procedure.

To enable accessibility mode using keystrokes after sign in:

1. Press Tab multiple times to navigate through the global header, until the focus is on your user name in the **Signed In As** area.

2. Press Enter, then Tab to highlight the **My Account** link.

3. Press Enter to display the "My Account dialog."

4. Press Tab to select the "My Account dialog: Preferences tab."

5. Press Tab to navigate through the fields on the tab until you reach the **Accessibility Mode** options.

6. Use the arrow keys to select the **On** option.

7. Press Enter to save your changes and close the dialog.

8. Refresh the page to see it displayed in accessibility mode.

Keyboard Shortcuts

This section provides the following information about shortcuts:

- "Keyboard Shortcuts for Oracle BI EE and Oracle BI Publisher"

- "Navigating in Oracle Business Intelligence Dashboards"

Keyboard Shortcuts for Oracle BI EE and Oracle BI Publisher

Both Oracle BI EE and BI Publisher support standard keyboard shortcuts that are used in many software applications. In addition, both components offer shortcuts to perform tasks that are specific to those components. Table B–1 describes general keyboard shortcuts for use with Oracle BI EE and BI Publisher.

Table B–1   General Keystrokes

Keyboard Shortcut	Result
CTRL+ALT+G	Navigates to the first focusable element in the global header, which is the Skip to Content link. This link enables you to bypass the options that are available in the global header and to move to the features that available in the main part of the Home page.
CTRL+ALT+D	Navigates to the Dashboards popup menu in the global header. You can then press ENTER to display a menu from which you select a dashboard to display.
CTRL+ALT+P	Navigates to the current dashboard page tab, if the tab is displayed. If there is only one page in the dashboard, then the page tab is not displayed.
CTRL+SHIFT+S	Navigates to the first focusable element in the next section. For a dashboard page, the first element is the collapse icon.
CTRL+SHIFT+ U	Navigates to the first focusable element in the previous section. For a dashboard page, the first element is the collapse icon.
TAB	Navigates to the next focusable element.
SHIFT + TAB	Navigates to the previous focusable element.
Down Arrow	Navigates to the next menu option.
Up Arrow	Navigates to the previous menu option.
ENTER	Triggers the activity, when the focus is on a link, an image, or a button with an associated URL or activity.
ESC	Closes the menu that has the focus.

Table B–2 describes keyboard shortcuts for navigating in dashboards in Oracle BI EE and reports in BI Publisher.

Table B–2   Keyboard Shortcuts for Navigating in Oracle BI EE and BI Publisher

Keyboard Shortcut	Result
ALT + Up or Down Arrow	Opens drop-down and combo boxes.
CTRL + Up or Down Arrow	Shows the next or previous item in a combo box.

> **Note:**   If you use Freedom Scientific JAWS or other screen reader programs, then you must first disable the virtual PC cursor before using the keystroke combinations to navigate the dashboard. You must enable the virtual PC cursor at other times, such as when navigating within table objects on a dashboard.

Table B–3 describes keyboard shortcuts for navigating the "BI Composer wizard." (For more information on BI Composer, see Chapter 15, "Using BI Composer to Work with Analyses.")

> **Note:**   The Catalog tree that is displayed in the Catalog tab of the BI Composer wizard is interpreted as a table. To navigate the tree, use the table keystrokes for your screen reader program.

Table B–3   Keyboard Shortcuts for Navigating in the BI Composer Wizard

Keyboard Shortcut	Result
ALT + SHIFT + b	Navigates to the **Back** button.
ALT + SHIFT + c	Navigates to the **Cancel** button.
ALT + SHIFT + l	Navigates to the **Finish** button.
ALT + SHIFT + x	Navigates to the **Next** button.
ALT + CTRL + m	Navigates to the context menu. For example, selecting an item in the Catalog tree and pressing ALT + CTRL + m displays a menu with options to expand and collapse menu items.
ALT + Down Arrow	Reads the messages in a pop-up window, one by one.

Navigating on the Home Page

If you display the Home page after signing into Oracle BI EE or by navigating from another location in Oracle BI EE, then you must press CTRL+ALT+G to place the focus on the **Skip to Content** link in the upper-left corner of the Home page.

To navigate on the Home page with keystrokes:

1. Sign into Oracle BI EE, as described in "Signing In Using Keystrokes."

2. Press CTRL+ALT+G to display the **Skip to Content** link in the upper-left corner of the Home page.

3. Press one of the following:

   - ENTER on this link to navigate to the default starting location on the Home page, which is the first link in the upper-left corner under the global header.

   - TAB to navigate to the first focusable element in the global header.

4. Continue to press TAB to navigate through the elements on the Home page.

Navigating in Oracle Business Intelligence Dashboards

The following procedure describes one way to navigate a dashboard using keyboard shortcuts. This procedure does not include all keyboard shortcuts and options but serves as an example.

To navigate dashboards with keystrokes:

1. Sign into Oracle BI EE, as described in "Signing In Using Keystrokes."

   - If the Home page is displayed first, then use keystrokes to display the dashboard. Press CTRL+ALT+D to navigate to the Dashboards menu in the global header, press ENTER to display the menu, press TAB or the arrow keys to navigate through the dashboard names, then press ENTER on the name of the dashboard to display.

     Proceed to the next step.

   - If a dashboard is displayed, then proceed to the next step.

2. Navigate to the desired dashboard page as follows:

   a. Press CTRL+ALT+G to display the **Skip to Content** link.

   b. Press TAB multiple times to navigate through the global header to the tab that corresponds to the first page of the dashboard.

If there are no page tabs, then you navigate to the first focusable element on the dashboard page.

Press TAB to move through the dashboard pages. After the last page, pressing TAB gives focus to the dashboard page menu.

c. Press ENTER when the focus is on the appropriate page tab to open that page of the dashboard.

3. Press CTRL+SHIFT+S to navigate to the first focusable element in the next section, which is the collapse icon.

4. Press TAB to navigate to the next focusable element in the current section.

5. Press CTRL+SHIFT+S to navigate to the first focusable element in the next section.

6. While the section collapse and expand icon has focus, press ENTER to collapse the current section.

7. To navigate in a table or pivot table:

a. Press TAB to select the table.

b. Press TAB to move through the headers of the table and to select any menus that exist there.

c. When the table has focus, press the arrow keys to navigate among the columns and body cells of the table

To access the drop-down menus in the header rows when a body cell has focus, press TAB, then ENTER to display the options for the menu in the first header row. Press TAB and use the arrow keys to highlight the options in the menu and press ENTER to select the desired option.

Designing for Accessibility

When creating content for consumption by a wide variety of users, you must plan to provide support for users with various disabilities. Such support is a legal requirement in many locations throughout the world.

You can follow several general guidelines when designing content for consumption by a variety of people with differing abilities. These guidelines apply to any content that you create for Oracle BI EE or other applications. You must also be aware of features that are specific to Oracle BI EE that ensure that the content that you provide supports accessibility requirements.

This section contains the following topics on designing for accessibility:

- "Obtaining General Information"

- "Avoiding Common Misconceptions"

- "Following Best Practice Recommendations"

- "Following General Guidelines for Accessible Content"

- "Designing Dashboards that are Accessible"

Obtaining General Information

You can locate information about accessibility across the Information Technology industry in numerous published books. This guide does not intend to duplicate those works. Various standards and legislation are documented, especially as part of the

World Wide Web Consortium (W3C) and Section 508 of the United States
Rehabilitation Act.

Avoiding Common Misconceptions

Many designers make assumptions about technology and accessibility. Some of the
more common misconceptions include:

- HTML content automatically equals accessible content.

- Accessible tools automatically create accessible content.

- Automated testing tools can reliably determine accessibility.

None of these assumptions, however, is correct. Developers can create non-accessible
content using HTML. A tool that can produce accessible content might not do so by
default, or might allow a developer to select options that turn off the accessible
features within existing accessible content. Automated testing tools do not always
interact with content the same way end that users do. As a result, they can erroneously
report accessible elements as non-accessible. Therefore, accessibility is ultimately the
responsibility of the content designer. When creating content, designers must be aware
of certain common practices to ensure the content is accessible to all users.

Following Best Practice Recommendations

When configuring or creating content for dashboard pages, consider the following best
practice recommendations:

- Refrain from using tickers, because they are not supported.

- When saving dashboards, ensure that you save them in appropriate locations so
  that they are easily accessible to users. See "Saving Dashboards by Other Names
  and in Other Locations" for information on appropriate locations.

- Reduce the interactivity and the complexity of pages. For example, restrict the
  number of prompts and drop-down menus, do not use the drill-inline feature for
  sections, and configure tables to show as many rows as possible.

Following General Guidelines for Accessible Content

Always consider the fact that multiple disabilities exist and that multiple disabilities
might manifest in the same individual. You must also remember that there are varying
degrees of certain disabilities (such as the various types of color vision deficiency).
Your designs must take all these possibilities into account.

This section contains guidelines on the following general areas of design:

- "Font Selection"

- "Color Selection"

- "Color Contrast"

Font Selection

Users with low visual acuity often use screen magnification software to make the
screen easier to read. The fonts that you use should be readable even when magnified
by accessibility tools by as much as 20 times. Some fonts do not display well when
magnified, while others do.

Oracle BI EE dashboards use style sheets to set standard display definitions. Ensure that these style sheets consistently use font selections that magnify well. That way, content creators automatically default to using fonts that are accessible.

Color Selection

Many different types of color vision deficiency exist, from an inability to see the difference between one common color pair such as red-green (the most common deficiency), all the way to full color blindness where a person can see only varying shades of gray and black. Using only color to convey critical information means that certain users are not fully aware of all the pertinent information about a subject. And, of course, a blind user needs any information conveyed by color to also be present in an alternate textual format.

As a developer, you must not create any content that provides key information by color alone. One example of a non-accessible design is to denote negative numbers solely by coloring the text red. Another example is a typical "stoplight" indicator where the only context information comes from its color — green for good and red for bad.

Using Color with Text You can use color in designs if you also include another indication of the same information. For example, you can include a minus sign or parentheses to denote negative numbers in tables and pivots. For stoplight displays, you can add descriptive text or different shaped icons in addition to the color. You can include text such as "Status: good." You can include green circles for "good," yellow triangles for "warning," and red octagons for "bad."

Color Contrast

Because color vision deficiency can also manifest as an inability to distinguish between subtle shades of similar colors, overall color design of all screen elements must provide a large amount of contrast. You should strive to achieve a minimum of a 4.5:1 color luminosity contrast ratio. For example, use black text on a white background instead of dark gray text on a light gray background.

You can check the following web sites for assistance:

- This site offers a tool that can test for the proper level of contrast:

  http://www.paciellogroup.com/resources/contrast-analyser.html

- This site offers a tool for viewing how a web site is displayed for individuals with various types of color vision deficiency:

  http://colorfilter.wickline.org/

Designing Dashboards that are Accessible

Use the guidelines in the following sections for designing accessible dashboards:

- "Promoting a Consistent Structure"

- "Keeping Dashboard Pages Simple"

- "Enhancing On-Screen Content"

- "Providing Alternate Displays"

- "Avoiding Prohibited Features"

Promoting a Consistent Structure

Use the following guidelines to promote a consistent structure for dashboards:

- If multiple dashboards contain similar functions or content, then keep those links or forms in the same place on all dashboards.

- Use the same text and labels for buttons and links that have the same functions or destinations. When graphical elements are used to identify controls, status indicators, or other programmatic elements, ensure that the meaning assigned to each graphical element is consistent throughout the pages of the dashboard.

- Associate the same text with icons and other graphics that are used for the same functions. Graphics cannot be read by assistive technologies, and low-vision users might be unable to discern the meaning of a graphic. Therefore, all graphics must have additional text to describe the functionality.

  Graphics must have "ALT text," which is descriptive text associated with the graphic that adequately describes its purpose. This alternate text is specified using the ALT attribute for the element in HTML code. Even if a graphic is present for aesthetic purposes and has no functional value, then you must still specify null ALT text (alt="") for its element so that screen readers know that the text should be skipped.

  For other graphical elements that do not support creation of ALT text, you should include text fields at the top or side to denote functionality, such as "Select a Display View Below."

Keeping Dashboard Pages Simple

Try to keep dashboard pages simple. Do not try to include too many objects on one page. Include multiple pages that are easy to navigate rather than one page that is cluttered and difficult to navigate.

Enhancing On-Screen Content

Use the following guidelines to enhance on-screen content for dashboards:

- As you do in graphs to promote a high color luminosity contrast ratio, do not use colored or patterned backgrounds for dashboard pages.

- Use styles that support high contrast between the background and the text, both in the dashboard header area and in the tabs on multi-page dashboards.

- Place the most important content at the top of the page so that users of screen readers can access that content without having to navigate the entire screen.

Providing Alternate Displays

For displays that are inherently visual, such as interactive GIS maps or audio-video feeds, no method might exist for making these elements directly accessible. When you deploy this kind of content, you must also provide a text-based equivalent display of the same information with similar interaction capabilities. Typically this means either creating an equivalent table or pivot table of the related data (if applicable), or providing a caption and text description for audio-visual content.

Including Descriptions for Analyses

Dashboard pages generate explanatory text for objects based on their description fields. Ensure that each analysis that you create includes a short description of its functionality. You specify this description in the **Description** field of the "Save dialog" for the analysis.

Working with Styles for Dashboards

The set of styles and skins that are available for the Oracle BI EE system controls the overall look and feel of any dashboard. You can work with styles and skins for accessibility, as described in the following sections:

- "Creating Custom Styles and Skins"
- "Applying a Style to a Dashboard"

Creating Custom Styles and Skins You can create custom styles and skins to implement standard settings that support accessibility, such as default font selections, high-contrast color schemes, and so on. You can start by copying and modifying the default styles. By modifying these files, you can select default colors, contrast, and fonts that can benefit users with certain disabilities.

Applying a Style to a Dashboard You can set a default style for all dashboards and you can also select a style to apply to an individual dashboard. You might want to create a set of dashboards with content that is specifically optimized for users with accessibility needs. You might also want to apply a special "accessibility" style to one or more individual dashboards for those users who need it.

You specify a style on the "Dashboard Properties dialog" for a particular dashboard.

Avoiding Prohibited Features

Certain features should not be used at all, such as elements that blink with a frequency between 2Hz and 55Hz, or that use excessive animation (such as a "stock ticker" display widget). Ensure that you are familiar with all legally mandated design prohibitions that apply in your locality and avoid including those elements on dashboard pages.

Using Objects to Enhance Accessibility

This section contains the following topics that provide examples of using objects to enhance accessibility:

- "Switching Content with View Selectors"
- "Using Static Text Objects for Custom HTML Markup"

Switching Content with View Selectors

In some cases, you might want to create additional content that is specifically optimized for users with accessibility needs. The view selector is a useful tool for providing the most feature-rich content for all user communities.

For example, suppose that you have a view called HR Pie Graph that uses color to show job categories in slices. This graph can be the default view for the dashboard page. You can include a view selector on the page that allows users to select either a table or a graph with cross-hatching instead of color for displaying the data. The graph can also add text elements that display the actual values that each slice represents, can simplify the background grid, and can include a descriptive title.

Using Static Text Objects for Custom HTML Markup

Screen readers generally use standard HTML markup to provide information for navigating on a page. One of the most commonly used markup tags is the Header tag. The default title view on an Oracle BI EE dashboard includes a Title tag when

Accessibility mode is turned on. However, you cannot add other tags to the design of a title view.

You can use the static text view to replace the title view and supply the necessary HTML tag at the same time. Select the **Contains HTML Markup** box in the "Results tab: Static Text editor" and enter the appropriate HTML code. You can access the styles that are contained in the style sheets for your Oracle BI EE system to ensure consistency with the rest of your dashboards.

For example you can create a header for a dashboard that enables you to enter a title marked with the H3 tag and a horizontal rule line underneath. Enter the following HTML code for the static text view:

```
<H3>My HR Report</H3><HR WIDTH=650 ALIGN=LEFT>
```

Installing and Configuring BI Composer for Oracle BI EE

For how to install and configure BI Composer for Oracle BI EE, see *Installation Guide for Oracle Business Intelligence*.

C

Logical SQL Reference

This appendix provides syntax and usage information for the Logical SQL statements understood by the Oracle BI Server. Oracle BI Server Logical SQL includes standard SQL, plus special functions (SQL extensions) such as AGO, TODATE, EVALUATE, and others. Logical SQL queries resolve to Presentation layer objects.

This appendix contains the following topics:

- About Logical SQL in Oracle Business Intelligence
- SQL Syntax and Semantics
- Aggregate, Running Aggregate, Time Series, and Reporting Functions
- String Functions
- Math Functions
- Calendar Date/Time Functions
- Conversion Functions
- Database Functions
- System Functions
- Advance Analytics Internal Logical SQL Functions
- Advanced Analytics External Logical SQL Functions

About Logical SQL in Oracle Business Intelligence

The Oracle BI Server accepts SQL SELECT statements from client tools. Additionally, the Oracle BI Administration Tool enables you to define logical columns with complex expressions. This appendix explains the syntax and semantics for the SELECT statement and for the expressions you can use in the Administration Tool to create derived columns.

The abstraction provided by the Presentation layer and Business Model and Mapping layer enables clients to query data with Logical SQL only, so that the interaction with actual physical sources is handled by the Oracle BI Server. The complexity of the multiple source languages needed to communicate with each data source type is hidden from users and clients.

In Answers, you can view the Logical SQL queries issued by Oracle BI Presentation Services for particular analyses by viewing the SQL Issued section of the Advanced tab of the Analysis editor. If you have the appropriate privileges, then you can also view SQL by displaying the Manage Sessions page in the Administration tab. Click **View Log** from the Manage Sessions page to see further details.

In Answers, there are also several places where you can issue Logical SQL. If you have the appropriate privileges, then you can use the Issue SQL page in the Administration tab to enter any SQL code to send to the Oracle BI Server. If an analysis does not contain hierarchical columns, member selections, or groups, then you can use the Advanced SQL Clauses fields in the Advanced tab of the Analysis editor. You can also enter SQL in the New Filter dialog.

Other clients, like Oracle BI Publisher, Oracle's Hyperion Interactive Reporting, the Oracle BI Add-in for Microsoft Office, and Essbase, also provide their own interfaces to view and issue Logical SQL to the Oracle BI Server.

SQL Syntax and Semantics

This section explains SQL syntax and semantics. The following topics are included:

- Syntax and Usage Notes for the SELECT Statement
- Syntax and Usage Notes for SELECT_PHYSICAL
- Limiting and Offsetting Rows Returned
- Operators
- Conditional Expressions
- Expressing Literals
- Variables

Syntax and Usage Notes for the SELECT Statement

The SELECT statement, or query specification, is the way to query a decision support system through the Oracle BI Server. A SELECT statement returns a table to the client that matches the query. It is a table in the sense that the results are in the form of rows and columns.

The SELECT statement is the basis for querying any structured query language (SQL) database. The Oracle BI Server accepts logical requests to query objects in a repository, and users (or query tools) make those logical requests with ordinary SQL SELECT statements. The server then translates the logical requests into physical queries against one or more data sources, combines the results to match the logical request, and returns the answer to the end user.

The SELECT statement in Logical SQL differs from standard SQL in that tables do not need to be joined. Any join conditions supplied in the query are ignored because the join conditions are predefined in the Oracle BI repository.

This section provides the basic syntax for the SELECT statement, as well as definitions for individual clauses. The syntax descriptions cover only basic syntax and features unique to the Oracle BI Server. For a more comprehensive description of SQL syntax, see a third-party reference book on SQL or a reference manual on SQL from your database vendors. For Oracle Database, see *Oracle Database SQL Language Reference*.

This section contains the following topics:

- Basic Syntax for the SELECT Statement
- Usage Notes
- Subquery Support
- SELECT List Syntax

- FROM Clause Syntax

- WHERE Clause Syntax

- GROUP BY Clause Syntax

- ORDER BY Clause Syntax

Basic Syntax for the SELECT Statement

Syntax for the SELECT statement is as follows:

```
SELECT [DISTINCT] select_list
FROM from_clause
[WHERE search_condition]
[GROUP BY column {, column}
     [HAVING search_condition]]
[ORDER BY column {, column}]
```

Where:

select_list is the list of columns specified in the request. See "SELECT List Syntax" for more information.

FROM *from_clause* is the list of tables in the request. Optionally includes certain join information for the request. See "FROM Clause Syntax" for more information.

WHERE *search_condition* specifies any combination of conditions to form a conditional test. A WHERE clause acts as a filter that lets you constrain a request to obtain results that answer a particular question. Together with the columns you select, filters determine what your results will contain. See "WHERE Clause Syntax" for more information.

GROUP BY *column* {, *column*} specifies a column (or alias) belonging to a table defined in the data source. See "GROUP BY Clause Syntax" for more information.

HAVING *search_condition* specifies any combination of conditions to form a conditional test. The syntax is identical to that for the WHERE clause.

ORDER BY *column* {, *column*} specifies the columns to order the results by. See "ORDER BY Clause Syntax" for more information.

Usage Notes

The Oracle BI Server treats the SELECT statement as a logical request. If aggregated data is requested in the SELECT statement, a GROUP BY clause is automatically assumed by the server. Any join conditions supplied in the query are ignored because the join conditions are all predefined in the Oracle BI repository.

The Oracle BI Server accepts the following SQL syntaxes for comments:

- /* */ C-style comments

- // Double slash for single-line comments

- # Number sign for single-line comments

Subquery Support

The Oracle BI Server supports certain subqueries, as well as UNION, UNION ALL, INTERSECT, and EXCEPT operations in logical requests. This functionality increases the range of business questions that can be answered, eases the formulation of queries, and provides some ability to query across multiple business models.

The Oracle BI Server supports the following subquery predicates in any conditional expression (for example, within WHERE, HAVING, or CASE statements):

```
IN, NOT IN
Any, >=Any, =Any, <Any, <=Any, <>Any
All, >=All, =All, <All,<=All, <>All
EXISTS, NOT EXISTS
```

In Answers, advanced users and developers can use the Advanced SQL Clauses fields in the Advanced tab of the Analysis editor to specify various SQL clauses, such as GROUP BY, HAVING, and DISTINCT, to include in the SQL queries that are sent to the Oracle BI Server. If an analysis contains hierarchical columns, selections, or groups, then certain Advanced SQL Clauses fields are not available.

SELECT List Syntax

The *select_list* lists the columns in the request. All columns need to be from a single business model. Table names can be included (as Table.Column), but are optional unless column names are not unique within a business model. If column names contain spaces, enclose column names in double quotes. The DISTINCT keyword does not need to be included, because the Oracle BI Server always does a distinct query. Columns that are being aggregated do not need to include the aggregation function (such as SUM), as aggregation rules are known to the server and aggregation is performed automatically.

Syntax

```
...
* |
  (column | expr) [[AS] alias]
  {, (column | expr) [[AS] alias] }
...
```

Where:

* Indicates all columns in the resultant table in the FROM clause.

column is a column (or alias) belonging to a table defined in the data source.

expr is any valid SQL expression.

Note: You cannot use * to select all columns from the Advanced tab of the Analysis editor in Answers. Instead, you must specify particular columns.

FROM Clause Syntax

The Oracle BI Server accepts any valid SQL FROM clause syntax. To simplify FROM clause creation, you can specify the name of a subject area instead of a list of tables. The Oracle BI Server determines the proper tables and the proper join specifications based on the columns the request asks for and the configuration of the Oracle BI repository.

WHERE Clause Syntax

The Oracle BI Server accepts any valid SQL WHERE clause syntax. There is no need to specify any join conditions in the WHERE clause, because the joins are all configured within the Oracle BI repository. Any join conditions specified in the WHERE clause are ignored.

The Oracle BI Server also supports the following subquery predicates in any conditional expression (WHERE, HAVING or CASE statements):

```
IN, NOT IN
```

```
Any, >=Any, =Any, <Any, <=Any, <>Any
All, >=All, =All, <All,<=All, <>All
EXISTS, NOT EXISTS
```

GROUP BY Clause Syntax

With auto aggregation on the Oracle BI Server, there is no need to submit a GROUP BY clause. When no GROUP BY clause is specified, the GROUP BY specification defaults to all of the nonaggregation columns in the SELECT list. If you explicitly use aggregation functions in the select list, you can specify a GROUP BY clause with different columns and the Oracle BI Server computes the results based on the level specified in the GROUP BY clause.

For an in-depth explanation and some examples of using the GROUP BY clause in requests against the Oracle BI Server, see *Metadata Repository Builder's Guide for Oracle Business Intelligence Enterprise Edition*.

ORDER BY Clause Syntax

The Oracle BI Server accepts any valid SQL ORDER BY clause syntax, including referencing columns by their order in the select list (such as ORDER BY 3, 1, 5).

In the ORDER BY clause, you can use the following syntax to alter the sort order for nulls in the query:

```
ORDER BY col1 NULLS LAST, ORDER BY col2 NULLS FIRST
```

For logical columns with sort order columns assigned to them, you can use the ORDER BY clause to disregard the sort order column and instead sort by the column's value. Note the following syntax:

```
ORDER BY { { <column_index> | <expr> } [ DISPLAY | SORTKEY ] [ ASC | DESC ] [NULLS
{ FIRST | LAST } ] }
```

Where:

DISPLAY sorts based on the order of the display value of the expression regardless of whether a sort column is assigned to the logical column. By default, Oracle BI Server assumes DISPLAY when a sort column *is not set* for the logical column.

SORTKEY sorts based on the logical column's assigned sort column. By default, Oracle BI Server assumes SORTKEY when a sort column *is set* for the logical column.

Syntax and Usage Notes for SELECT_PHYSICAL

The SELECT_PHYSICAL command provides the functionality to directly query objects in the Physical layer of the metadata repository, and to nest such a statement within a query against the Business Model and Mapping layer or the Presentation layer.

Though a SELECT_PHYSICAL query bypasses the Presentation layer and the Business Model and Mapping layer, the Oracle BI Server still performs parsing, interpretation, and query generation on a SELECT_PHYSICAL query before passing it to the database.

A SELECT_PHYSICAL command can contain any element allowed in standard Oracle BI Server SQL with the following constraints:

■ The SELECT_PHYSICAL command does not explicitly reference structures in the repository Business Model and Mapping layer or the Presentation layer

■ The SELECT_PHYSICAL command does not require implicit logical transformation

■ The `SELECT_PHYSICAL` command cannot contain certain aggregate functions - see "Aggregate Functions Not Supported in SELECT_PHYSICAL Queries" for details

> **Note:** SELECT_PHYSICAL statements are not cached.

You can set up an ODBC connection to the Oracle BI Server to be a dedicated physical connection over which all `SELECT` queries are treated as `SELECT_PHYSICAL` queries. To do this, select **Route Requests To Physical Layer** in the ODBC data source for the Oracle BI Server. See "Integrating Other Clients with Oracle Business Intelligence" in *Integrator's Guide for Oracle Business Intelligence Enterprise Edition* for more information.

`SELECT_PHYSICAL` statements are logged as Physical Request entries.

The topics in this section are the following:

■ Syntax for the SELECT_PHYSICAL Statement

■ Aggregate Functions Not Supported in SELECT_PHYSICAL Queries

■ Queries Supported by SELECT_PHYSICAL

■ Using the NATURAL_JOIN Keyword

■ Special Usages of SELECT_PHYSICAL

Syntax for the SELECT_PHYSICAL Statement

Basic syntax for `SELECT_PHYSICAL` queries is equivalent to "Basic Syntax for the SELECT Statement" with the term `SELECT_PHYSICAL` replacing the word `SELECT`, namely:

```
SELECT_PHYSICAL [DISTINCT] select_list
FROM from_clause
[WHERE search_condition]
[GROUP BY column {, column}
     [HAVING search_condition]]
[ORDER BY column {, column}]
```

> **Notes:** The `SELECT_PHYSICAL` statement is close to the standard ANSI SQL `SELECT` statement. For example, you cannot omit the `GROUP BY` clause nor, where relevant, the `HAVING` clause in a `SELECT_PHYSICAL` aggregate query.

In `SELECT_PHYSICAL` queries, you must fully qualify the table names in the `FROM` list. Each fully qualified table name must match a table name in the physical layer of the repository.

A fully qualified table name consists of up to four components, database name, catalog name, schema name, and table name. Each component is surrounded by double quotes (") with a period (.) separator between components. For example, "SQL_DB"."My_Catalog"."My_Schema"."Customers" for a SQL Server table, and "FoodMart"..."Sales" for a cube table.

Refer to the corresponding topics in "Basic Syntax for the SELECT Statement" for more information about the different clauses and sub-clauses of the `SELECT_PHYSICAL` command.

Aggregate Functions Not Supported in SELECT_PHYSICAL Queries

The following aggregate functions are not supported in SELECT_PHYSICAL queries:

- AGO

- BOTTOMN

- FILTER

- FIRST

- LAST

- RCOUNT

- RMAX

- RMIN

- RSUM

- TODATE

- TOPN

Queries Supported by SELECT_PHYSICAL

The Oracle BI Server supports the use of SELECT_PHYSICAL for the following types of logical query:

- **Standard Non-Aggregate Queries**

  Standard non-aggregate SELECT_PHYSICAL commands follow the same rules as standard non-aggregate SELECT commands. They can also include scalar functions, such as String, Math, and Calendar Date/Time functions. For example:

  ```
  SELECT_PHYSICAL productid, categoryid
  FROM "My_DB"."My_Schema"."products"
  WHERE categoryid > 5;

  SELECT_PHYSICAL LEFT(productname,10)
  FROM "My_DB"."My_Schema"."products"
  WHERE productname is not null;
  ```

- **Queries with Aggregate Functions**

  In general, all aggregate functions supported in SELECT queries are also supported in SELECT_PHYSICAL queries. See "Aggregate Functions Not Supported in SELECT_PHYSICAL Queries" for a list of the exceptions to this rule.

  For aggregates supported in SELECT_PHYSICAL commands, each aggregate must have an explicitly specified aggregation level, using the GROUP BY clause or the BY clause. For example:

  ```
  SELECT_PHYSICAL employeeid, SUM(quantity by)
  FROM "My_DB"."My_Schema"."employees";

  SELECT_PHYSICAL employeeid, SUM(quantity)
  FROM "My_DB"."My_Schema"."employees"
  GROUP BY employeeid
  HAVING SUM(quantity) > 100;
  ```

- **Subqueries**

  The Oracle BI Server supports the following types of query:

- Queries where both the parent query and the subquery use `SELECT_PHYSICAL`

- Parent query uses `SELECT` and subquery uses `SELECT_PHYSICAL`

Subqueries are supported on both filters and on projections embedded in a Case statement.

For example:

```
SELECT_PHYSICAL *
FROM "My_DB"."My_Schema"."products"
WHERE supplierid IN
 (SELECT_PHYSICAL supplierid
  FROM "My_DB"."My_Schema"."suppliers");

SELECT productid
FROM snowflakesales.product
WHERE categoryid IN
 (SELECT_PHYSICAL categoryid
  FROM "My_DB"."My_Schema"."categories");

SELECT CASE WHEN b.categoryid IN
 (SELECT_PHYSICAL a.categoryid
  FROM "My_DB"."My_Schema"."products" a)
 THEN b.categoryid END
FROM categories b;
```

- **Queries with Derived Tables**

   Both `SELECT` and `SELECT_PHYSICAL` queries can have derived tables in their `FROM` clause. The tables can be derived using either `SELECT` or `SELECT_PHYSICAL`. For example:

```
SELECT_PHYSICAL COUNT(DISTINCT t.rto)
FROM
 (SELECT_PHYSICAL employeeid AS id, reportsto AS rto
  FROM "My_DB"."My_Schema"."employees") t;

SELECT productid, categoryid
FROM
 (SELECT_PHYSICAL productid, categoryid
  FROM "My_DB"."My_Schema"."products" a
  LEFT OUTER JOIN "My_DB"."My_Schema"."categories" b
  ON a.categoryid = b.categoryid);

SELECT y.cid, sum(x.qty)
FROM
 (SELECT productid pid, categoryid cid, qtysold qty
  FROM sales.product) x
 RIGHT OUTER JOIN
 (SELECT_PHYSICAL CASE categoryid WHEN 1 THEN null ELSE categoryid END cid
  FROM "My_DB"."My_Schema"."categories") y
 ON x.cid = y.cid
 GROUP BY y.cid;
```

- **Cross-Database Queries**

   You can use `SELECT_PHYSICAL` to join tables in different databases. For example:

```
SELECT_PHYSICAL a.productid, b.categoryid
FROM "My_DB"."My_Schema"."products" a
FULL OUTER JOIN
"My_DB2"."My_Schema"."categories" b
```

```
        ON a.categoryid = b.categoryid
```

Using the NATURAL_JOIN Keyword

SELECT_PHYSICAL queries support the NATURAL JOIN syntax, which enables you to use predefined join expressions. For ADF data sources, the ViewLink in ADF becomes active. The NATURAL JOIN join type, however, is not exposed for use in Logical Table Sources (for example, LEFT OUTER JOIN).

You can only use the NATURAL JOIN keyword in SELECT_PHYSICAL queries. The NATURAL JOIN behavior in Oracle Business Intelligence is different from the ANSI NATURAL JOIN. The following examples illustrate how joins are executed with and without the NATURAL JOIN syntax:

```
SELECT PHYSICAL *
FROM A, B;
```

In this example, no join is executed between A and B (even if one is defined in the metadata).

```
SELECT_PHYSICAL *
FROM A NATURAL JOIN B;
```

In this example, the physical join between A and B is executed. For ADF data sources, the join expression defined by the underlying ViewLink is used.

```
SELECT_PHYSICAL *
FROM C, A NATURAL JOIN B;
```

In this example, even if C is joined to A in the metadata, only the A-B join is active. The C-A join is not used.

Special Usages of SELECT_PHYSICAL

You can use session variables and the INDEXCOL function in a SELECT_PHYSICAL command, as in the following examples:

```
SELECT_PHYSICAL VALUEOF(NQ_SESSION.REGION)
FROM "My_DB"."My_Schema"."products";

SELECT_PHYSICAL INDEXCOL(VALUEOF(NQ_SESSION.INDEXCOLINDEX), productid, categoryid)
FROM "My_DB"."My_Schema"."products";
```

Limiting and Offsetting Rows Returned

You can use the FETCH and OFFSET clauses to constrain the number of rows returned by the SELECT statement and to skip a specified number of rows from the beginning of the result set. Both clauses are optional and can be used together, or independently. The fetch and offset clauses are part of the SELECT statement and are placed at the end.

These clauses are useful for situations where you have a large result set (such as with a large dimension), and you want to present, for example, the first 100 rows to the user. The Oracle BI Server stops processing when the limit is reached, improving overall performance and conserving resources. In addition, the limit is pushed to the back-end database in many cases so that the database can optimize the query.

Technically, both clauses can be used without an ORDER BY clause, but the results would be non-deterministic. Because of this, both clauses should always be used with ORDER BY.

If `OFFSET` is not specified, the default value is 0, which means that results are returned starting from the first row. If `FETCH` is not specified, it means that there is no limitation on the number rows returned.

Both clauses are evaluated after the `WHERE` clause, aggregation, `HAVING` clause, window analytic function, and `ORDER BY` clause. Both clauses can be used with `SELECT_PHYSICAL` in addition to `SELECT`.

Syntax for OFFSET Clause

```
OFFSET n ROW[S]
```

n is the number of rows you want to skip from the beginning of the result set. Note that *n* must be greater than zero.

Syntax for FETCH Clause

```
FETCH FIRST | NEXT n ROW[S] ONLY
```

n is the number of rows you want to retrieve. Note that *n* must be greater than zero.

Typically, `FIRST` is used when the limit clause is used independently of the offset clause, while `NEXT` is used when the limit clause is used in conjunction with the offset clause.

Example

```
SELECT employeeid, firstname, revenue
FROM sales.employee
ORDER BY revenue desc
OFFSET 2 ROWS
FETCH NEXT 4 ROWS ONLY
```

The following table lists the entire result set without the `OFFSET` and `FETCH` clauses. When the `OFFSET` and `FETCH` clauses are included, only the rows shown in bold are returned.

Employeeid	FirstName	Revenue
4	Margaret	250187.45
3	Janet	213051.30
1	**Nancy**	**202143.71**
2	**Andrew**	**202143.71**
7	**Robert**	**177749.26**
8	**Laura**	**141295.99**
9	*Anne*	133301.03
6	*Michael*	82964.00
5	*Steven*	78198.10

Limitations of the FETCH and OFFSET Clauses

Because `ORDER BY` clauses are ignored in `UNION ALL` set-operator blocks, using these clauses in such queries would be non-deterministic. Do not use `FETCH` and `OFFSET` with these queries.

Operators

There are two types of operators: SQL logical operators, and mathematical operators.

SQL Logical Operators

The following SQL logical operators are used to specify comparisons between expressions.

- **Between:** Used to determine boundaries for a condition. Each boundary is an expression, and the bounds do not include the boundary limits, as in less than and greater than (as opposed to less than or equal to and greater than or equal to). BETWEEN can be preceded with NOT to negate the condition.

- **In:** Specifies a comparison of a column value with a set of values.

- **Is Null:** Specifies a comparison of a column value with the null value.

- **Like:** Specifies a comparison to a literal value. Often used with wildcard characters to indicate any character string match of zero or more characters (%) or a any single character match (_).

Mathematical Operators

Mathematical operators are used to combine expression elements to make certain types of comparisons in an expression.

Table C–1 lists operators and describes their use in an expression.

Table C–1   Operators

Operator	Description
+	Plus sign for addition.
-	Minus sign for subtraction.
*	Multiply sign for multiplication.
/	Divide by sign for division.
||	Character string concatenation.
(	Open parenthesis.
)	Closed parenthesis.
>	Greater than sign, indicating values higher than the comparison.
<	Less than sign, indicating values lower than the comparison.
=	Equal sign, indicating the same value.
<=	Less than or equal to sign, indicating values the same or lower than the comparison.
>=	Greater than or equal to sign, indicating values the same or higher than the comparison.
<>	Not equal to, indicating values higher or lower, but different.
AND	AND connective, indicating intersection with one or more conditions to form a compound condition.
OR	OR connective, indicating the union with one or more conditions to form a compound condition.
NOT	NOT connective, indicating a condition is not met.
,	Comma, used to separate elements in a list.

Conditional Expressions

Expressions are building blocks for creating conditional expressions that convert a value from one form to another. Expressions include:

- CASE (Switch)
- CASE (If)

CASE (Switch)

This form of the CASE statement is also referred to as the CASE(Lookup) form. The value of *expr1* is examined, then the WHEN expressions. If *expr1* matches any WHEN expression, it assigns the value in the corresponding THEN expression.

If none of the WHEN expressions match, it assigns the default value specified in the ELSE expression. If no ELSE expression is specified, the system automatically adds an ELSE NULL.

If *expr1* matches an expression in multiple WHEN clauses, only the expression following the first match is assigned.

> **Note:** In a CASE statement, AND has precedence over OR.

Syntax

```
CASE expr1
     WHEN expr2 THEN expr3
     {WHEN expr... THEN expr...}
     ELSE expr
END
```

Where:

CASE starts the CASE statement. Must be followed by an expression and one or more WHEN and THEN statements, an optional ELSE statement, and the END keyword.

WHEN specifies the condition to be satisfied.

THEN specifies the value to assign if the corresponding WHEN expression is satisfied.

ELSE specifies the value to assign if none of the WHEN conditions are satisfied. If omitted, ELSE NULL is assumed.

END ends the CASE statement.

Example

```
CASE Score-par
  WHEN -5 THEN 'Birdie on Par 6'
  WHEN -4 THEN 'Must be Tiger'
  WHEN -3 THEN 'Three under par'
  WHEN -2 THEN 'Two under par'
  WHEN -1 THEN 'Birdie'
  WHEN 0 THEN 'Par'
  WHEN 1 THEN 'Bogey'
  WHEN 2 THEN 'Double Bogey'
  ELSE 'Triple Bogey or Worse'
END
```

In this example, the WHEN statements must reflect a strict equality. For example, a WHEN condition of WHEN < 0 THEN 'Under Par' is illegal because comparison operators are not allowed.

CASE (If)

This form of the CASE statement evaluates each WHEN condition and if satisfied, assigns the value in the corresponding THEN expression.

If none of the WHEN conditions are satisfied, it assigns the default value specified in the ELSE expression. If no ELSE expression is specified, the system automatically adds an ELSE NULL.

> **Note:** In a CASE statement, AND has precedence over OR.

Syntax

```
CASE
     WHEN request_condition1 THEN expr1
     {WHEN request_condition2 THEN expr2}
     {WHEN request_condition... THEN expr...}
     ELSE expr
END
```

Where:

CASE starts the CASE statement. Must be followed by one or more WHEN and THEN statements, an optional ELSE statement, and the END keyword.

WHEN specifies the condition to be satisfied.

THEN specifies the value to assign if the corresponding WHEN expression is satisfied.

ELSE specifies the value to assign if none of the WHEN conditions are satisfied. If omitted, ELSE NULL is assumed.

END ends the CASE statement.

Example

```
CASE
  WHEN score-par < 0 THEN 'Under Par'
  WHEN score-par = 0 THEN 'Par'
  WHEN score-par = 1 THEN 'Bogie'
  WHEN score-par = 2 THEN 'Double Bogey'
  ELSE 'Triple Bogey or Worse'
END
```

Unlike the Switch form of the CASE statement, the WHEN statements in the If form allow comparison operators. For example, a WHEN condition of WHEN < 0 THEN 'Under Par' is legal.

Expressing Literals

A literal is a nonnull value corresponding to a given data type. Literals are typically constant values, or in other words, they are values that are taken as they are. A literal value must comply with the data type that it represents.

SQL provides mechanisms for expressing literals in SQL statements. This following topics describe how to express each type of literal in SQL:

- [Character Literals](#)
- [Datetime Literals](#)
- [Numeric Literals](#)

Character Literals

A character literal represents a value of CHARACTER or VARCHAR data type. To express a character literal, enclose the character string in single quotes ('). The number of characters enclosed between the single quotes implies the length of the literal.

Examples

```
'Oracle BI Server'

'abc123'
```

Datetime Literals

The SQL 92 standard defines three kinds of 'typed' datetime literals, in the following formats:

```
DATE 'yyyy-mm-dd'
TIME 'hh:mm:ss'
TIMESTAMP 'yyyy-mm-dd hh:mm:ss'
```

To express a typed datetime literal, use the keywords DATE, TIME, or TIMESTAMP followed by a datetime string enclosed in single quotation marks, as in the preceding example. Two digits are required for all nonyear components even if the value is a single digit.

Examples

```
DATE '2000-08-15'
TIME '11:55:25'
TIMESTAMP '1999-03-15 11:55:25'
```

Numeric Literals

A numeric literal represents a value of a numeric data type (such as INTEGER, DECIMAL, or FLOAT). To express a numeric literal, type the number as part of a SQL statement.

Do not surround numeric literals with single quotes. Doing so expresses the literal as a character literal.

> **Note:** When `ENABLE_NUMERIC_DATA_TYPE` is set to `YES` in NQSConfig.INI, all decimal literals (or integer literals that are too large to fit in the INT data type) are parsed internally within the Oracle BI Server as NUMERIC.
>
> When treating literals as NUMERIC, be aware of the Oracle standard double promotion rules, including the following:
>
> DOUBLE/NUMBER = DOUBLE , DOUBLE * NUMBER = DOUBLE
>
> Because the parsing of numeric literals happens very early in the query processing before the actual data source is known, internally, the Oracle BI Server treats decimal numbers as NUMERIC if `ENABLE_NUMERIC_DATA_TYPE` is set to `YES`, regardless of data source type.
>
> When NUMERIC is enabled and the Oracle BI Server executes an expression internally involving decimal literals, the server treats the literals as NUMERIC even if the back-end data source does not support the NUMERIC data type. However, the type promotion rules still apply. For example, if the Oracle BI Server retrieves the data from a data source as DOUBLE and combines that with a NUMERIC literal during internal execution, the final result is still be converted to DOUBLE.

Numeric literals include:

- Integer Literals
- Decimal Literals
- Floating Point Literals

Integer Literals To express an integer constant as a literal, specify the integer as part of a SQL statement (for example, in the `SELECT` list). Precede the integer with a plus sign (+) to indicate the integer is positive, or a minus sign (-) to indicate the integer is negative. Unsigned integers are assumed to be positive.

Examples

```
234
+2
567934
```

Decimal Literals To express a decimal literal, specify a decimal number. Precede the number with a plus sign (+) to indicate the number is positive, or a minus sign (-) to indicate the number is negative. Unsigned numbers are assumed to be positive.

Examples

```
1.223
-22.456
+33.456789
```

Floating Point Literals To express floating point numbers as literal constants, enter a decimal literal followed by the letter E (either uppercase or lowercase), followed by the plus sign (+) to indicate a positive exponent, or the minus sign (-) to indicate a negative exponent. No spaces are allowed between the integer, the letter E, and the sign of the exponent.

Examples

```
333.456E-
1.23e+
```

Variables

You can include and set variables in SQL statements. To do this, include the variable at the beginning of the SQL statement.

Syntax

```
SET VARIABLE variable_name = variable_value; SELECT_statement
```

If you are executing a query from the nqcmd utility, use a colon as a delimiter. Otherwise, you can use either a semicolon or a colon.

Examples

```
SET VARIABLE LOGLEVEL = 3; SELECT Products.Brand, Measures.Dollars FROM "Products"

SET VARIABLE DISABLE_CACHE_HIT=1, LOGLEVEL = 3, WEBLANGUAGE='en': SELECT
Products.Brand, Measures.Dollars FROM "Products"
```

Aggregate, Running Aggregate, Time Series, and Reporting Functions

This section contains information about aggregate functions, running aggregate functions, and time series functions:

- Aggregate Functions
- Running Aggregate Functions
- Time Series Functions

Aggregate Functions

Aggregate functions perform operations on multiple values to create summary results.

Aggregate functions include:

- AGGREGATE AT
- AVG
- AVGDISTINCT
- BOTTOMN
- COUNT
- COUNTDISTINCT
- COUNT(*)
- MAX
- MEDIAN
- MIN
- NTILE
- PERCENTILE
- RANK

- STDDEV

- STDDEV_POP

- SUM

- SUMDISTINCT

- TOPN

AGGREGATE AT

This function aggregates columns based on the level or levels you specify. Using AGGREGATE AT guarantees that the aggregate for the measure always occurs at the levels specified after the keyword AT, regardless of the WHERE clause.

Syntax

```
AGGREGATE(expr AT level [, level1, levelN])
```

Where:

expr is any expression that references at least one measure column

level is the level at which you want to aggregate. You can optionally specify multiple levels.

You cannot specify a level from a dimension that contains levels that are being used as the measure level for the measure you specified in the first argument. For example, you cannot write the function as AGGREGATE(yearly_sales AT month) because "month" is from the same time dimension that is being used as the measure level for "yearly_sales."

Example

The following example shows the AGGREGATE AT function and example results:

```
SELECT month, year, AGGREGATE(sales AT Year)
FROM timeseriestesting
WHERE year = 1994 AND month = 12
```

Result:

```
Month    Year    AGGREGATE AT year
12       1994    7396
Row count: 1
```

Because the AGGREGATE AT operator is always executed before the predicates, it always returns the correct total for the time level specified after the keyword AT.

AVG

This function calculates the average (mean) value of an expression in a result set. It must take a numeric expression as its argument.

Note that the denominator of AVG is the number of rows aggregated. For this reason, it is usually a mistake to use AVG(x) in a calculation in Oracle Business Intelligence. Instead, write the expression manually so that you can control both the numerator and denominator (x/y).

Syntax

```
AVG(numExpr)
```

Where:

numExpr is any expression that evaluates to a numeric value.

AVGDISTINCT

This function calculates the average (mean) of all distinct values of an expression. It must take a numeric expression as its argument.

Syntax

```
AVG(DISTINCT numExpr)
```

Where:

numExpr is any expression that evaluates to a numeric value.

BOTTOMN

This function ranks the lowest *n* values of the expression argument from 1 to *n*, 1 corresponding to the lowest numeric value. The BOTTOMN function operates on the values returned in the result set. A request can contain only one BOTTOMN expression.

Syntax

```
BOTTOMN(numExpr, integer)
```

Where:

numExpr is any expression that evaluates to a numeric value.

integer is any positive integer. Represents the bottom number of rankings displayed in the result set, 1 being the lowest rank.

COUNT

This function calculates the number of rows having a nonnull value for the expression. The expression is typically a column name, in which case the number of rows with nonnull values for that column is returned.

Syntax:

```
COUNT(expr)
```

Where:

expr is any expression.

COUNTDISTINCT

This function adds distinct processing to the COUNT function.

Syntax

```
COUNT(DISTINCT expr)
```

Where:

expr is any expression.

COUNT(*)

This function counts the number of rows.

Syntax

```
COUNT(*)
```

Example

For example, if a table named Facts contained 200,000,000 rows, the sample request would return the results shown:

```
SELECT COUNT(*) FROM Facts
```

Result:

```
200000000
```

MAX

This function calculates the maximum value (highest numeric value) of the rows satisfying the numeric expression argument.

Syntax

```
MAX(numExpr)
```

Where:

numExpr is any expression that evaluates to a numeric value.

MEDIAN

This function calculates the median (middle) value of the rows satisfying the numeric expression argument. When there are an even number of rows, the median is the mean of the two middle rows. This function always returns a double.

Syntax

```
MEDIAN(numExpr)
```

Where:

numExpr is any expression that evaluates to a numeric value.

MIN

This function calculates the minimum value (lowest numeric value) of the rows satisfying the numeric expression argument.

Syntax

```
MIN(numExpr)
```

Where:

numExpr is any expression that evaluates to a numeric value.

NTILE

This function determines the rank of a value in terms of a user-specified range. It returns integers to represent any range of ranks. In other words, the resulting sorted data set is broken into several tiles where there are roughly an equal number of values in each tile.

NTile with *numTiles* = 100 returns what is commonly called the "percentile" (with numbers ranging from 1 to 100, with 100 representing the high end of the sort). This value is different from the results of the Oracle BI PERCENTILE function, which conforms to what is called "percent rank" in SQL 92 and returns values from 0 to 1.

Syntax

NTILE(*numExpr*, *numTiles*)

Where:

numExpr is any expression that evaluates to a numeric value.

numTiles is a positive, nonnull integer that represents the number of tiles.

If the *numExpr* argument is not null, the function returns an integer that represents a rank within the requested range.

PERCENTILE

This function calculates a percent rank for each value satisfying the numeric expression argument. The percentile rank ranges are from 0 (1st percentile) to 1 (100th percentile), inclusive.

The percentile is calculated based on the values in the result set.

Syntax

PERCENTILE(*numExpr*)

Where:

numExpr is any expression that evaluates to a numeric value.

RANK

This function calculates the rank for each value satisfying the numeric expression argument. The highest number is assigned a rank of 1, and each successive rank is assigned the next consecutive integer (2, 3, 4,...). If certain values are equal, they are assigned the same rank (for example, 1, 1, 1, 4, 5, 5, 7...).

The rank is calculated based on the values in the result set.

Syntax

RANK(*numExpr*)

Where:

numExpr is any expression that evaluates to a numeric value.

STDDEV

This function returns the standard deviation for a set of values. The return type is always a double. STDEV_SAMP is a synonym for STDDEV.

Syntax

STDDEV([ALL | DISTINCT] *numExpr*)

Where:

numExpr is any expression that evaluates to a numeric value.

If `ALL` is specified, the standard deviation is calculated for all data in the set.

If `DISTINCT` is specified, all duplicates are ignored in the calculation.

If nothing is specified (the default), all data is considered.

STDDEV_POP

This function returns the standard deviation for a set of values using the computational formula for population variance and standard deviation.

Syntax

`STDDEV_POP([ALL | DISTINCT]` *numExpr*`)`

Where:

numExpr is any expression that evaluates to a numeric value.

If `ALL` is specified, the standard deviation is calculated for all data in the set.

If `DISTINCT` is specified, all duplicates are ignored in the calculation.

If nothing is specified (the default), all data is considered.

SUM

This function calculates the sum obtained by adding up all values satisfying the numeric expression argument.

Syntax

`SUM(`*numExpr*`)`

Where:

numExpr is any expression that evaluates to a numeric value.

SUMDISTINCT

This function calculates the sum obtained by adding all of the distinct values satisfying the numeric expression argument.

Syntax

`SUM(DISTINCT` *numExpr*`)`

Where:

numExpr is any expression that evaluates to a numeric value.

TOPN

This function ranks the highest *n* values of the expression argument from 1 to *n*, 1 corresponding to the highest numeric value. The `TOPN` function operates on the values returned in the result set. A request can contain only one `TOPN` expression.

Syntax

`TOPN(`*numExpr*`, ` *integer*`)`

Where:

numExpr is any expression that evaluates to a numeric value.

integer is any positive integer. Represents the top number of rankings displayed in the result set, 1 being the highest rank.

Running Aggregate Functions

Running aggregate functions are similar to functional aggregates in that they take a set of records as input, but instead of outputting the single aggregate for the entire set of records, they output the aggregate based on records encountered so far.

This section describes the running aggregate functions supported by the Oracle BI Server. Functions include:

- MAVG
- MSUM
- RSUM
- RCOUNT
- RMAX
- RMIN

MAVG

This function calculates a moving average (mean) for the last *n* rows of data in the result set, inclusive of the current row.

The average for the first row is equal to the numeric expression for the first row. The average for the second row is calculated by taking the average of the first two rows of data. The average for the third row is calculated by taking the average of the first three rows of data, and so on until you reach the *n*th row, where the average is calculated based on the last *n* rows of data.

Syntax

```
MAVG(numExpr, integer)
```

Where:

numExpr is any expression that evaluates to a numeric value.

integer is any positive integer. Represents the average of the last *n* rows of data.

MSUM

This function calculates a moving sum for the last *n* rows of data, inclusive of the current row.

The sum for the first row is equal to the numeric expression for the first row. The sum for the second row is calculated by taking the sum of the first two rows of data. The sum for the third row is calculated by taking the sum of the first three rows of data, and so on. When the *n*th row is reached, the sum is calculated based on the last *n* rows of data.

Syntax

```
MSUM(numExpr, integer)
```

Where:

numExpr is any expression that evaluates to a numeric value.

integer is any positive integer. Represents the average of the last *n* rows of data.

Example

This example shows a query that uses the MSUM function, along with example query results.

```
select month, revenue, MSUM(revenue, 3) as 3_MO_SUM from sales_subject_area
```

Result:

```
MONTH    REVENUE    3_MO_SUM
JAN      100.00     100.00
FEB      200.00     300.00
MAR      100.00     400.00
APRIL    100.00     400.00
MAY      300.00     500.00
JUNE     400.00     800.00
JULY     500.00     1200.00
AUG      500.00     1400.00
SEPT     500.00     1500.00
OCT      300.00     1300.00
NOV      200.00     1000.00
DEC      100.00     600.00
```

RSUM

This function calculates a running sum based on records encountered so far. The sum for the first row is equal to the numeric expression for the first row. The sum for the second row is calculated by taking the sum of the first two rows of data. The sum for the third row is calculated by taking the sum of the first three rows of data, and so on.

Syntax

```
RSUM(numExpr)
```

Where:

numExpr is any expression that evaluates to a numeric value.

In Answers, you can also use the following alternate syntax:

```
RSUM(expression1 [BY expression2[, expression3[, ...]]])
```

Where:

`expression1, expression2, expression3 ...` can be any column reference, or an arithmetic expression on column references.

The BY clause causes the RSUM computation to restart at the row where the value of any of the BY columns differs from the previous row.

Example

This example shows a query that uses the RSUM function, along with example query results.

```
SELECT month, revenue, RSUM(revenue) as RUNNING_SUM from sales_subject_area
```

Result:

```
MONTH    REVENUE    RUNNING_SUM
JAN      100.00     100.00
FEB      200.00     300.00
```

```
MAR     100.00    400.00
APRIL   100.00    500.00
MAY     300.00    800.00
JUNE    400.00    1200.00
JULY    500.00    1700.00
AUG     500.00    2200.00
SEPT    500.00    2700.00
OCT     300.00    3000.00
NOV     200.00    3200.00
DEC     100.00    3300.00
```

RCOUNT

This function takes a set of records as input and counts the number of records encountered so far.

Syntax

```
RCOUNT(expr)
```

Where:

`expr` is an expression of any data type.

In Answers, you can also use the following alternate syntax:

```
RCOUNT(expression1 [BY expression2[, expression3[, ...]]])
```

Where:

`expression1, expression2, expression3 ...` can be any column reference, or an arithmetic expression on column references.

The `BY` clause causes the `RCOUNT` computation to restart at the row where the value of any of the `BY` columns differs from the previous row.

Example

This example shows a query that uses the `RCOUNT` function, along with example query results.

```
select month, profit, RCOUNT(profit) from sales_subject_area where profit > 200
```

Result:

```
MONTH    PROFIT    RCOUNT(profit)
MAY      300.00    2
JUNE     400.00    3
JULY     500.00    4
AUG      500.00    5
SEPT     500.00    6
OCT      300.00    7
```

RMAX

This function takes a set of records as input and shows the maximum value based on records encountered so far. The specified data type must be one that can be ordered.

Syntax

```
RMAX(expr)
```

Where:

expr is an expression of any data type. The data type must be one that has an associated sort order.

In Answers, you can also use the following alternate syntax:

```
RMAX(expression1 [BY expression2[, expression3[, ...]]])
```

Where:

`expression1, expression2, expression3 ...` can be any column reference, or an arithmetic expression on column references.

The `BY` clause causes the `RMAX` computation to restart at the row where the value of any of the `BY` columns differs from the previous row.

Example

This example shows a query that uses the `RMAX` function, along with example query results.

```
SELECT month, profit, RMAX(profit) from sales_subject_area
```

Result:

```
MONTH     PROFIT     RMAX(profit)
JAN       100.00     100.00
FEB       200.00     200.00
MAR       100.00     200.00
APRIL     100.00     200.00
MAY       300.00     300.00
JUNE      400.00     400.00
JULY      500.00     500.00
AUG       500.00     500.00
SEPT      500.00     500.00
OCT       300.00     500.00
NOV       200.00     500.00
DEC       100.00     500.00
```

RMIN

This function takes a set of records as input and shows the minimum value based on records encountered so far. The specified data type must be one that can be ordered.

Syntax

```
RMIN(expr)
```

Where:

expr is an expression of any data type. The data type must be one that has an associated sort order.

In Answers, you can also use the following alternate syntax:

```
RMIN(expression1 [BY expression2[, expression3[, ...]]])
```

Where:

`expression1, expression2, expression3 ...` can be any column reference, or an arithmetic expression on column references.

The `BY` clause causes the `RMIN` computation to restart at the row where the value of any of the `BY` columns differs from the previous row.

Example

This example shows a query that uses the RMIN function, along with example query results.

```
select month, profit, RMIN(profit) from sales_subject_area
```

Result:

```
MONTH    PROFIT    RMIN(profit)
JAN      400.00    400.00
FEB      200.00    200.00
MAR      100.00    100.00
APRIL    100.00    100.00
MAY      300.00    100.00
JUNE     400.00    100.00
JULY     500.00    100.00
AUG      500.00    100.00
SEPT     500.00    100.00
OCT      300.00    100.00
NOV      200.00    100.00
DEC      100.00    100.00
```

Time Series Functions

Time series functions operate on time-oriented dimensions. The time series functions calculate AGO, TODATE, and PERIODROLLING functions based on user supplied calendar tables, not on standard SQL date manipulation functions.

To use time series functions on a particular dimension, you have to designate the dimension as a Time dimension and set one or more keys at one or more levels as chronological keys. See *Metadata Repository Builder's Guide for Oracle Business Intelligence Enterprise Edition* for more information.

Functions include:

- AGO
- PERIODROLLING
- TODATE

AGO

This function is a time series aggregation function that calculates the aggregated value from the current time grain (as determined by the measure grain and predicates) back to a specified time period. For example, AGO can produce sales for every month of the current quarter and the corresponding quarter-ago sales.

The grain at which the time shift occurs is determined by the measure grain and predicates. For example, in the following query, the time shift occurs at the quarter level and goes back one year:

```
Select year, quarter, Ago(sales, year_level, 1)
```

However, in the following query, the time shift occurs at the day level, as determined by the associated level of the day_of_month attribute).

```
Select year, quarter, Ago(sales, year_level, 1)
Where day_of_month IN (1, 2)
```

When computing the time shift, Oracle BI Server steps through the time hierarchy. For example, if the time hierarchy is Year, then Month, then Day, then Oracle BI Server computes the time shift as follows:

1. Year is shifted by 1.

2. Moth in year remains the same.

3. Day of month remains the same.

See "About the AGO Function Level" for more information about the level of the function.

Multiple AGO functions can be nested if all the AGO functions have the same level argument. You can nest exactly one TODATE and multiple AGO functions if they each have the same level argument.

Syntax

```
AGO(expr, [time_level,] offset)
```

Where:

expr is an expression that references at least one measure column.

time_level is an optional argument that specifies the type of time period, such as quarter, month, or year.

In Answers, specify a presentation level from a presentation hierarchy for *time_level*.

offset is an integer literal that represents the time shift amount.

Example

The following example returns last year's sales:

```
SELECT Year_ID, AGO(sales, year, 1)
```

About the AGO Function Level It is recommended that you explicitly specify the level of the AGO function using the [*time_level*] argument.

If you do not explicitly specify the [*time_level*] argument, the default level is determined as follows:

- If the measure used in the expression is a level-based measure in the time dimension (as set in the Administration Tool), then that same level is considered the default AGO level.

- Otherwise, the grain of the measure used in the expression, as determined by the BY clause of the measure shown in the logical request, is the default Ago level.

  For example, the result of the query:

  ```
  SELECT year, AGO(sales, 1) WHERE quarter=1
  ```

  is the same as:

  ```
  SELECT year, AGO(sales, year_level, 1) WHERE quarter=1
  ```

You can see the default AGO level for a given query in the Logical Request section of the query log.

PERIODROLLING

This function computes the aggregate of a measure over the period starting x units of time and ending y units of time from the current time. For example, you can use `PERIODROLLING` to compute sales for a period that starts at a certain quarter before and ends at a certain quarter after the current quarter.

Time series functions operate on members of time dimensions which are at or below the level of the function. Because of this, one or more columns that uniquely identify members at or below the given level must be projected in the query. Alternatively, you can apply a filter to the query that specifies a single member at or below the given level. See "Determining the Level Used by the PERIODROLLING Function" for more information about the level of the function.

You cannot nest `AGO` and `TODATE` functions within a `PERIODROLLING` function. Also, you cannot nest `PERIODROLLING`, `FIRST`, `FIRST_PERIOD`, `LAST`, and `LAST_PERIOD` functions.

If you embed other aggregate functions (like `RANK`, `TOPN`, `PERCENTILE`, `FILTER`, or `RSUM`) inside `PERIODROLLING`, the `PERIODROLLING` function is pushed inward. For example, `PERIODROLLING(TOPN(measure))` is executed as `TOPN(PERIODROLLING(measure))`.

Syntax

`PERIODROLLING(measure, x ,y [,hierarchy])`

Where:

`measure` is the name of a measure column.

`x` is an integer that specifies the offset from the current time. Precede the integer with a minus sign (-) to indicate an offset into the past.

`y` specifies the number of time units over which the function will compute. To specify the current time, enter 0.

`hierarchy` is an optional argument that specifies the name of a hierarchy in a time dimension, such as `yr, mon, day`, that you want to use to compute the time window. This option is useful when there are multiple hierarchies in a time dimension, or when you want to distinguish between multiple time dimensions.

If you want to roll back or forward the maximum possible amount, use the keyword `UNBOUND`. For example, the function `PERIODROLLING (measure, -UNBOUND, 0)` sums over the period starting from the beginning of time until now.

You can combine `PERIODROLLING` and `AGGREGATE AT` functions to specify the level of the `PERIODROLLING` function explicitly. For example, if the query level is day but you want to find the sum of the previous and current months, use the following:

`SELECT year, month, day, PERIODROLLING(AGGREGATE(sales AT month), -1)`

Examples

`SELECT Month_ID, PERIODROLLING(monthly_sales, -1, 1)`

`SELECT Month_ID, PERIODROLLING(monthly_sales, -UNBOUND, 2)`

`SELECT Month_ID, PERIODROLLING(monthly_sales, -UNBOUND, UNBOUND)`

Determining the Level Used by the PERIODROLLING Function The unit of time (offset) used in the `PERIODROLLING` function is called the *level* of the function. This value is determined by the measure level of the measures in its first argument and the query level of the query to which the function belongs. The measure level for the measure can be set in the Administration Tool. If a measure level has been set for the measure

used in the function, the measure level is used as the level of the function. The measure level is also called the *storage grain* of the function.

If a measure level has not been set in the Administration Tool, then the query level is used. The query level is also called the *query grain* of the function. In the following example, the query level is month, and the `PERIODROLLING` function computes the sum of the last, current, and next month for each city for the months of March and April:

```
SELECT year, month, country, city, PERIODROLLING(sales, -1, 1)
WHERE month in ('Mar', 'Apr') AND city = 'New York'
```

When there are multiple hierarchies in the time dimension, you must specify the *hierarchy* argument in the `PERIODROLLING` function. For example:

```
SELECT year, fiscal_year, month, PERIODROLLING(sales, -1, 1, "fiscal_time_
hierarchy")
```

In this example, the level of the `PERIODROLLING` function is `fiscal_year`.

TODATE

This function is a time series aggregation function that aggregates a measure from the beginning of a specified time period to the currently displayed time. For example, this function can calculate Year to Date sales.

Time series functions operate on members of time dimensions which are at or below the level specified in the function. Because of this, one or more columns that uniquely identify members at or below the given level must be projected in the query. Alternatively, you can apply a filter to the query that specifies a single member at or below the given level.

A `TODATE` function may not be nested within another `TODATE` function. You can nest exactly one `TODATE` and multiple `AGO` functions if they each have the same level argument.

`TODATE` is different from the `TO_DATE` SQL function supported by some databases. Do not use `TO_DATE` to change to a `DATE` data type. Instead, use the `CAST` function. See "CAST" for more information.

Syntax

```
TODATE(expr, time_level)
```

Where:

expr is an expression that references at least one measure column.

time_level is the type of time period, such as quarter, month, or year.

Example

The following example returns the year-to-month sales:

```
SELECT Year_ID, Month_ID, TODATE(sales, year)
```

String Functions

String functions perform various character manipulations, and they operate on character strings. Functions include:

- ASCII
- BIT_LENGTH

- [CHAR](#)
- [CHAR_LENGTH](#)
- [CONCAT](#)
- [INSERT](#)
- [LEFT](#)
- [LENGTH](#)
- [LOCATE](#)
- [LOWER](#)
- [OCTET_LENGTH](#)
- [POSITION](#)
- [REPEAT](#)
- [REPLACE](#)
- [RIGHT](#)
- [SPACE](#)
- [SUBSTRING](#)
- [TRIMBOTH](#)
- [TRIMLEADING](#)
- [TRIMTRAILING](#)
- [UPPER](#)

ASCII

This function converts a single character string to its corresponding ASCII code, between 0 and 255. If the character expression evaluates to multiple characters, the ASCII code corresponding to the first character in the expression is returned.

Syntax

```
ASCII(strExpr)
```

Where:

strExpr is any expression that evaluates to a character string.

BIT_LENGTH

This function returns the length, in bits, of a specified string. Each Unicode character is 2 bytes in length (equal to 16 bits).

Syntax

```
BIT_LENGTH(strExpr)
```

Where:

strExpr is any expression that evaluates to character string.

CHAR

This function converts a numeric value between 0 and 255 to the character value corresponding to the ASCII code.

Syntax

```
CHAR(numExpr)
```

Where:

numExpr is any expression that evaluates to a numeric value between 0 and 255.

CHAR_LENGTH

This function returns the length, in number of characters, of a specified string. Leading and trailing blanks are not counted in the length of the string.

Syntax

```
CHAR_LENGTH(strExpr)
```

Where:

strExpr is any expression that evaluates to a character string.

CONCAT

There are two forms of this function. The first form concatenates two character strings. The second form uses the character string concatenation character to concatenate more than two character strings.

Syntax for Form 1 (To Concatenate Two Strings)

```
CONCAT(strExpr1, strExpr2)
```

Where:

strExprs are expressions that evaluate to character strings, separated by commas.

Example

This example request returns the results shown.

```
SELECT DISTINCT CONCAT('abc', 'def') FROM employee
CONCAT('abc', 'def')
```

Result:

```
abcdef
```

Syntax for Form 2 (To Concatenate More Than Two Strings)

```
CONCAT(strExpr1, strExpr2 || strExpr3)
```

Where:

strExprs are expressions that evaluate to character strings, separated by commas and the character string concatenation operator || (double vertical bars). First, *strExpr2* is concatenated with *strExpr3* to produce an intermediate string, then both *strExpr1* and the intermediate string are concatenated by the CONCAT function to produce the final string.

Example

This example request returns the results shown.

```
SELECT DISTINCT CONCAT('abc','def' || 'ghi') FROM employee
```

Result:

```
abcdefghi
```

INSERT

This function inserts a specified character string into a specified location in another character string.

Syntax

```
INSERT(strExpr1, integer1, integer2, strExpr2)
```

Where:

strExpr1 is any expression that evaluates to a character string. Identifies the target character string.

integer1 is any positive integer that represents the number of characters from the beginning of the target string where the second string is to be inserted.

integer2 is any positive integer that represents the number of characters in the target string to be replaced by the second string.

strExpr2 is any expression that evaluates to a character string. Identifies the character string to be inserted into the target string.

Example

In the first string, starting at the second position (occupied by the number 2), three characters (the numbers 2, 3, and 4) are replaced by the string abcd.

```
SELECT INSERT('123456', 2, 3, 'abcd') FROM table
```

Result:

```
1abcd56
1abcd56
...
```

LEFT

Returns a specified number of characters from the left of a string.

Syntax

```
LEFT(strExpr, integer)
```

Where:

strExpr is any expression that evaluates to a character string.

integer is any positive integer that represents the number of characters from the left of the string to return.

Example

This example returns the three leftmost characters from the character string 123456:

```
SELECT LEFT('123456', 3) FROM table
```

Result:

```
123
123
...
```

LENGTH

This function returns the length, in number of characters, of a specified string. The length is returned excluding any trailing blank characters.

Syntax

```
LENGTH(strExpr)
```

Where:

strExpr is any expression that evaluates to a character string.

LOCATE

This function returns the numeric position of a character string in another character string. If the character string is not found in the string being searched, the function returns a value of 0.

If you want to specify a starting position to begin the search, include the integer argument. The numeric position to return is determined by counting the first character in the string as occupying position 1, regardless of the value of the integer argument.

Syntax

```
LOCATE(strExpr1, strExpr2 [, integer])
```

Where:

strExpr1 is any expression that evaluates to a character string. Identifies the string for which to search.

strExpr2 is any expression that evaluates to a character string. Identifies the string to be searched.

integer is any positive (nonzero) integer that represents the starting position to begin to look for the character string. The integer argument is optional.

Examples

This example returns 4 as the numeric position of the letter d in the character string abcdef:

```
LOCATE('d', 'abcdef')
```

This example returns 0, because the letter g is not found within the string being searched.

```
LOCATE('g', 'abcdef')
```

This example returns 4 as the numeric position of the letter d in the character string abcdef. The search begins with the letter c, the third character in the string. The numeric position to return is determined by counting the letter 'a' as occupying position 1.

```
LOCATE('d' 'abcdef', 3)
```

This example returns 0, because the letter b occurs in the string before the starting position to begin the search.

```
LOCATE('b' 'abcdef', 3)
```

LOWER

This function converts a character string to lowercase.

Syntax

```
LOWER(strExpr)
```

Where:

strExpr is any expression that evaluates to a character string.

OCTET_LENGTH

This function returns the number of bits, in base 8 units (number of bytes), of a specified string.

Syntax

```
OCTET_LENGTH(strExpr)
```

Where:

strExpr is any expression that evaluates to a character string.

POSITION

This function returns the numeric position of *strExpr1* in a character expression. If *strExpr1* is not found, the function returns 0. See also "LOCATE" for related information.

Syntax

```
POSITION(strExpr1 IN strExpr2)
```

Where:

strExpr1 is any expression that evaluates to a character string. Identifies the string to search for in the target string.

strExpr2 is any expression that evaluates to a character string. Identifies the target string to be searched.

Examples

This example returns 4 as the position of the letter d in the character string abcdef:

```
POSITION('d', 'abcdef')
```

This example returns 0 as the position of the number 9 in the character string 123456, because the number 9 is not found.

```
POSITION('9', '123456')
```

REPEAT

This function repeats a specified expression *n* times.

Syntax

```
REPEAT(strExpr, integer)
```

Where:

strExpr is any expression that evaluates to a character string.

integer is any positive integer that represents the number of times to repeat the character string.

Example

This example repeats abc four times:

```
REPEAT('abc', 4)
```

REPLACE

This function replaces one or more characters from a specified character expression with one or more other characters.

Syntax

```
REPLACE(strExpr1, strExpr2, strExpr3)
```

Where:

strExpr1 is any expression that evaluates to a character string. This is the string in which characters are to be replaced.

strExpr2 is any expression that evaluates to a character string. This second string identifies the characters from the first string that are to be replaced.

strExpr3 is any expression that evaluates to a character string. This third string specifies the characters to substitute into the first string.

Example

In the character string abcd1234, the characters 123 are replaced by the character string zz:

```
Replace('abcd1234', '123', 'zz')
```

Result:

```
abcdzz4
```

RIGHT

This function returns a specified number of characters from the right of a string.

Syntax

```
RIGHT(strExpr, integer)
```

Where:

strExpr is any expression that evaluates to a character string.

integer is any positive integer that represents the number of characters from the right of the string to return.

Example

This example returns the three rightmost characters from the character string 123456:

```
SELECT right('123456', 3) FROM table
```

Result:

```
456
```

SPACE

This function inserts blank spaces.

Syntax

```
SPACE(integer)
```

Where:

integer is any positive integer that indicates the number of spaces to insert.

SUBSTRING

This function creates a new string starting from a fixed number of characters into the original string.

Syntax

```
SUBSTRING(strExpr FROM starting_position)
```

Where:

strExpr is any expression that evaluates to a character string.

starting_position is any positive integer that represents the number of characters from the start of the left side of the string where the result is to begin.

TRIMBOTH

This function strips specified leading and trailing characters from a character string.

Syntax

```
TRIM(BOTH character FROM strExpr)
```

Where:

character is any single character. If you omit this specification (and the required single quotes), a blank character is used as the default.

strExpr is any expression that evaluates to a character string.

TRIMLEADING

This function strips specified leading characters from a character string.

Syntax

```
TRIM(LEADING character FROM strExpr)
```

Where:

character is any single character. If you omit this specification (and the required single quotes), a blank character is used as the default.

strExpr is any expression that evaluates to a character string.

TRIMTRAILING

This function strips specified trailing characters from a character string.

Syntax

```
TRIM(TRAILING character FROM strExpr)
```

Where:

character is any single character. If you omit this specification (and the required single quotes), a blank character is used as the default.

strExpr is any expression that evaluates to a character string.

UPPER

This function converts a character string to uppercase.

Syntax

```
UPPER(strExpr)
```

Where:

strExpr is any expression that evaluates to a character string.

Math Functions

The math functions perform mathematical operations. Functions include:

- ABS
- ACOS
- ASIN
- ATAN
- ATAN2
- CEILING
- COS
- COT
- DEGREES
- EXP
- EXTRACTBIT
- FLOOR
- LOG

- LOG10
- MOD
- PI
- POWER
- RADIANs
- RAND
- RANDFROMSEED
- ROUND
- SIGN
- SIN
- SQRT
- TAN
- TRUNCATE

ABS

This function calculates the absolute value of a numeric expression.

Syntax

```
ABS(numExpr)
```

Where:

numExpr is any expression that evaluates to a numeric value.

ACOS

This function calculates the arc cosine of a numeric expression.

Syntax

```
ACOS(numExpr)
```

Where:

numExpr is any expression that evaluates to a numeric value.

ASIN

This function calculates the arc sine of a numeric expression.

Syntax

```
ASIN(numExpr)
```

Where:

numExpr is any expression that evaluates to a numeric value.

ATAN

This function calculates the arc tangent of a numeric expression.

Syntax

ATAN(*numExpr*)

Where:

numExpr is any expression that evaluates to a numeric value.

ATAN2

This function calculates the arc tangent of y/x, where y is the first numeric expression and x is the second numeric expression.

Syntax

ATAN2(*numExpr1*, *numExpr2*)

Where:

numExpr is any expression that evaluates to a numeric value.

CEILING

This function rounds a noninteger numeric expression to the next highest integer. If the numeric expression evaluates to an integer, the CEILING function returns that integer.

Syntax

CEILING(*numExpr*)

Where:

numExpr is any expression that evaluates to a numeric value.

COS

This function calculates the cosine of a numeric expression.

Syntax

COS(*numExpr*)

Where:

numExpr is any expression that evaluates to a numeric value.

COT

This function calculates the cotangent of a numeric expression.

Syntax

COT(*numExpr*)

Where:

numExpr is any expression that evaluates to a numeric value.

DEGREES

This function converts an expression from radians to degrees.

Syntax

DEGREES(*numExpr*)

Where:

numExpr is any expression that evaluates to a numeric value.

EXP

This function sends the value to the power specified.

Syntax

EXP(*numExpr*)

Where:

numExpr is any expression that evaluates to a numeric value.

EXTRACTBIT

This function retrieves a bit at a particular position in an integer. It returns an integer of either 0 or 1 corresponding to the position of the bit. The primary use case for this function is to extract 'cell status' in the Hyperion Financial Management cube source. The EXTRACTBIT function cannot be pushed into any database, and is always internally executed (in the Oracle BI Server).

Syntax

Int ExtractBit(*Arg1*, *Arg2*)

Where:

Arg1 is an expression of the following types: INT, SMALLINT, UNIT, SMALLUNIT, TINYINT, TINYUNIT. If Arg1 is of double type, it is necessary to cast the column to an INT first.

Arg2 is an expression of type integer. The value should range from 1 to *length_of_Arg1*. 1 retrieves the Least Significant Bit. If the Arg2 is beyond the length of the integer, then 0 is returned. An error message is triggered when the Arg2 is less than 1.

FLOOR

This function rounds a noninteger numeric expression to the next lowest integer. If the numeric expression evaluates to an integer, the FLOOR function returns that integer.

Syntax

FLOOR(*numExpr*)

Where:

numExpr is any expression that evaluates to a numeric value.

LOG

This function calculates the natural logarithm of an expression.

Syntax

LOG(*numExpr*)

Where:

numExpr is any expression that evaluates to a numeric value.

LOG10

This function calculates the base 10 logarithm of an expression.

Syntax

`LOG10(numExpr)`

Where:

numExpr is any expression that evaluates to a numeric value.

MOD

This function divides the first numeric expression by the second numeric expression and returns the remainder portion of the quotient.

Syntax

`MOD(numExpr1, numExpr2)`

Where:

numExpr is any expression that evaluates to a numeric value.

Examples

This example request returns a value of 0:

`MOD(9, 3)`

This example request returns a value of 1:

`MOD(10, 3)`

PI

This function returns the constant value of pi (the circumference of a circle divided by its diameter).

Syntax

`PI()`

POWER

This function takes the first numeric expression and raises it to the power specified in the second numeric expression.

Syntax

`POWER(numExpr1, numExpr2)`

Where:

numExpr1 is any expression that evaluates to a numeric value.

RADIANs

This function converts an expression from degrees to radians.

Syntax

```
RADIANS(numExpr)
```

Where:

numExpr is any expression that evaluates to a numeric value.

RAND

Returns a pseudo-random number between 0 and 1.

Syntax

```
RAND()
```

RANDFROMSEED

Returns a pseudo-random number based on a seed value. For a given seed value, the same set of random numbers are generated.

Syntax

```
RAND(numExpr)
```

Where:

numExpr is any expression that evaluates to a numeric value.

ROUND

This function rounds a numeric expression to *n* digits of precision.

Syntax

```
ROUND(numExpr, integer)
```

Where:

numExpr is any expression that evaluates to a numeric value.

integer is any positive integer that represents the number of digits of precision.

Example

This example returns 2.17 as the result.

```
ROUND(2.166000, 2)
```

SIGN

This function returns the following:

- A value of 1 if the numeric expression argument evaluates to a positive number.

- A value of -1 if the numeric expression argument evaluates to a negative number.

- 0 (zero) if the numeric expression argument evaluates to zero.

Syntax

SIGN(*numExpr*)

Where:

numExpr is any expression that evaluates to a numeric value.

SIN

This function calculates the sine of a numeric expression.

Syntax

SIN(*numExpr*)

Where:

numExpr is any expression that evaluates to a numeric value.

SQRT

This function calculates the square root of the numeric expression argument. The numeric expression must evaluate to a nonnegative number.

Syntax

SQRT(*numExpr*)

Where:

numExpr is any expression that evaluates to a nonnegative numeric value.

TAN

This function calculates the tangent of a numeric expression.

Syntax

TAN(*numExpr*)

Where:

numExpr is any expression that evaluates to a numeric value.

TRUNCATE

This function truncates a decimal number to return a specified number of places from the decimal point.

Syntax

TRUNCATE(*numExpr*, *integer*)

Where:

numExpr is any expression that evaluates to a numeric value.

integer is any positive integer that represents the number of characters to the right of the decimal place to return.

Examples

This example returns 45.12:

```
TRUNCATE(45.12345, 2)
```

This example returns 25.12:

```
TRUNCATE(25.126, 2)
```

Calendar Date/Time Functions

The calendar date/time functions manipulate data of the data types `DATE` and `DATETIME` based on a calendar year. You must select these functions with another column; they cannot be selected alone.

Month and day names are returned in mixed case by default. If you have existing expressions that assume month/day names are returned in uppercase, you must either adjust the expressions, or set the parameters `USE_UPPERCASE_MONTH_NAMES` and `USE_UPPERCASE_DAY_NAMES` to `YES` in NQSConfig.INI. See "NQSConfig.INI File Configuration Settings" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition* for more information.

Functions such as MONTHNAME can be used to format date columns, but the locale is fixed by the data source or the Oracle BI Server's NQSConfig.INI file. It is not possible for you to specify a locale for the logical SQL date formatting functions because these are based on the ODBC standard, which does not provide for a locale argument.

To format date columns according to the user's selected locale, Oracle suggests that when the locale is fixed, the content designer specifies a standard date format or a custom date format on an analysis' date column. See "Custom Format Strings for Date and Time Fields" and "Column Properties: Data Format tab" in *User's Guide for Oracle Business Intelligence Enterprise Edition* for more information.

Functions include:

- CURRENT_DATE
- CURRENT_TIME
- CURRENT_TIMESTAMP
- DAY_OF_QUARTER
- DAYNAME
- DAYOFMONTH
- DAYOFWEEK
- DAYOFYEAR
- HOUR
- MINUTE
- MONTH
- MONTH_OF_QUARTER
- MONTHNAME
- NOW
- QUARTER_OF_YEAR
- SECOND

- [TIMESTAMPADD](#)
- [TIMESTAMPDIFF](#)
- [WEEK_OF_QUARTER](#)
- [WEEK_OF_YEAR](#)
- [YEAR](#)

CURRENT_DATE

This function returns the current date. The date is determined by the system in which the Oracle BI Server is running.

Syntax

```
CURRENT_DATE
```

CURRENT_TIME

This function returns the current time. The time is determined by the system in which the Oracle BI Server is running.

Syntax

```
CURRENT_TIME(integer)
```

Where:

integer is any integer representing the number of digits of precision with which to display the fractional second. The argument is optional; the function returns the default precision when no argument is specified.

CURRENT_TIMESTAMP

This function returns the current date/timestamp. The timestamp is determined by the system in which the Oracle BI Server is running.

Syntax

```
CURRENT_TIMESTAMP(integer)
```

Where:

integer is any integer representing the number of digits of precision with which to display the fractional second. The argument is optional; the function returns the default precision when no argument is specified.

DAY_OF_QUARTER

This function returns a number (between 1 and 92) corresponding to the day of the quarter for the specified date.

Syntax

```
DAY_OF_QUARTER(dateExpr)
```

Where:

dateExpr is any expression that evaluates to a date.

DAYNAME

This function returns the name of the day of the week for a specified date.

Syntax

```
DAYNAME(dateExpr)
```

Where:

dateExpr is any expression that evaluates to a date.

DAYOFMONTH

This function returns the number corresponding to the day of the month for a specified date.

Syntax

```
DAYOFMONTH(dateExpr)
```

Where:

dateExpr is any expression that evaluates to a date.

DAYOFWEEK

This function returns a number between 1 and 7 corresponding to the day of the week, Sunday through Saturday, for a specified date. For example, the number 1 corresponds to Sunday, and the number 7 corresponds to Saturday.

Syntax

```
DAYOFWEEK(dateExpr)
```

Where:

dateExpr is any expression that evaluates to a date.

DAYOFYEAR

This function returns the number (between 1 and 366) corresponding to the day of the year for a specified date.

Syntax

```
DAYOFYEAR(dateExpr)
```

Where:

dateExpr is any expression that evaluates to a date.

HOUR

This function returns a number (between 0 and 23) corresponding to the hour for a specified time. For example, 0 corresponds to 12 a.m. and 23 corresponds to 11 p.m.

Syntax

```
HOUR(timeExpr)
```

Where:

timeExpr is any expression that evaluates to a time.

MINUTE

This function returns a number (between 0 and 59) corresponding to the minute for a specified time.

Syntax

```
MINUTE(timeExpr)
```

Where:

timeExpr is any expression that evaluates to a time.

MONTH

This function returns the number (between 1 and 12) corresponding to the month for a specified date.

Syntax

```
MONTH(dateExpr)
```

Where:

dateExpr is any expression that evaluates to a date.

MONTH_OF_QUARTER

This function returns the number (between 1 and 3) corresponding to the month in the quarter for a specified date.

Syntax

```
MONTH_OF_QUARTER(dateExpr)
```

Where:

dateExpr is any expression that evaluates to a date.

MONTHNAME

This function returns the name of the month for a specified date.

Syntax

```
MONTHNAME(dateExpr)
```

Where:

dateExpr is any expression that evaluates to a date.

NOW

This function returns the current timestamp. The `NOW` function is equivalent to the `CURRENT_TIMESTAMP` function.

Syntax

```
NOW()
```

QUARTER_OF_YEAR

This function returns the number (between 1 and 4) corresponding to the quarter of the year for a specified date.

Syntax

```
QUARTER_OF_YEAR(dateExpr)
```

Where:

dateExpr is any expression that evaluates to a date.

SECOND

This function returns the number (between 0 and 59) corresponding to the seconds for a specified time.

Syntax

```
SECOND(timeExpr)
```

Where:

timeExpr is any expression that evaluates to a time.

TIMESTAMPADD

This function adds a specified number of intervals to a specified timestamp, and returns a single timestamp.

In the simplest scenario, this function adds the specified integer value to the appropriate component of the timestamp, based on the interval. Adding a week translates to adding seven days, and adding a quarter translates to adding three months. A negative integer value results in a subtraction (such as going back in time).

An overflow of the specified component (such as more than 60 seconds, 24 hours, 12 months, and so on) necessitates adding an appropriate amount to the next component. For example, when adding to the day component of a timestamp, this function considers overflow and takes into account the number of days in a particular month (including leap years when February has 29 days).

When adding to the month component of a timestamp, this function verifies that the resulting timestamp has enough days for the day component. For example, adding 1 month to 2000-05-31 does not result in 2000-06-31 because June does not have 31 days. This function reduces the day component to the last day of the month, 2000-06-30 in this example.

A similar issue arises when adding to the year component of a timestamp having a month component of February and a day component of 29 (that is, last day of February in a leap year). If the resulting timestamp does not fall on a leap year, the function reduces the day component to 28.

These actions conform to the behavior of Microsoft SQL Server and the native OCI interface for Oracle Database.

Syntax

```
TIMESTAMPADD(interval, intExpr, timestamp)
```

Where:

interval is the specified interval. Valid values are:

- SQL_TSI_SECOND

- SQL_TSI_MINUTE

- SQL_TSI_HOUR

- SQL_TSI_DAY

- SQL_TSI_WEEK

- SQL_TSI_MONTH

- SQL_TSI_QUARTER

- SQL_TSI_YEAR

intExpr is any expression that evaluates to an integer value.

timestamp is any valid timestamp. This value is used as the base in the calculation.

A null integer expression or a null timestamp passed to this function results in a null return value.

Examples

The following query asks for the resulting timestamp when 3 days are added to 2000-02-27 14:30:00. Since February, 2000 is a leap year, the query returns a single timestamp of 2000-03-01 14:30:00.

```
SELECT TIMESTAMPADD(SQL_TSI_DAY, 3, TIMESTAMP'2000-02-27 14:30:00')
FROM Employee WHERE employeeid = 2;
```

The following query asks for the resulting timestamp when 7 months are added to 1999-07-31 0:0:0. The query returns a single timestamp of 2000-02-29 00:00:00. Notice the reduction of day component to 29 because of the shorter month of February.

```
SELECT TIMESTAMPADD(SQL_TSI_MONTH, 7, TIMESTAMP'1999-07-31 00:00:00')
FROM Employee WHERE employeeid = 2;
```

The following query asks for the resulting timestamp when 25 minutes are added to 2000-07-31 23:35:00. The query returns a single timestamp of 2000-08-01 00:00:00. Notice the propagation of overflow through the month component.

```
SELECT TIMESTAMPADD(SQL_TSI_MINUTE, 25, TIMESTAMP'2000-07-31 23:35:00')
FROM Employee WHERE employeeid = 2;
```

TIMESTAMPDIFF

This function returns the total number of specified intervals between two timestamps.

This function first determines the timestamp component that corresponds to the specified interval parameter, and then looks at the higher order components of both timestamps to calculate the total number of intervals for each timestamp. For example, if the specified interval corresponds to the month component, the function calculates the total number of months for each timestamp by adding the month component and twelve times the year component. Then the function subtracts the first timestamp's total number of intervals from the second timestamp's total number of intervals.

> **Note:** This section describes the `TIMESTAMPDIFF` behavior when the function is calculated in the Oracle BI Server. If this function is calculated in the data source, then the result might be different from the behavior described in this section. If the `TIMESTAMPDIFF` function result is different from the desired result, then you can disable `TIMESTAMP_DIFF_SUPPORTED` in the Features tab for the database object in the Administration Tool to ensure that the function is calculated in the Oracle BI Server. However, making this change might adversely affect performance.

The `TIMESTAMPDIFF` function rounds up to the next integer whenever fractional intervals represent a crossing of an interval boundary. For example, the difference in years between 1999-12-31 and 2000-01-01 is one year because the fractional year represents a crossing from one year to the next (such as 1999 to 2000). By contrast, the difference between 1999-01-01 and 1999-12-31 is zero years because the fractional interval falls entirely within a particular year (that is, 1999). Microsoft SQL Server exhibits the same rounding behavior, but IBM DB2 does not; it always rounds down.

When calculating the difference in weeks, the function calculates the difference in days and divides by seven before rounding. Additionally, the function takes into account how the parameter `FIRST_DAY_OF_THE_WEEK` has been configured in the NQSConfig.INI file. For example, with Sunday as the start of the week, the difference in weeks between 2000-07-06 (a Thursday) and 2000-07-10 (the following Monday) results in a value of 1 week. With Tuesday as the start of the week, however, the function would return zero weeks since the fractional interval falls entirely within a particular week. When calculating the difference in quarters, the function calculates the difference in months and divides by three before rounding.

The Oracle BI Server pushes down the `TIMESTAMPADD` and `TIMESTAMPDIFF` functions to Microsoft SQL Server, Oracle Database, IBM DB2, and ODBC databases by default.

Syntax

```
TIMESTAMPDIFF(interval, timestamp1, timestamp2)
```

Where:

interval is the specified interval. Valid values are:

- SQL_TSI_SECOND
- SQL_TSI_MINUTE
- SQL_TSI_HOUR
- SQL_TSI_DAY
- SQL_TSI_WEEK
- SQL_TSI_MONTH
- SQL_TSI_QUARTER
- SQL_TSI_YEAR

timestamp1 and *timestamp2* are any valid timestamps.

A null timestamp parameter passed to this function results in a null return value.

Example

The following example query asks for a difference in days between timestamps 1998-07-31 23:35:00 and 2000-04-01 14:24:00. It returns a value of 610. Notice that the leap year in 2000 results in an additional day.

```
SELECT TIMESTAMPDIFF
(SQL_TSI_DAY, TIMESTAMP'1998-07-31 23:35:00',TIMESTAMP'2000-04-01 14:24:00')
FROM Employee WHERE employeeid = 2;
```

WEEK_OF_QUARTER

This function returns a number (between 1 and 13) corresponding to the week of the quarter for the specified date.

Syntax

```
WEEK_OF_QUARTER(dateExpr)
```

Where:

dateExpr is any expression that evaluates to a date.

WEEK_OF_YEAR

This function returns a number (between 1 and 53) corresponding to the week of the year for the specified date.

Syntax

```
WEEK_OF_YEAR(dateExpr)
```

Where:

dateExpr is any expression that evaluates to a date.

YEAR

This function returns the year for the specified date.

Syntax

```
YEAR(dateExpr)
```

Where:

dateExpr is any expression that evaluates to a date.

Conversion Functions

The conversion functions convert a value from one form to another. You can also use the VALUEOF function in a filter to reference the value of an Oracle BI system variable. Functions include:

- CAST
- IFNULL
- TO_DATETIME
- VALUEOF

CAST

This function changes the data type of an expression or a null literal to another data type. For example, you can cast a customer_name (a data type of Char or Varchar) or birthdate (a datetime literal). The following are the supported data types to which the value can be changed:

```
CHARACTER, VARCHAR, INTEGER, FLOAT, SMALLINT, DOUBLE PRECISION, DATE, TIME,
TIMESTAMP, BIT, BIT VARYING
```

Depending on the source data type, some destination types are not supported. For example, if the source data type is a `BIT` string, the destination data type must be a character string or another `BIT` string.

Use `CAST` to change to a `DATE` data type.

The following describes unique characteristics of the `CHAR` and `VARCHAR` data types:

- **Casting to a CHAR data type.** You must use a size parameter. If you do not add a size parameter, a default of 30 is added. Syntax options appear in the following list:

    - The recommended syntax is:

        ```
        CAST(expr|NULL AS CHAR(n))
        ```

        For example:

        ```
        CAST(companyname AS CHAR(35))
        ```

    - You can also use the following syntax:

        ```
        CAST(expr|NULL AS data_type)
        ```

        For example:

        ```
        CAST(companyname AS CHAR)
        ```

        > **Note:** If you use this syntax, the Oracle BI Server explicitly converts and stores as `CAST(expr|NULL AS CHAR(30))`

- **Casting to a VARCHAR data type.** You must use a size parameter. If you omit the size parameter, you cannot can save the change.

Examples

```
CAST(hiredate AS CHAR(40)) FROM employee

SELECT CAST(hiredate AS VARCHAR(40)), CAST(age AS double precision),
CAST(hiredate AS timestamp), CAST(age AS integer) FROM employee

CAST("db"."table"."col" AS date)
```

IFNULL

This function tests if an expression evaluates to a null value, and if it does, assigns the specified value to the expression.

Syntax

```
IFNULL(expr, value)
```

Where:

expr is the expression to evaluate.

value is the value to assign if the expression evaluates to a null value.

TO_DATETIME

This function converts string literals of dateTime format to a DateTime data type.

Syntax

```
TO_DATETIME('string1', 'DateTime_formatting_string')
```

Where:

string1 is the string literal you want to convert

DateTime_formatting_string is the DateTime format you want to use, such as yyyy.mm.dd hh:mi:ss. For this argument, yyyy represents year, mm represents month, dd represents day, hh represents hour, mi represents minutes, and ss represents seconds.

Examples

```
SELECT TO_DATETIME('2009-03-03 01:01:00', 'yyyy-mm-dd hh:mi:ss') FROM
snowflakesales
```

```
SELECT TO_DATETIME('2009.03.03 01:01:00', 'yyyy.mm.dd hh:mi:ss') FROM
snowflakesales
```

VALUEOF

Use the VALUEOF function to reference the value of a repository variable. Repository variables are defined using the Administration Tool. You can use the VALUEOF function both in Expression Builder in the Administration Tool, and when you edit the SQL statements for an analysis from the Advanced tab of the Analysis editor in Answers.

Syntax

Variables should be used as arguments of the VALUEOF function. Refer to static repository variables by name. Note that variable names are case sensitive. For example, to use the value of a static repository variables named prime_begin and prime_end:

```
CASE WHEN "Hour" >= VALUEOF("prime_begin")AND "Hour" < VALUEOF("prime_end") THEN
'Prime Time' WHEN ... ELSE...END
```

You must refer to a dynamic repository variable by its fully qualified name. If you are using a dynamic repository variable, the names of the initialization block and the repository variable must be enclosed in double quotes ("), separated by a period, and contained within parentheses. For example, to use the value of a dynamic repository variable named REGION contained in an initialization block named Region Security, use the following syntax:

```
SalesSubjectArea.Customer.Region = VALUEOF("Region Security"."REGION")
```

The names of session variables must be preceded by NQ_SESSION, separated by a period, and contained within parentheses, including the NQ_SESSION portion. For example, to use the value of a session variable named REGION, use the following syntax in Expression Builder or a filter:

```
"SalesSubjectArea"."Customer"."Region" = VALUEOF(NQ_SESSION.REGION)
```

If the variable name contains or begins with any characters other than ASCII alphanumeric characters ([A-Z] [a-z] [0-9]) or an underscore (_), then enclose the name in double quotes ("). Examples of such characters include a space, single quote, or double quote. The following example contains a single quote and a space:

```
"SalesSubjectArea"."Customer"."Region" = VALUEOF("NQ_SESSION"."Steven's Regions")
```

If the variable name that you specify contains double quotes ("), then escape the double quotes with a set of double quotes. For example:

```
"SalesSubjectArea"."Customer"."Region" = VALUEOF("NQ_SESSION"."""Top Sales""
Region")
```

Database Functions

Users and administrators can create requests by directly calling database functions from either Oracle BI Answers, or by using a logical column (in the logical table source) within the metadata repository. Key uses for these functions include the ability to pass through expressions to get advanced calculations, as well as the ability to access custom written functions or procedures on the underlying database.

Functions include:

- EVALUATE

- EVALUATE_ANALYTIC

- EVALUATE_AGGR

- EVALUATE_PREDICATE

EVALUATE

This function passes the specified database function with optional referenced columns as parameters to the back-end data source for evaluation. This function is intended for scalar calculations, and is useful when you want to use a specialized database function that is not supported by the Oracle BI Server, but that is understood by the underlying data source.

The embedded database function may require one or more columns. These columns are referenced by %1 ... %N within the function. The actual columns must be listed after the function.

The ability to use EVALUATE is disabled by default. To enable support for this function, change the EVALUATE_SUPPORT_LEVEL parameter in NQSConfig.INI. See *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition* for more information.

Syntax

```
EVALUATE('db_function(%1...%N)' [AS data_type] [, column1, columnN])
```

Where:

`db_function` is any valid database function understood by the underlying data source.

`data_type` is an optional parameter that specifies the data type of the return result. Use this parameter whenever the return data type cannot be reliably predicted from the input arguments. However, do not use this parameter for type casting; if the

function needs to return a particular data type, add an explicit cast. You can typically omit this parameter when the database-specific function has a return type not supported by the Oracle BI Server, but is used to generate an intermediate result that does not need to be returned to the Oracle BI Server.

column1 through *columnN* is an optional, comma-delimited list of columns.

Examples

This example shows an embedded database function.

```
SELECT EVALUATE('instr(%1, %2)', address, 'Foster City') FROM employees
```

Examples Using EVALUATE_AGGREGATE and EVALUATE to Leverage Unique Essbase Functions

The following examples use the EVALUATE_AGGREGATE and EVALUATE functions. Note that expressions are applied to columns in the logical table source that refers to the physical cube.

Use EVALUATE_AGGREGATE to implement custom aggregations. For example, you may want to compare overall regional profit to profits for the top three products in the region. You can define a new measure to represent the profits for top three products resulting in the Logical SQL statement:

```
SELECT Region, Profit, EVALUATE_AGGREGATE('SUM(TopCount(%1.members, 3, %2), %3)',
Products, Profit, Profit) Top_3_prod_Profit FROM SampleBasic
```

The Oracle BI Server generates the following expression for the custom aggregation:

```
member [Measures].[MS1] AS
'SUM(Topcount([Product].Generations(6).members,3,[Measures].[Profit]),[Measures].[
Profit])'
```

Use the EVALUATE function on projected dimensions to implement scalar functions that are computed post-aggregation. EVALUATE may change the grain of the query, if its definition makes explicit references to dimensions (or attributes) that are not in the query.

For example, if you would like to see the Profits for the top five products ranked by Sales sold in a Region, after creating the applicable measure, the resulting Logical SQL statement is as follows

```
SELECT Region, EVALUATE('TopCount(%1.members, 5, %2)' as VARCHAR(20), Products,
Sales), Profits
FROM SampleBasic
```

The Oracle BI Server generates the following expression to retrieve the top five products:

```
set [Evaluate0] as
'{Topcount([Product].Generations(6).members,5,[Measures].[Sales]) }'
```

EVALUATE_ANALYTIC

This function passes the specified database analytic function with optional referenced columns as parameters to the back-end data source for evaluation.

The embedded database function may require one or more columns. These columns are referenced by %1 ... %N within the function. The actual columns must be listed after the function.

The ability to use `EVALUATE_ANALYTIC` is disabled by default. To enable support for this function, change the EVALUATE_SUPPORT_LEVEL parameter in NQSConfig.INI. See *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition* for more information.

Syntax

```
EVALUATE_ANALYTIC('db_function(%1...%N)' [AS data_type] [, column1, columnN])
```

Where:

`db_function` is any valid database analytic function understood by the underlying data source.

`data_type` is an optional parameter that specifies the data type of the return result. Use this parameter whenever the return data type cannot be reliably predicted from the input arguments. However, do not use this parameter for type casting; if the function needs to return a particular data type, add an explicit cast. You can typically omit this parameter when the database-specific analytic function has a return type not supported by the Oracle BI Server, but is used to generate an intermediate result that does not need to be returned to the Oracle BI Server.

`column1` through `columnN` is an optional, comma-delimited list of columns.

Examples

This example shows an embedded database analytic function.

```
EVALUATE_ANALYTIC('dense_rank() over(order by %1 )' AS INT,sales.revenue)
```

If the preceding example needs to return a double, then an explicit cast should be added, as follows:

```
CAST(EVALUATE_ANALYTIC('Rank(%1.dimension.currentmember, %2.members)',
"Foodmart93"."Time"."Month" as Double)
```

EVALUATE_AGGR

This function passes the specified database function with optional referenced columns as parameters to the back-end data source for evaluation. This function is intended for aggregate functions with a `GROUP BY` clause.

The embedded database function may require one or more columns. These columns are referenced by %1 ... %N within the function. The actual columns must be listed after the function.

The ability to use `EVALUATE_AGGR` is disabled by default. To enable support for this function, change the EVALUATE_SUPPORT_LEVEL parameter in NQSConfig.INI. See *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition* for more information.

Syntax

```
EVALUATE_AGGR('db_agg_function(%1...%N)' [AS data_type] [, column1, columnN])
```

Where:

`db_agg_function` is any valid aggregate database function understood by the underlying data source.

`data_type` is an optional parameter that specifies the data type of the return result. Use this parameter whenever the return data type cannot be reliably predicted from

the input arguments. However, do not use this parameter for type casting; if the function needs to return a particular data type, add an explicit cast. You can typically omit this parameter when the database-specific function has a return type not supported by the Oracle BI Server, but is used to generate an intermediate result that does not need to be returned to the Oracle BI Server.

column1 through *columnN* is an optional, comma-delimited list of columns.

Example

```
EVALUATE_AGGR('REGR_SLOPE(%1, %2)', sales.quantity, market.marketkey)
```

EVALUATE_PREDICATE

This function passes the specified database function with optional referenced columns as parameters to the back-end data source for evaluation. This function is intended for functions with a return type of Boolean.

The embedded database function may require one or more columns. These columns are referenced by %1 ... %N within the function. The actual columns must be listed after the function.

Note that EVALUATE_PREDICATE is not supported for use with Essbase data sources.

The ability to use EVALUATE_PREDICATE is disabled by default. To enable support for this function, change the EVALUATE_SUPPORT_LEVEL parameter in NQSConfig.INI. See *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition* for more information.

Syntax

```
EVALUATE_PREDICATE('db_function(%1...%N)', [, column1, columnN)
```

Where:

db_function is any valid database function with a return type of Boolean that is understood by the underlying data source.

column1 through *columnN* is an optional, comma-delimited list of columns.

If you want to model a database function for comparison purposes, you should not use EVALUATE_PREDICATE. Instead, use EVALUATE and put the comparison outside the function. For example, do *not* use EVALUATE_PREDICATE as follows:

```
EVALUATE_PREDICATE('dense_rank() over (order by 1% ) < 5', sales.revenue)
```

Instead, use EVALUATE, as follows:

```
EVALUATE('dense_rank() over (order by 1% ) ', sales.revenue) < 5
```

Example
```
SELECT year, Sales AS DOUBLE,CAST(EVALUATE('OLAP_EXPRESSION(%1,''LAG(units_cube_
sales, 1, time, time LEVELREL time_levelrel)'')', OLAP_CALC) AS DOUBLE) FROM
"Global".Time, "Global"."Facts - sales" WHERE EVALUATE_PREDICATE('OLAP_
CONDITION(%1, ''LIMIT time KEEP ''''1'''', ''''2'''', ''''3'''', ''''4'''' '')
=1', OLAP_CALC) ORDER BY year;
```

System Functions

The system functions return values relating to the session. Functions include:

- USER

- [DATABASE](#)

USER

This function returns the user name for the Oracle BI repository to which you are logged on.

Syntax

```
USER()
```

DATABASE

This function returns the name of the default subject area.

Syntax

```
DATABASE()
```

Advance Analytics Internal Logical SQL Functions

SMR: This section is for Answers, only.

Oracle BI Server supports Logical SQL functions that allow Visual Analyzer users to explore data using models such as binning and trend lines.

The Logical SQL functions described in this section are also available to Presentation Services users.

This section contains the following topics:

- [Comparison of BIN and WIDTH_BUCKET Functions](#)
- [BIN Function](#)
- [WIDTH_BUCKET Function](#)
- [TRENDLINE Function](#)

Comparison of BIN and WIDTH_BUCKET Functions

Oracle BI Server supports the BIN and WIDTH_BUCKET Logical SQL functions. Although these functions share some of the same parameters and syntax, the usage of each functions is different.

Note the following differences between the BIN and WIDTH_BUCKET functions:

- Unlike the BIN function, the WIDTH_BUCKET function is not treated as a new dimensional attribute for the purposes of aggregation. Instead, the WIDTH_BUCKET function is applied on top of the query result similar to the other display functions such as RANK, TOPN, BOTTOMN, NTILE, PERCENTILE, MAVG, and MEDIAN.

- The BY clause of the BIN function defines the grain at which the binned expression is evaluated prior to binning. If the binned expression is a measure, then the measure is grouped at the grain specified in the BY clause before being binned.

- The BY clause of the WIDTH_BUCKET function defines the groups in the query result set over which the WIDTH_BUCKET calculation is applied. The buckets within different groups are calculated independently.

- The BY clause of the BIN function is mandatory if the binned expression is a measure. Otherwise, for non-measure expressions, the BY clause is optional.

- The BY clause is always optional in the WIDTH_BUCKET function. If the BY clause is omitted from the WIDTH_BUCKET function, then the function operates over the entire result set.

- Use the BIN function when you want to compute a set of discrete buckets on top of a continuous valued attribute or measure and you want to treat that new set of discrete buckets as if it were a new dimension attribute that is intended to be included in the GROUP BY clause of other base measures in the query.

- Use the WIDTH_BUCKET function when you want to compute a discrete set of buckets on top of an already aggregated query result set.

BIN Function

With the BIN function, the user can select any numeric attribute (INT, FLOAT, DOUBLE, NUMERIC) from a dimension or fact table or a measure containing the data values and place them into a discrete number of bins.

The BIN function classifies a given numeric expression into a specified number of equal width buckets. The function can return either the bin number or one of the two end points of the bin interval. The output of the BIN function is then used as a GROUP BY expression for other measures included in the query.

For example, suppose the user is analyzing the sales performance for a retail store. One way to look at sales is in the form of a histogram so that you can see sales less than $500, between $500 and $1000, and so on. To build a histogram first you would classify the sales total values into bins.

The BIN function is treated like a new dimension attribute for purposes such as aggregation, filtering, and drilling. All of these operations are supported on BIN expressions.

Note that the WIDTH_BUCKET function is an alternative to the BIN function for users who require bucketing on top of the final query result set as a display function. See "Comparison of BIN and WIDTH_BUCKET Functions" for more information.

Syntax

```
BIN(numeric_expr [BY grain_expr1, ..., grain_exprN] [WHERE condition]
INTO number_of_bins BINS [BETWEEN min_value AND max_value]
[RETURNING { NUMBER | RANGE_LOW | RANGE_HIGH }])
```

Where:

numeric_expr indicates the measure or numeric attribute to bin.

BY *grain_expr1, ..., grain_exprN* indicates a list of expressions that define the grain at which the *numeric_expr* is calculated before the numeric values are assigned to bins. This clause is required for measure expressions and is optional for attribute expressions.

WHERE *condition* indicates a filter condition to apply to the *numeric_expr* before the numeric values are assigned to bins.

INTO *number_of_bins* indicates the number of bins to return. The default is 10.

BETWEEN *min_value* AND *max_value* indicates the minimum and maximum values used for the end points of the outermost bins.

RETURNING indicates a filter condition to apply to the *numeric_expr* before the numeric values are assigned to bins. Note the following options:

- RETURNING NUMBER indicates the return value should be the bin number (for example, 1, 2, 3, 4). This is the default condition.

- RETURNING RANGE_LOW indicates the lower value of the bin interval.

- RETURNING RANGE_HIGH indicates the higher value of the bin interval.

Example 1

In this example, the filter Year IN (2013, 2014, 2015) applies to the calculation of Revenue, but it does not affect the UnitPrice subquery used to calculate the bins by product.

```
SELECT
Year,
BIN(UnitPrice BY ProductName), Revenue
FROM SampleSalesSubjectArea
WHERE Year IN (2013, 2014, 2015);
```

Example 2

In this example, the filter Year = 2014 is explicitly applied to the bin calculation and will affect the QtySold expression that is used to define the bins. The Year IN (2013, 2014, 2015) filter is applied to the calculation of Revenue but will not affect the bin definitions

Instead of returning the bin numbers, this query will return the low and high end points of the bin intervals.

```
SELECT
Year,
BIN(QtySold BY ProductName WHERE Year = 2014 INTO 20 BINS RETURNING RANGE_LOW),
BIN(QtySold BY ProductName WHERE Year = 2014 INTO 20 BINS RETURNING RANGE_HIGH),
Revenue
FROM SampleSalesSubjectArea
WHERE Year IN (2013, 2014, 2015);
```

Example 3

In this example, the measure being binned (QtySold) is computed at the City grain. Each city regardless of its region is assigned to bins 1, 2, 3, 4, or 5.

Also, the bin query containing the bin number (1 through 5) and the City primary key are joined with the main query on the City key. The main query is grouped by Region and the City bin (1 through 5).

Some regions may not have each city bin number represented in the final result set. For example, the rows for the region East might only have bins 1, 3, 4 represented, while the region West might only have bins 1, 2, 4, 5.

```
SELECT
Region,
BIN(QtySold BY City INTO 5 BINS),
Revenue
FROM SampleSalesSubjectArea;
```

Example 4

In this example, because Age is an attribute, the BY clause is omitted. In this case, the grain used to compute the bins is determined by the attribute's associated level defined in the metadata.

```
SELECT
BIN(Age),
Revenue
FROM SampleSalesSubjectArea;
```

Example 5

In this example, the BY clause explicitly states the grain at which the Age attribute is computed. If the attribute contains multiple values at this grain, then the BI Server grain check detects the error condition and displays an error message indicating which tuple contains the multiple values.

```
SELECT
BIN(Age BY Customer),
Revenue
FROM SampleSalesSubjectArea;
```

WIDTH_BUCKET Function

The WIDTH_BUCKET function classifies a given numeric expression into a specified number of equal width buckets.

The WIDTH_BUCKET function operates on top of the base query result set as a display function. The function can return either the bin number or one of the two end points of the bin interval.

Note that although the WIDTH_BUCKET and BIN functions share some of the same parameters and syntax, the usage of each functions is different. See "Comparison of BIN and WIDTH_BUCKET Functions" for more information.

Syntax

The syntax of the WIDTH_BUCKET function is simpler than the BIN function, using simple comma-separated arguments instead of multiple clauses. The only nested clause supported by the WIDTH_BUCKET function is the BY clause, which is supported by all display functions including WIDTH_BUCKET, RANK, TOPN, and PERCENTILE.

```
WIDTH_BUCKET(numeric_expr, { NUMBER | RANGE_LOW | RANGE_HIGH },
number_of_bins, [min_value, max_value] [BY expr1, ..., exprN])
```

Where:

numeric_expr indicates the measure or numeric attribute to bin.

NUMBER indicated that the return value should be the bin number (for example, 1, 2, 3, 4). This is the default condition.

RANGE_LOW indicates the lower value of the bin interval.

RANGE_HIGH indicates the higher value of the bin interval.

number_of_bins indicates the number of bins to return. The default is 10.

min_value, max_value indicates the minimum and maximum values used for the end points of the outermost bins. If the *min_value* and *max_value* conditions are omitted, then the function determines the end points automatically

BY *expr1, ..., exprN* indicates an optional list of expressions that define the groups in the query result set over which the WIDTH_BUCKET calculation is applied. The bucket intervals within different groups are calculated independently.

Example 1

In this example, the filter `Year IN (2013, 2014, 2015)` applies to the entire result set. The Revenue measure is computed at the Year, Category grain. And then the WIDTH_BUCKET is calculated on top of the already filtered and aggregated Revenue measure at the Year, Category grain.

```
SELECT
Year, Category, Revenue, WIDTH_BUCKET(Revenue, RANGE_HIGH, 5)
FROM SampleSalesSubjectArea
WHERE Year IN (2013, 2014, 2015);
```

Example 2

In this example, the Revenue measure is computed at the Year, Category grain, and the WIDTH_BUCKET is calculated on top of the aggregated Revenue measure.

The WIDTH_BUCKET function specifies 10 buckets between the values 0 and 1,000,000. This will result in 10 buckets each with an interval of 100,000. Any Revenue values outside of the range (0, 1,000,000) are placed into overflow buckets. Therefore, if there are Revenue values below 0 or above 1,000,000, then there could actually be 11 or 12 distinct buckets in the result.

```
SELECT
Year, Category, Revenue, WIDTH_BUCKET(Revenue, NUMBER, 10, 0, 1000000)
FROM SampleSalesSubjectArea;
```

Example 3

In this example, the WIDTH_BUCKET is partitioned by Year so that the bucket intervals are computed independently for each Year. Note that this query may not make much sense unless the results are divided into multiple visualizations by Year (for example, a trellis chart) since the bucket intervals from different years will not necessary be aligned to the same end points.

```
SELECT Year, Category, Revenue, QtySold
WIDTH_BUCKET(Revenue, RANGE_LOW, 5 BY Year) as Low,
WIDTH_BUCKET(Revenue, RANGE_HIGH, 5 BY Year) as High
FROM SampleSalesSubjectArea;
```

TRENDLINE Function

The TRENDLINE function measures data across time and shows a line chart of a metric by ordered records.

Currently the TRENDLINE function can model data as linear and exponential regression.

Syntax

```
TRENDLINE( <numeric_expr>, ( [<series>] ) BY ( [<partitionBy>] ),
<model_type>, <result_type>, [number_of_degrees] )
```

Where:

numeric_expr indicates the data to trend. This is usually a measure column. Note that this is the Y-axis.

series indicates the X-axis. This is a list of *<valueExp> <orderByDirection>*, where *<valueExp>* is a dimension column and *<orderByDirection>* is ASC or DES. The default is ASC. Note that this cannot be an arbitrary combination of numeric columns.

partitionBy indicates the control break for the trendline.

model_type indicates the type of model to use. Currently you can only specify LINEAR.

result_type indicates the type of output. You can specify VALUE or MODEL. VALUE returns the regression Y values given X in the fit. MODEL returns the parameters in a JSON format string.

number_of_degrees is used in polynomial models, only. This parameter is optional.

Example 1

This example shows a trend line using Sales.Revenue as the Y-axis and day.cal_year as the X-axis. The regression method is linear regression and the returning type is value. Note that day.cal_year is a primary level key from a time dimension.

```
SELECT
day.cal_year, Sales.Revenue, TRENDLINE(Sales.Revenue, (day.cal_year),
(), 'LINEAR', 'VALUE')
FROM TimeSeriesTesting;
```

Example 2

This example shows a separate trend line using Sales.Revenue as the Y-axis and day.cal_year as the X-axis for each Product.CategoryID.

```
SELECT
Product.CategoryID, day.cal_year, Sales.Revenue, TRENDLINE(Sales.Revenue,
(day.cal_year), (Product.CategoryID), 'LINEAR', 'VALUE')
FROM TimeSeriesTesting; //single trendline with control_break
```

Example 3

This example shows a multiple trendline function in the same query. This example uses Sales.Revenue as Y-axis and (day.cal_year, day.cal_qtr) as X-axis.

```
SELECT
day.cal_year, day.cal_qtr, Sales.Revenue, TRENDLINE(Sales.Revenue,
(day.cal_year, day.cal_qtr), (), 'LINEAR', 'VALUE'), TRENDLINE(Sales.Revenue,
(day.cal_year, day.cal_qtr), (), 'LINEAR', 'MODEL')
FROM TimeSeriesTesting
order by 1; //multiple trendline functions
```

Example 4

This example shows a separate trend line using Sales.Revenue as Y-axis and day.cal_year as X-axis for each Product.CategoryID. Note that although Shipper.ShipperID is in the query projection list, the trendline will not take it for computation.

```
SELECT
Product.CategoryID, Shipper.ShipperID, day.cal_year, Sales.Revenue,
TRENDLINE(aggregate(Sales.Revenue by day.cal_year, Product.CategoryID),
(day.cal_year), (Product.CategoryID), 'LINEAR', 'Value')
FROM TimeSeriesTesting
order by 1, 3; //Query grain can be lower than Trendline Y-axis grain.
```

Example 5

This example uses one single numeric column as Trendline X-axis.

```
SELECT
employee.country, category.categoryid, sales.qtysold, TRENDLINE
(sales.qtysold, (category.categoryid), (employee.country),
'LINEAR', 'VALUE')
FROM TimeSeriesTesting
```

```
order by 1, 2; //using a single numeric column as Trendline X-axis.
```

Advanced Analytics External Logical SQL Functions

SMR: This section is for Answers, only.

Oracle BI Server supports external Logical SQL functions that allow Visual Analyzer users to explore data with models such as forecast, cluster, and outlier.

The external Logical SQL functions described in this section are also available to Presentation Services users.

The External Logical SQL functions feed the input data to the standalone R-process or ORE. Therefore depending upon your environment and query needs, your environment must include either the R or ORE external engine before you can successfully use these functions. See *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition* for information about installing and configuring the R or ORE engine.

This section contains the following topics:

- EVALUATE_SCRIPT Function
- FORECAST Function
- CLUSTER Function
- OUTLIER Function
- REGR Function

EVALUATE_SCRIPT Function

The EVALUATE_SCRIPT function executes an R script as specified in the *script_file_path*, passing in one or more columns or literal expressions as input. The output of the function is determined by the *column_name*.

Syntax

```
EVALUATE_SCRIPT( <script_file_path>, <column_name>, <options>,
[<runtime_binded_column_options>] )
```

Where:

script_file_path indicates the script XML file path. For example, filerepo//obiee.TimeSeriesForecast.xml.

column_name indicates the column name upon which to forecast.

options is a string list of names or value pairs separated by a semi-colon (;). For example,
'algorithm=GLM;CustomerID=%1;ActualRevenue=%2;YearsAsCustomer=%3',

runtime_binded_column_options indicates an optional variable list of column expression. You can specify one or more columns.

Example 1

This example shows a general use of the EVALUATE_SCRIPT command.

```
EVALUATE_SCRIPT(
'filerepo://PAFScore_bounded.xml',
'predictionValue',
```

```
'algorithm=GLM;CustomerID=%1;ActualRevenue=%2;YearsAsCustomer=%3',
"A - Sample Sales"."Customers"."C0 Customer Number",
"A - Sample Sales"."Datamining"."M01- Actual Revenue",
"A - Sample Sales"."Customers"."C20 Years as Customer"
) PredictedRevenue
```

Example 2

This example shows how to use the EVALUATE_SCRIPT function to call the
Clustering.xml script.

```
SELECT
"A - Sample Sales"."Customers"."C0 Customer Number" CustomerID,
"A - Sample Sales"."Datamining"."M02- Expected Rev" ActualRevenue,
EVALUATE_SCRIPT(
'filerepo://obiee.Clustering.xml',
'clusterId',
'algorithm=kmeans;numClusters=3;id=%1;arg1=%2;',
"A - Sample Sales"."Customers"."C0 Customer Number" ,
"A - Sample Sales"."Datamining"."M02- Expected Rev") ClusterId,
EVALUATE_SCRIPT(
'filerepo://obiee.Clustering.xml',
'clusterName',
'algorithm=kmeans;numClusters=3;id=%1;arg1=%2;',
"A - Sample Sales"."Customers"."C0 Customer Number" ,
"A - Sample Sales"."Datamining"."M02- Expected Rev") ClusterName,
EVALUATE_SCRIPT(
'filerepo://obiee.Clustering.xml',
'clusterSize',
'algorithm=kmeans;numClusters=3;id=%1;arg1=%2;',
"A - Sample Sales"."Customers"."C0 Customer Number" ,
"A - Sample Sales"."Datamining"."M02- Expected Rev") ClusterSize,
EVALUATE_SCRIPT(
'filerepo://obiee.Clustering.xml',
'distanceFromCenter',
'algorithm=kmeans;numClusters=3;id=%1;arg1=%2;',
"A - Sample Sales"."Customers"."C0 Customer Number" ,
"A - Sample Sales"."Datamining"."M02- Expected Rev") DistanceFromCenter
FROM "A - Sample Sales" WHERE "A - Sample Sales"."Customers".
"C0 Customer Number" < 1000;
```

Example 3

This example shows how to use the EVALUATE_SCRIPT function to call the
TimeSeriesForecast.xml script.

```
SELECT
"A - Sample Sales"."Time"."T00 Calendar Date" Day1,
"A - Sample Sales"."Base Facts"."1- Revenue" Target,
EVALUATE_SCRIPT(
'filerepo://obiee.TimeSeriesForecast.xml',
'forecast',
'numPeriods=7;predictionInterval=90;timeDay=%1;target=%2;',
"A - Sample Sales"."Time"."T00 Calendar Date",
"A - Sample Sales"."Base Facts"."1- Revenue") ForecastedRevenue,
EVALUATE_SCRIPT(
'filerepo://obiee.TimeSeriesForecast.xml',
'high',
'numPeriods=7;predictionInterval=90;timeDay=%1;target=%2;',
"A - Sample Sales"."Time"."T00 Calendar Date",
"A - Sample Sales"."Base Facts"."1- Revenue") High,
```

```
EVALUATE_SCRIPT(
'filerepo://obiee.TimeSeriesForecast.xml',
'low',
'numPeriods=7;predictionInterval=90;timeDay=%1;target=%2;',
"A - Sample Sales"."Time"."T00 Calendar Date",
"A - Sample Sales"."Base Facts"."1- Revenue") Low
FROM "A - Sample Sales"order by 1;
```

Example 4

This example shows how to use EVALUATE_SCRIPT function to call the Outliers.xml.

```
SELECT
"A - Sample Sales"."Customers"."C0 Customer Number" CustomerID,
"A - Sample Sales"."Datamining"."M02- Expected Rev" ActualRevenue,
EVALUATE_SCRIPT(
'filerepo://obiee.Outliers.xml',
'isOutlier',
'algorithm=mvoutlier;id=%1;arg1=%2;arg2=%3;',
"A - Sample Sales"."Customers"."C0 Customer Number" ,
"A - Sample Sales"."Datamining"."M02- Expected Rev",
"A - Sample Sales"."Customers"."C21 Customer Age") IsOutlier,
EVALUATE_SCRIPT(
'filerepo://obiee.Outliers.xml',
'distance',
'algorithm=mvoutlier;id=%1;=arg1=%2;arg2=%3;',
"A - Sample Sales"."Customers"."C0 Customer Number" ,
"A - Sample Sales"."Datamining"."M02- Expected Rev",
"A - Sample Sales"."Customers"."C21 Customer Age") Distance
FROM "A - Sample Sales" WHERE "A - Sample Sales"."Customers".
"C0 Customer Number" < 1000
```

FORECAST Function

The FORECAST function creates a time-series model of the specified measure over the series using either Exponential Smoothing or ARMIA. This function outputs a forecast for the set of periods as specified by numPeriods.

Syntax

```
FORECAST(numeric_expr, ([series]), output_column_name, options, [runtime_binded_
options])])
```

Where:

numeric_expr indicates the measure to forecast. For example, revenue data to forecast.

series indicates the time grain at which the forecast model is built. This is a list of one or more time dimension columns. If you omit *series*, then the time grain is determined from the query.

output_column_name indicates the output column. The valid values are 'forecast', 'low', 'high', and 'predictionInterval'.

options indicates a string list of name/value pairs separated by a semi-colon (;). The value can include %1 ... %N, which can be specified in *runtime_binded_options*.

runtime_binded_options indicates a comma separated list of runtime-binded columns and options.

Available Options

This section contains information about the options and the option values you can use with the FORECAST function.

Table C–2   FORECAST Function Options

Option Name	Description	Values
numPeriods	The number of periods to forecast.	Integer
predictionInterval	The confidence for the prediction.	0 to 100, where higher values specify higher confidence
modelType	The model to use for forecasting.	ARIMA ETS
useBoxCox	If TRUE, then use Box-Cox transformation.	TRUE FALSE
lambdaValue	The Box-Cox transformation parameter. Ignore if NULL or when useBoxCox is FALSE. Otherwise the data is transformed before the model is estimated.	–
trendDamp	This is a parameter for ETS model. If TRUE, then use damped trend. If NULL, then try both damped and non-damped trend and choose the one that is optimal.	–
errorType	This is a parameter for ETS model.	additive("A") multiplicative("M") automatically selected ("Z")
trendType	This is a parameter for ETS model.	none("N") additive("A") multiplicative("M") automatically selected("Z")
seasonType	This is a parameter for ETS model.	none("N") additive("A") multiplicative("M") automatically selected("Z")
modelParamIC	The information criterion (IC) to be used in the model selection.	"ic_auto" "ic_aicc" "ic_bic" "ic_auto" (this is the default)

Output Columns

The FORECAST function output contains the following columns:

- **forecast** – This column is the forecasted output.

- **low** – This column is the forecasted lower bound number.

- **high** – This column is the forecasted higher bound number.

Example 1

This example selects revenue forecast by day.

```
FORECAST(
"A - Sample Sales"."Base Facts"."1- Revenue" Target,
("A - Sample Sales"."Time"."T00 Calendar Date"),
'forecast',
'numPeriods=30;predictionInterval=70;'
) ForecastedRevenue
```

Example 2

This example selects revenue forecast by year and quarter.

```
FORECAST(
"A - Sample Sales"."Base Facts"."1- Revenue",
("A - Sample Sales"."Time"."T01 Year" timeYear, "A - Sample Sales"."Time"."T02
Quarter" TimeQuarter),
'forecast',
'numPeriods=30;predictionInterval=70;'
) ForecastedRevenue
```

Example 3

This example selects revenue forecast by year and quarter using a custom forecast
script xml file.

```
FORECAST(
"A - Sample Sales"."Base Facts"."1- Revenue",
("A - Sample Sales"."Time"."T01 Year" timeYear, "A - Sample Sales"."Time"."T02
Quarter" TimeQuarter),
'forecast',
'numPeriods=30;predictionInterval=70;Script=filerepo://PAFTimeSeriesForecast.xml'
) ForecastedRevenue
```

Example 4

This example includes the runtime-binded option where numPeriods=%1.

```
SELECT
"X - Airlines Traffic"."Month"."Dep Month" s_1,
"X - Airlines Traffic"."Passengers"."Passengers" s_2,
IFNULL(FORECAST(0.9*"X - Airlines Traffic"."Passengers"."Passengers" Target,
("X - Airlines Traffic"."Month"."Dep Month" Time_Month),'forecast',
'numPeriods=%1;predictionInterval=90',6),"X - Airlines
 Traffic"."Passengers"."Passengers") s_3
FROM "X - Airlines Traffic"
```

Example 5

This example selects revenue forecast by year and month with a floating time grain.

```
SELECT
"A - Sample Sales"."Time"."T05 Per Name Year" TimeYear1,
"A - Sample Sales"."Time"."T02 Per Name Month" Month1,
"A - Sample Sales"."Base Facts"."1- Revenue" Target1,
FORECAST(
"A - Sample Sales"."Base Facts"."1- Revenue" ,
(),
'Forecast',
```

```
'numPeriods=%1;predictionInterval=70;',
4) ForecastedRevenue
FROM "A - Sample Sales"
order by Month1;
```

Example 6

This example selects revenue forecast by year and month with a floating time grain separately for each Region and Country Name.

```
SELECT
"A - Sample Sales"."Time"."T05 Per Name Year" TimeYear1,
"A - Sample Sales"."Time"."T02 Per Name Month" Month1,
"A - Sample Sales"."Base Facts"."1- Revenue" Target1,
"A - Sample Sales"."Office Regions"."D50 Region" Region,
"A - Sample Sales"."Office Regions"."D52 Country Name" Con,
FORECAST(
"A - Sample Sales"."Base Facts"."1- Revenue" ,
(),
'Forecast',
'numPeriods=%1;predictionInterval=70;',
4) ForecastedRevenue
FROM "A - Sample Sales"
order by region, con, Month1;
```

CLUSTER Function

The CLUSTER function collects a set of records into groups based on one or more input expressions using K-Means or Hierarchical Clustering.

Syntax

```
CLUSTER((dimension_expr1 , ... dimension_exprN), (expr1, .. exprN),
output_column_name, options, [runtime_binded_options])
```

Where:

dimension_expr indicates a list of dimensions to be clustered.

expr indicates a list of dimension attributes or measures to use to cluster *dimension_expr*.

output_column_name indicates the output column name for the cluster. Valid values are 'clusterId', 'clusterName', 'clusterDescription', 'clusterSize', 'distanceFromCenter', and 'centers'.

options indicates a string list of name/value pairs separated by a semi-colon (;). You can include %1 ... %N, which can be specified using *runtime_binded_options*.

runtime_binded_options indicates a comma separated list (,) of run-time binded columns or literal expressions.

Available Options

This section contains information about the options and the option values you can use with the CLUSTER function.

Table C–3   CLUSTER Function Options

Option Name	Description	Values
algorithm	The algorithm to use for clustering.	k-mean h-clustering
method	The method within the algorithm.	For k-means algorithm: Hartigan-Wong, Lloyd, Forgy, MacQueen For h-clustering algorithm: ward.D, ward.D2, single, complete, average, mcquitty, median, or centroid.
numClusters	The number of clusters. Every record is assigned to one of the clusters.	Integer
attributeNames	The attributes to consider for clustering.	arg1,arg2,arg3,arg4,arg5,arg6,arg7,arg8,arg9,arg10
maxIter	The number of iterations.	Integer
normalizedDist	Normalizes the distance between 0 to 100 if set to TRUE.	TRUE FALSE
useRandomSeed	Set to TRUE by default. If set to TRUE, then is the value to use in PRODUCTION environment. If set to FALSE, then use set.seed(initialSeed) to ensure reproducibility, used in QA/Debug Environment.	True False
initialSeed	Default is 250. This value is used only when useRandomSeed is set to FALSE.	Integer
clusterNamePrefix	Default is empty. If set, then this is the prefix for the cluster name.	Varchar
clusterNameSuffix	Default is empty. If set, then this is the suffix for the cluster name.	Varchar

Output Columns

The CLUSTER function output contains the following columns:

- **clusterID** – This column is the cluster number or ID.

- **clusterName** – This column is the name of the cluster. It is the same as clusterID.

- **clusterDescription** – The description can be added by the end user after the cluster dataset is persisted into DSS.

- **clusterSize** – This column is the number of elements in the current cluster.

- **distanceFromCenter** – This column indicates how far the current cluster element is from the center of the current cluster.

- **centers** – This column indicates the center of the current cluster.

Example 1

This example clusters Customer Number by Expected Revenue, and selects the clusterID of every Customer Number less than 1000.

```
SELECT
"A - Sample Sales"."Customers"."C0 Customer Number" CustomerID,
"A - Sample Sales"."Datamining"."M02- Expected Rev" ActualRevenue,
CLUSTER(
("A - Sample Sales"."Customers"."C0 Customer Number"),
("A - Sample Sales"."Datamining"."M02- Expected Rev"),
'clusterId',
'algorithm=k-means;numClusters=5;maxIter=10'
) ClusterId
FROM "A - Sample Sales" WHERE "A - Sample Sales"."Customers"."C0 Customer Number"
< 1000;
```

Example 2

This example clusters Customer Number by Expected Revenue and Customer Age, and select the clusterID of every Customer Number less than 1000:

```
SELECT
"A - Sample Sales"."Customers"."C0 Customer Number" CustomerID,
"A - Sample Sales"."Datamining"."M02- Expected Rev" ActualRevenue,
CLUSTER(
("A - Sample Sales"."Customers"."C0 Customer Number"),
("A - Sample Sales"."Datamining"."M02- Expected Rev", "A - Sample
Sales"."Customers"."C21 Customer Age"),
'clusterId',
'algorithm=k-means;numClusters=5;maxIter=10'
) ClusterId
FROM "A - Sample Sales" WHERE "A - Sample Sales"."Customers"."C0 Customer Number"
< 1000;
```

Example 3

This example uses a custom cluster script xml. Note that the custom cluster script xml must reside in the same directory as other Advanced Analytics xml files.

```
SELECT
"A - Sample Sales"."Customers"."C0 Customer Number" CustomerID,
"A - Sample Sales"."Datamining"."M02- Expected Rev" ActualRevenue,
CLUSTER(
("A - Sample Sales"."Customers"."C0 Customer Number"),
("A - Sample Sales"."Datamining"."M02- Expected Rev", "A - Sample
Sales"."Customers"."C21 Customer Age"),
'clusterId',
'algorithm=k-means;numClusters=5;maxIter=10;Script=filerepo://CustomClusterScript.
xml'
 ) ClusterId
FROM "A - Sample Sales" WHERE "A - Sample Sales"."Customers"."C0 Customer Number"
< 1000;
```

Example 4

This example shows runtime binded parameters.

```
SELECT
"A - Sample Sales"."Customers"."C0 Customer Number" CustomerID,
"A - Sample Sales"."Datamining"."M02- Expected Rev" ActualRevenue,
```

```
CLUSTER(
("A - Sample Sales"."Customers"."C0 Customer Number"),
("A - Sample Sales"."Datamining"."M02- Expected Rev", "A - Sample
Sales"."Customers"."C21 Customer Age"),
'clusterId',
'algorithm=%2;numClusters=%1;maxIter=%3', 5, 'k-means', 10
) ClusterId
FROM "A - Sample Sales" WHERE "A - Sample Sales"."Customers"."C0 Customer Number"
< 1000;
```

Example 5

This example clusters Customer Number by Expected Revenue and Customer Age, and selects the clusterID and distanceFromCenter of each Customer Number less than 1000.

```
SELECT
"A - Sample Sales"."Customers"."C0 Customer Number" CustomerID,
"A - Sample Sales"."Datamining"."M02- Expected Rev" ActualRevenue,
CLUSTER(
("A - Sample Sales"."Customers"."C0 Customer Number"),
("A - Sample Sales"."Datamining"."M02- Expected Rev", "A - Sample
Sales"."Customers"."C21 Customer Age"),'clusterId',
'algorithm=%2;numClusters=%1;maxIter=%3', 5,'k-means', 10
) ClusterId,
CLUSTER(
( "A - Sample Sales"."Customers"."C0 Customer Number"),
("A - Sample Sales"."Datamining"."M02- Expected Rev", "A - Sample
Sales"."Customers"."C21 Customer Age"),'distanceFromCenter',
'algorithm=%3;numClusters=%1;maxIter=%2', 5, 10, 'k-means'
) distanceFromCenter
FROM "A - Sample Sales" WHERE "A - Sample Sales"."Customers"."C0 Customer Number"
< 1000;
```

Example 6

This example clusters Customer Number by Expected Revenue and Customer Age, but separately for Brand and Product Type, and selects the clusterID and distanceFromCenter of each Customer Number less than 1000.

```
SELECT
"A - Sample Sales"."Customers"."C0 Customer Number" CustomerID,
"A - Sample Sales"."Datamining"."M02- Expected Rev" ActualRevenue,
"A - Sample Sales"."Products"."P4 Brand" Brand,
"A - Sample Sales"."Products"."P2 Product Type" ProductType,
CLUSTER(
("A - Sample Sales"."Customers"."C0 Customer Number"),
("A - Sample Sales"."Datamining"."M02- Expected Rev", "A - Sample
Sales"."Customers"."C21 Customer Age"),
'clusterName',
'algorithm=k-means;numClusters=%1;maxIter=%2;useRandomSeed=FALSE;', 2, 10
) clusterName
FROM "A - Sample Sales"
where Brand = 'FunPod' order by Brand, ProductType;
```

Example 7

This example clusters multiple columns (Product and Company) in the ID list. There is no partition dimension as both the ID list columns are in the projection list.

```
SELECT
"A - Sample Sales"."Products"."P1 Product" s_1,
"A - Sample Sales"."Offices"."D4 Company" s_2,
CLUSTER(
("A - Sample Sales"."Products"."P1 Product", "A - Sample Sales"."Offices"."D4
Company"),
("A - Sample Sales"."Base Facts"."2- Billed Quantity","A - Sample Sales"."Base
Facts"."1- Revenue"),
'clusterName',
'algorithm=k-means;numClusters=%1;maxIter=%2;useRandomSeed=FALSE;', 5, 10) s_3,
"A - Sample Sales"."Base Facts"."2- Billed Quantity" s_4,
"A - Sample Sales"."Base Facts"."1- Revenue" s_5
FROM "A - Sample Sales";
```

Example 8

This example clusters multiple columns (Product and Company) in the ID list. There is one partition dimension (City).

```
SELECT
"A - Sample Sales"."Products"."P1 Product" s_1,
"A - Sample Sales"."Offices"."D4 Company" s_2,
"A - Sample Sales"."Office Regions"."D55 City" s_3,
CLUSTER(
("A - Sample Sales"."Products"."P1 Product", "A - Sample Sales"."Offices"."D4
Company"),
("A - Sample Sales"."Base Facts"."2- Billed Quantity","A - Sample Sales"."Base
Facts"."1- Revenue"),
'clusterName',
'algorithm=k-means;numClusters=%1;maxIter=%2;useRandomSeed=FALSE;', 5, 10) s_4,
"A - Sample Sales"."Base Facts"."2- Billed Quantity" s_5,
"A - Sample Sales"."Base Facts"."1- Revenue" s_6
FROM "A - Sample Sales" order by s_3;
```

OUTLIER Function

The OUTLIER function classifies a record as an outlier based on one or more input expressions using K-Means or Hierarchical Clustering or Multi-Variate Outlier detection Algorithms.

Syntax

```
OUTLIER((dimension_expr1 , ... dimension_exprN), (expr1, .. exprN),
output_column_name, options, [runtime_binded_options])))])
```

Where:

dimension_expr indicates a list of dimensions.

expr represents a list of dimension attributes or measures to find outlier.

output_column_name indicates the output column name. Valid values are 'isOutlier' and 'distance'.

options indicates a string list of name/value pairs separated by a semi-colon (;). The value can include %1 ... %N, which can be specified using *runtime_binded_options*.

runtime_binded_options is an option comma separated list (,) of run-time binded columns and or literal expressions.

Available Options

This section contains information about the options and the option values you can use with the OUTLIER function.

Table C–4   OUTLIER Function Options

Option Name	Description	Values
attributeName	The attributes to consider for outlier detection.	arg1,arg2,arg3,arg4,arg5,arg6,arg7,arg8,arg9,arg10
algorithm	The algorithm to use.	mvoutlier (default) h-clustering k-means
useRandomSeed	This is TRUE by default. This is the value to use in PRODUCTION environment. If set to FALSE, then we use set.seed(initialSeed) to ensure reproducibility. Used in QA/Debug environment.	TRUE FALSE
initialSeed	The default is set to 250. This value is used only when useRandomSeed is set to FALSE.	Integer
topN	The default is set to 3. If isTopNAsPercentage is TRUE then return the topN % as outliers. Or else return the topN values as outliers.	Double
isTopNAsPercentage	The default is FALSE. This value is used with topN.	TRUE FALSE

Output Columns

The OUTLIER function output contains the following columns:

- **isOutlier** – This column uses True or False to indicates if the current element is an outlier.

- **distance** – This column indicates the distance from the center.

Example 1

This example determines outliers for Customer Number based on Expected Revenue and using the mvoutlier algorithm.

```
SELECT
"A - Sample Sales"."Customers"."C0 Customer Number" CustomerID,
"A - Sample Sales"."Datamining"."M02- Expected Rev" ActualRevenue,
OUTLIER(
("A - Sample Sales"."Customers"."C0 Customer Number"),
("A - Sample Sales"."Datamining"."M02- Expected Rev")
'isOutlier',
'algorithm=mvoutlier'
) IsOutlier
FROM "A - Sample Sales" WHERE "A - Sample Sales"."Customers"."C0 Customer Number"
< 1000;
```

Example 2

This example determines outliers for Customer Number based on Expected Revenue and Customer Age, and using algorithm k-means.

```
SELECT
"A - Sample Sales"."Customers"."C0 Customer Number" CustomerID,
"A - Sample Sales"."Datamining"."M02- Expected Rev" ActualRevenue,
OUTLIER(
("A - Sample Sales"."Customers"."C0 Customer Number"),
("A - Sample Sales"."Datamining"."M02- Expected Rev", "A - Sample
Sales"."Customers"."C21 Customer Age"),
'isOutlier',
'algorithm=k-means'
) IsOutlier
FROM "A - Sample Sales" WHERE "A - Sample Sales"."Customers"."C0 Customer Number"
< 1000;
```

Example 3

This example determines outliers using a custom outlier script xml. Note that the custom outlier script xml must reside in the same directory as other Advanced Analytics xml files.

```
SELECT
"A - Sample Sales"."Customers"."C0 Customer Number" CustomerID,
 "A - Sample Sales"."Datamining"."M02- Expected Rev" ActualRevenue,
 OUTLIER(
( "A - Sample Sales"."Customers"."C0 Customer Number"),
 ("A - Sample Sales"."Datamining"."M02- Expected Rev", "A - Sample
Sales"."Customers"."C21 Customer Age"),
 'isOutlier',
 'algorithm=mvoutlier;Script=filerepo://CustomOutlierScript.xml'
 ) IsOutlier
FROM "A - Sample Sales" WHERE "A - Sample Sales"."Customers"."C0 Customer Number"
< 1000;
```

Example 4

This example determines outliers using runtime binded parameters.

```
SELECT
"A - Sample Sales"."Customers"."C0 Customer Number" CustomerID,
"A - Sample Sales"."Datamining"."M02- Expected Rev" ActualRevenue,
OUTLIER(
("A - Sample Sales"."Customers"."C0 Customer Number"),
("A - Sample Sales"."Datamining"."M02- Expected Rev", "A - Sample
Sales"."Customers"."C21 Customer Age"),
'isOutlier',
'algorithm=%1', 'mvoutlier'
) IsOutlier
FROM "A - Sample Sales" WHERE "A - Sample Sales"."Customers"."C0 Customer Number"
< 1000;
```

Example 5

This example determines outliers and distance for Customer Number based on Expected Revenue and Customer Age.

```
SELECT
```

```
"A - Sample Sales"."Customers"."C0 Customer Number" CustomerID,
"A - Sample Sales"."Datamining"."M02- Expected Rev" ActualRevenue,
OUTLIER(
("A - Sample Sales"."Customers"."C0 Customer Number"),
("A - Sample Sales"."Datamining"."M02- Expected Rev", "A - Sample
Sales"."Customers"."C21 Customer Age"),
'isOutlier',
'algorithm=%1', 'mvoutlier'
) IsOutlier,
OUTLIER(
( "A - Sample Sales"."Customers"."C0 Customer Number"),
("A - Sample Sales"."Datamining"."M02- Expected Rev", "A - Sample
Sales"."Customers"."C21 Customer Age"),
'distance', 'algorithm=%1', 'mvoutlier')
Distance FROM "A - Sample Sales" WHERE "A - Sample Sales"."Customers".
"C0 Customer Number" < 1000;
```

Example 6

This example determines outliers for Customer Number based on Expected Revenue,
Dyn Expected Rev, and Credit Rate, separately for each Brand and Office.

```
SELECT
"A - Sample Sales"."Customers"."C0 Customer Number" CustNo,
"A - Sample Sales"."Datamining"."M02- Expected Rev" Revenue,
"A - Sample Sales"."Products"."P4 Brand" Brand,
"A - Sample Sales"."Offices"."D1 Office" Office,
OUTLIER(
("A - Sample Sales"."Customers"."C0 Customer Number"),
("A - Sample Sales"."Datamining"."M02- Expected Rev", "A - Sample
Sales"."Datamining"."M03- Dyn Expected Rev", "A - Sample Sales".
"Customers"."C6 Credit Rate"), 'isOutlier', 'algorithm=k-means;'
) IsOutlier
FROM "A - Sample Sales" order by Brand, Office;
```

Example 7

This example includes multiple columns, Product and Company, in the ID list. There is
no partition dimension as both ID list columns are in the projection list.

```
SELECT
"A - Sample Sales"."Products"."P1 Product" s_1,
"A - Sample Sales"."Offices"."D4 Company" s_2,
OUTLIER(
("A - Sample Sales"."Products"."P1 Product", "A - Sample Sales"."Offices".
"D4 Company"),
("A - Sample Sales"."Base Facts"."2- Billed Quantity","A - Sample Sales".
"Base Facts"."1- Revenue"),
'isOutlier','algorithm=k-means;useRandomSeed=FALSE') s_3,
"A - Sample Sales"."Base Facts"."2- Billed Quantity" s_4,
"A - Sample Sales"."Base Facts"."1- Revenue" s_5
FROM "A - Sample Sales";
```

Example 8

This example includes multiple columns, Product and Company, in the ID list. The
partition dimension is City.

```
SELECT
```

```
"A - Sample Sales"."Products"."P1 Product" s_1,
"A - Sample Sales"."Offices"."D4 Company" s_2,
"A - Sample Sales"."Office Regions"."D55 City" s_3,
OUTLIER(
("A - Sample Sales"."Products"."P1 Product", "A - Sample Sales"."Offices".
"D4 Company"),
("A - Sample Sales"."Base Facts"."2- Billed Quantity","A - Sample Sales".
"Base Facts"."1- Revenue"),
'isOutlier','algorithm=k-means;useRandomSeed=FALSE') s_4,
"A - Sample Sales"."Base Facts"."2- Billed Quantity" s_5,
"A - Sample Sales"."Base Facts"."1- Revenue" s_6
FROM "A - Sample Sales" order by s_3;
```

REGR Function

The REGR function fits a linear model and returns the fitted values or model. You can use this function to fit a linear curve on two measures.

Syntax

```
REGR(y_axis_measure_expr, (x_axis_expr),
(category_expr1, ..., category_exprN), output_column_name,
options, [runtime_binded_options])
```

Where:

y_axis_measure_expr indicates the measure for which the regression model is to be computed.

x_axis_measure_expr indicates the measure used to determine the regression model for the *y_axis_measure_expr*.

category_expr1, ..., category_exprN indicates the dimension/dimension attributes used to determine the category for which the regression model for the *y_axis_measure_expr* is computed. One or up to five dimensions/dimension attributes can be provided as category columns.

output_column_name indicates the output column name for regression. Valid values are 'fitted', 'intercept', or 'modelDescription'.

options indicates a string list of name/value pairs separated by a semi-colon (;). The value can include %1 ... %N, which can be specified using *runtime_binded_options*.

runtime_binded_options indicates an optional comma-separated (,) list of runtime binded columns or literal expressions.

Available Options

This section contains information about the options and the option values you can use with the REGR function.

Table C–5   REGR Function Options

Option Name	Description	Values
algorithm	The algorithm to use for regression.	LM
attributeNames	The attribute to consider for regression.	arg1,arg2,arg3,arg4,arg5,arg6,arg7,arg8,arg9,arg10
targetNames	The number of iterations.	target

Table C–5 (Cont.) REGR Function Options

Option Name	Description	Values
showModelDescript ion	This is set to TRUE by default. If set to TRUE, then the model description is written in JSON format.	TRUE FALSE

Output Columns

The REGR function output contains the following columns:

- **fitted** – This column is the fitted value for the current value based on the algorithm used.

- **intercept** – This column is the intercept value, 'c' value in linear model, $y = m1x1 + c$.

- **modelDescription** – This column is the JSON output describing the regression model summary.

Example 1

This example selects fitted values for Revenue, determined using a regression model based on Discount amount for each Product Type and Brand, and partitioned on Region and Country Name.

```
SELECT
"A - Sample Sales"."Office Regions"."D50 Region" Region,
"A - Sample Sales"."Office Regions"."D52 Country Name" Con,
"A - Sample Sales"."Products"."P4 Brand" Brand,
"A - Sample Sales"."Products"."P2 Product Type" ProductType,
"A - Sample Sales"."Base Facts"."3- Discount Amount" Discount,
"A - Sample Sales"."Base Facts"."1- Revenue" ActualRevenue,
REGR(
"A - Sample Sales"."Base Facts"."1- Revenue" ,
("A - Sample Sales"."Base Facts"."3- Discount Amount"),
("A - Sample Sales"."Products"."P2 Product Type", "A - Sample Sales".
"Products"."P4 Brand"), 'FITTED', 'algorithm=%1', 'LM')
FROM "A - Sample Sales";
```

Example 2

This example selects fitted values for Revenue, determined using a regression model based on Discount amount for each Product Type, Brand, Region, and Country Name.

```
SELECT
"A - Sample Sales"."Office Regions"."D50 Region" Region,
"A - Sample Sales"."Office Regions"."D52 Country Name" Con,
"A - Sample Sales"."Products"."P4 Brand" Brand,
"A - Sample Sales"."Products"."P2 Product Type" ProductType,
"A - Sample Sales"."Base Facts"."3- Discount Amount" Discount,
"A - Sample Sales"."Base Facts"."1- Revenue" ActualRevenue,
REGR(
"A - Sample Sales"."Base Facts"."1- Revenue" ,
("A - Sample Sales"."Base Facts"."3- Discount Amount"), (),
'FITTED', 'algorithm=%1', 'LM')
FROM "A - Sample Sales";
```

Example 3

This example selects fitted values for Revenue, determined using a regression model based on Discount amount for each Product Type and Brand.

```
SELECT
"A - Sample Sales"."Products"."P4 Brand" Brand,
"A - Sample Sales"."Products"."P2 Product Type" ProductType,
"A - Sample Sales"."Base Facts"."3- Discount Amount" Discount,
"A - Sample Sales"."Base Facts"."1- Revenue" ActualRevenue,
REGR(
"A - Sample Sales"."Base Facts"."1- Revenue" ,
("A - Sample Sales"."Base Facts"."3- Discount Amount"),
("A - Sample Sales"."Products"."P2 Product Type", "A - Sample Sales".
"Products"."P4 Brand"), 'FITTED', 'algorithm=%1', 'LM')
FROM "A - Sample Sales";
```

Example 4

This example selects fitted values for Revenue, determined using a regression model based on Discount amount for each Product Type and Brand.

```
SELECT
"A - Sample Sales"."Products"."P4 Brand" Brand,
"A - Sample Sales"."Products"."P2 Product Type" ProductType,
"A - Sample Sales"."Base Facts"."3- Discount Amount" Discount,
"A - Sample Sales"."Base Facts"."1- Revenue" ActualRevenue,
REGR(
"A - Sample Sales"."Base Facts"."1- Revenue" ,
("A - Sample Sales"."Base Facts"."3- Discount Amount"),
(), 'FITTED', 'algorithm=%1', 'LM')
FROM "A - Sample Sales";
```

D

User Interface Reference

This appendix contains comprehensive reference information for each user interface item (dialogs, panes, editors, and so on) in Oracle Business Intelligence Enterprise Edition.

Topics are provided in alphabetical order by user interface item.

Act As dialog

Use this dialog to select the user who you want to "act as"; that is the user whose account you want to access. You also use this dialog to return to your own user account after "acting as" another user. This dialog is available and includes a list of users only if you have been assigned the appropriate privilege and the administrator has configured this feature. For configuration information, see "Enabling Users to Act for Others" in *Security Guide for Oracle Business Intelligence Enterprise Edition*.

For more information, see "Acting for Other Users."

Components

User
Use this option to select the ID of the user whose account you want to access. Based on the system settings, a text box might be displayed in this dialog. Generally, this text box is displayed if a long list of users is returned. In this text box, enter the ID of the user to act as.

Stop
Use this button to stop accessing another user's account and to return to your own account.

Action Link dialog

Use this dialog to add an action link to an initiative or objective in a Scorecard.

For more information, see:

- "What Are Actions?"
- "What Are Action Links and Action Link Menus?"
- "Adding Actions to Initiatives and Objectives in Scorecards"

Components

State Equals

Use this box to select the state of the initiative or objective under which the action link is to be enabled.

Action

Displays the action to be associated with the action link.

Create New Action

Use this button to select the type of action to create and display the "Add New Action dialog," where you create the action.

Select Existing Action

Use this button to display the "Select Existing Action dialog," where you select an existing action.

Link Text

Use this field to enter the text to display as the link to execute the associated action.

Action Links dialog

Use this dialog to add an action link to a KPI threshold range.

For more information, see:

- "What Are Actions?"
- "What Are Action Links and Action Link Menus?"
- "Adding Actions to KPIs"

Components

Action Links List

Displays the action links that have been added to the KPI, including the text of the action links and the actions associated with the links.

Add Action Link

Use this option to display the "New Action Link dialog," where you create an action link.

Edit Action Link

Use this button to display the "Edit Action Link dialog," where you edit the selected action link.

Remove Action Link

Use this button to remove the selected action link.

Action Link Menu Properties dialog

Use this dialog to set the properties of an action link menu on a dashboard page.

For more information, see:

- "What Are Actions?"
- "What Are Action Links and Action Link Menus?"
- "About Adding Actions to Dashboard Pages"
- "Adding Actions to Dashboard Pages Using Action Link Menus"

Components

Menu Label

Use this field to enter the text to display for the menu.

Caption

Use this field to enter a caption to be displayed above the menu text.

Action Links

Displays a list of action links associated with the action link menu.

Add

Use this button to display the "Action Link Properties dialog," where you add an action link to the action link menu.

Edit

Use this button to display the "Action Link Properties dialog," where you edit the currently selected action link.

Delete

Use this button to delete the currently selected action link.

Notes

- Use the arrows to the right of the Action Links list to reorder the list of action links and change the order of how they are displayed in the action link menu.

Action Link Properties dialog

Use this dialog to set the properties of an action link on a dashboard page.

For more information, see:

- "What Are Actions?"
- "What Are Action Links and Action Link Menus?"
- "About Adding Actions to Dashboard Pages"
- "Adding Actions to Dashboard Pages Using Action Links"
- "Adding Actions to Dashboard Pages Using Action Link Menus"
- "Editing Actions, Action Links, and Action Link Menus Added to Dashboard Pages"

Components

Link Text
Use this field to enter the text to display as the link to execute the associated action.

Caption
This field is available only for actions links that are not displayed on an action link menu.

Use this field to enter a caption to display above the link text.

Action
Displays the action to be associated with the action link.

New Action
Use this button to select the type of action to create and display the "New Action dialog," where you create an inline action. For more information on inline actions, see "What Are Inline Actions?"

Select Action
Use this button to display the "Select Existing Action dialog," where you select a named action. For more information on named actions, see "What Are Named Actions?"

Edit Parameter Mapping
This button is available only for named actions that have parameters that are not fixed or hidden.

Use this button to display the "Edit Parameter Mapping dialog," where you edit the action parameters. For more information on action parameters, see "What Are Action Parameters?"

More (>>)
Displays these options for the currently selected action:

- **Edit Action** — Use this option to display the "Edit Action dialog," where you edit an action.

- **Remove Action** — Use this option to remove the action.

- **Save Action As** — Use this button to display the "Save As dialog," where you save the action to the Oracle BI Presentation Catalog. If the action is an inline action, then the action is saved to the catalog rather than saved with the dashboard. If the action is a named action, then you can save the action with the same name or another name.

Open Link in New Window

This box is available only for actions that navigate to related content, such as Navigate to a Web Page and Navigate to BI Content actions.

Use this box to specify, for an action link that navigates to a URL or to other BI content, whether to open the link in a new browser window or new tab (if the browser supports tabs). Select this box to open the action link in a new browser window or tab. Deselect this box to open the action link in the same browser window or tab.

> **Note:** If you selected a named action for this action link, the default value for this component is determined by the definition of the named action (that is, by the value specified for the **Open In New Window** component in the "Action Options dialog: Invoke Action tab.") You can override this default value. The value that you set here ultimately determines whether to open a new window or new tab.

Add to Briefing Book

This box is available only for Navigate to BI Content actions.

Use this box to specify whether the action associated with the action link can be executed in a briefing book, but only if the number of briefing book navigation links to be followed is greater than 0. (You set the number of briefing book navigation links to be followed in the "Save Briefing Book Content dialog" or in the "Page Properties dialog.")

If you select this box, then the action can be executed in a briefing book. A briefing book icon is displayed to the left of the action link on the dashboard page and in the briefing book to indicate that the action can be executed.

If you deselect this box, then the action cannot be executed in the briefing book.

See "Working with Briefing Books."

Show Link

Use this box to specify one of the following options:

- **Always** — Use this option to specify that the action link is always to be enabled.

- **Conditionally** — Use this option to specify that the action link is to be enabled only if the associated condition is satisfied. Selecting this option displays the **Condition** area.

Condition

(Displayed only if the **Conditionally** option is selected.)

Use this area to specify the condition under which the action link is to be enabled. It includes the following components:

- **New Condition** — Use this button to display the "New Condition dialog," where you create a condition.

- **Select Condition** — Use this button to display the "Select Condition dialog," where you select an existing condition.

- **More (>>)** — Display these options:

    – **Test Condition** — Use this button to test if the condition evaluates to true or false.

    – **Edit Condition** — Use this button to display the "Edit Condition dialog," where you edit the condition.

    – **Remove Condition** — Use this button to remove the condition.

    – **Save Condition As** — Use this button to display the "Save As dialog," where you save the condition to the catalog.

Action Options dialog

Use this dialog to customize information to display to users when they execute an action.

For more information, see:

- "What Are Actions?"
- "Specifying the Settings for New Actions"
- "Create New Action dialog"

Components

Invoke Action

Use the "Action Options dialog: Invoke Action tab" to:

- Specify whether to display a confirmation prompt to users when they execute the action
- Customize the dialog that is displayed to users when they must supply action parameter values before the action is executed
- Customize the invocation successful message that is displayed to users
- Customize the invocation failure message that is displayed to users

Action Results

This tab is available only for Invoke a Web Service actions.

Use the "Action Options dialog: Action Results tab" to customize a dialog to display information to users about the results of the action, if the action executed successfully.

Action Options dialog: Action Results tab

Use this tab of the "Action Options dialog" to customize a dialog to display information to users about the results of the action, if the action executed successfully.

For more information, see:

- "What Are Actions?"
- "Specifying the Settings for New Actions"
- "Create New Action dialog"

Components

Contains HTML Markup

Available only if you have been granted the Save Actions containing embedded HTML privilege and only for an Invoke a Web Service action.

Use this option to work with HTML codes, as described in "Working with HTML Markup."

Dialog Text

Use this field to enter the Web Service results information to display to users.

XPath Results

Use this area to specify one or more XPath expressions to be used to extract values from the XML returned from the Invoke a Web Service action.

> **Note:** Before specifying any XPath expressions, you must know what the Web Service returns. You can find out what a Web Service returns by reading the Web Services Definition Language (WSDL).

To add an XPath Expression to the list, click the **Add XPath Expression** button. A row is added to the list, where you then specify the following information:

- In the **Name** column, enter a unique name for the XPath expression, for example, filename. You then can use this name to embed the XPath expression as a token in the dialog text, for example, @{filename}.

- In the **XPath Expression** column, enter the XPath expression. For example, if you know that the name of a file can be identified by the XPath expression "Body/writeToFileResponse/result", you enter `Body/writeToFileResponse/result`.

- In the **Default Value** column, enter the value to display when the XPath expression is not found in the action results. If you do not enter a default value and the XPath expression is not found, then an empty string is displayed.

> **Note:** If multiple values for an XPath expression are found in the results, then only the first value is shown.

To delete an XPath expression from the list, select the XPath expression and click the **Delete XPath Expression** button.

Dialog Title

Use this box to specify the title of the dialog, for example, Action Results.

Dialog Width

Use this field to specify the width for the dialog. Specifying a width causes the content to wrap and a scroll bar to be displayed, if necessary.

If you do not specify the width, then the dialog is sized based on its content.

You might want to specify a width, for example, if the dialog text contains a long sentence without any explicit line breaks, which would result in a very wide dialog.

Dialog Height

Use this field to specify the height for the dialog. Specifying a height causes the content to wrap and a scroll bar to be displayed, if necessary.

If you do not specify the height, then the dialog is sized based on its content.

You might want to specify a height, for example, if the dialog contains extensive text, which would result in a very long dialog.

Show Preview

Use this button to preview how the dialog is displayed. (Note that this does not run the action.)

Working with HTML Markup

Various dialogs and editors in which you can enter HTML code include the **Contains HTML Markup** box.

The **Contains HTML Markup** box is enabled in the following dialogs and editors, but only if you have been granted the Save Content with HTML Markup privilege:

- For analyses:
  - "Edit Footer or Header dialog"
  - "Results tab: Narrative editor"
  - "Results tab: Static Text editor"
  - "Results tab: Ticker editor"
  - "Edit Column Formula dialog: Column Formula tab"
  - "Column Properties dialog: Column Format tab"
- For dashboards:
  - "Edit Footer or Header dialog"
  - "Text Properties dialog" for a Text object

In addition the **Contains HTML Markup** box is available in the "Action Options dialog: Action Results tab," but only if you have been granted the Save Actions containing embedded HTML privilege and only for an Invoke a Web Service action.

Use this box to specify whether the text that you enter in the appropriate field contains HTML markup. (For example, in the Action Results tab, the field is labeled **Dialog Text**.) Select this box if the text contains HTML markup. Deselect this box if it contains only plain text. If the text contains HTML markup and you do not select this box, then the text is displayed as plain text.

You can add HTML that contains formatted text, and depending on the security settings of the servers, Active-X controls or Java scripts, sound bites, animation, a background image, and so on. The HTML code can contain anything that is supported by the browser but that makes sense in the context of the page.

Table D–1 contains usage notes and examples for several HTML elements. If you find an example in the table that is similar to what you want to do, then you can copy and paste the example, then tailor it to your needs.

Table D–1   Usage Notes and Examples for HTML Elements

HTML Element	Usage Notes and Examples
Text	Any HTML tags can be used to control the format of the text. The following HTML tags are examples of some of the formatting you can apply.
	■ To center the text in the section:
	<CENTER>Centered Text</CENTER>
	■ To make the text bold:
	<B>Bold Text</B>
	■ To set font size and color:
	<FONT SIZE="4" COLOR="red">Red Text</FONT>
	■ You can also combine tags for additional effects:
	<CENTER><B><FONT COLOR="red">Bold Centered Red Text</FONT></B></CENTER>
	Note that when you export analyses and dashboards, not all HTML features are supported. For a list of the supported HTML features for export, see "Supported HTML Features" in *Report Designer's Guide for Oracle Business Intelligence Publisher*.
Active-X object	The Active-X object must be self-contained and supported by the browser. Paste or type the object into the HTML text window, ensuring that you include the beginning and ending tags <object...> and </object>.
JavaScript and VBScript	The script must be self-contained and supported by the browser. Paste or type the script into the HTML text window, ensuring that you include the beginning and ending tags <script> and </script>.
	Specify the script language in the opening <SCRIPT> tag, either <SCRIPT LANGUAGE="javascript"> or <SCRIPT LANGUAGE="vbscript">.
	Note that Oracle BI EE does not support the use of `document.write()` or `document.writeln()` functions in these custom script entries.
Audio	Ensure that you know where the audio clip is located. If the audio clip is for use in a shared environment, then it must be located on a network drive that is accessible to all users. Use the HTML tag <EMBED> to add audio in the dashboard. The following HTML code is an example:
	```<EMBED SRC="audio" AUTOSTART="true" LOOP="true" HIDDEN="true"></EMBED>```
	where "audio" is the location and name of the audio clip.
	Note: You might need to adjust the HTML for the browser.
	The following HTML tags are examples of the <EMBED> tag.
	■ To add an audio clip located on the hard drive, specify the following HTML code:
	<EMBED SRC="c:\mycomputer\MIDIfiles\wakeup.mid" AUTOSTART="true" LOOP="true" HIDDEN="true"></EMBED>
	■ To add the same audio clip from a shared location on the Web server, specify the following HTML code:
	<EMBED SRC="/DashboardFiles/wakeup.mid" AUTOSTART="true" LOOP="true" HIDDEN="true"></EMBED>

Action Options dialog: Invoke Action tab

Use this tab of the "Action Options dialog" to:

- Specify whether to display a confirmation prompt to users when they execute the action.
- Customize the dialog that is displayed to users when they must supply action parameter values before the action is executed.
- Customize the invocation successful message that is displayed to users.
- Customize the invocation failure message that is displayed to users.

For more information, see:

- "What Are Actions?"
- "Specifying the Settings for New Actions"
- "Create New Action dialog"

Components

Run Confirmation

Use this box to specify whether to display a confirmation prompt to users when they run the action. The confirmation prompt includes the text that you enter, a **Yes** button to run the action, and a **No** button to cancel the running of the action.

Select this box to display a confirmation prompt and then enter the text of the confirmation prompt in the field to the right. Deselect this box to not display a confirmation prompt.

Dialog Title

Use this box to customize the title of the dialog that is displayed to users when they must supply action parameter values.

Select this box to customize the title and then enter the title in the field to the right. Deselect this box to use the default title **Invoke Action**.

Action Help Text

Use this box to specify the text of the dialog that is displayed to users when they must supply action parameter values.

Select this box to specify the text and then enter the text in the field to the right. Deselect this box to use the default text **Enter the values for action parameters and execute**.

To embed a URL link within the text, use the token @{URL}. The URL link is substituted for the token.

Link URL

Use this box to specify whether to display a URL link below or within the text of the dialog that is displayed to users when they must supply action parameter values. This enables you, for example, to display a link that navigates to a URL that provides more information about the action being executed.

Select this box to display a URL link below or within the text and then enter the URL in the box to the right. If the @URL token is embedded in the text, the URL (or URL label if provided) is displayed within the text. If the token is not embedded in the text, then the URL (or URL label if provided) is displayed beneath the text.

Deselect this box to not display a URL below or within the text.

Label

Use this field to enter the text to display for the URL link.

Execute Button Text

Use this box to customize the name of the button that is shown on the dialog that is displayed to users when they must supply action parameter values, and that users click to execute the action when they have supplied parameter values.

Select this box to customize the name of the button and then enter the name in the box to the right. Deselect this box to use the default value **Execute**.

Open In New Window

This box is available only for actions that navigate to related content, such as Navigate to a Web Page and Navigate to BI Content actions.

Use this box to specify, for an action link that navigates to related content, whether to open the link in a new browser window or new tab (if the browser supports tabs). Select this box to open the action link in a new browser window or tab. Deselect this box to open the action link in the same browser window or tab.

> **Note:** The setting you specify for this **Open In New Window** component determines the default value for the **Open Link in New Window** box in the "Action Link Properties dialog," but only when you select a named action for the action link that you are adding to a dashboard page.

Successful Invocation Message

This box is not available for some action types.

> **Note:** For an Invoke a Web Service action, you can use the "Action Options dialog: Action Results tab" to customize a dialog to display information to users about the results of the action, if the action executed successfully.

Use this box to customize the message that is displayed to users when the action is successfully executed.

Select this box to customize the message and then enter the message in the field to the right. Deselect this box to use the default message **Action invocation was successful**.

Invocation Failure Message

This box is not available for some action types.

Use this box to customize the message that is displayed to users when the action is not successfully executed.

Select this box to customize the message and then enter the message in the field to the right. Deselect this box to use the default message **Action invocation was unsuccessful**.

Add Application Roles, Catalog Groups, and Users dialog

Use this dialog to select the users, Application roles, and Catalog groups to:

- Receive the delivery content of an agent.

- Have permission to access a section or alert section in a dashboard.

- Have permission to use a saved customization.

- Add or edit for an existing Catalog group.

- Assign permissions to a catalog object.

For more information, see:

- "Agent editor: Recipients tab"

- "Permissions dialog"

- "Properties Buttons for Objects"

- "Saving Customizations"

- *Security Guide for Oracle Business Intelligence Enterprise Edition*

This dialog is also displayed as:

Add Groups dialog
Edit Groups dialog
Select User dialog

Components

Group Name
Available only when working with Catalog groups. Enter the name to use for this group.

Location
Available only when you are working with catalog object permissions. Displays the catalog location of the object with which you are working.

Available Members
Use this area to:

- Initiate a search in the **Search** area.

- Select accounts to move to the **Selected Members** area.

Click to see effective permissions
Available only when you are working with catalog object permissions. Use this button to add the Permissions column to the Available Members list. This column displays the permissions that the corresponding Application role, Catalog group, or user would have if you add them to the object for which you are assigning permissions. The effective permissions that display in the table are determined by the membership that the Application role, Catalog group, or user has in the other roles, groups, and users previously added to the Permissions dialog.

Search

Use this button to show and hide the **Search** area within the **Available Members** area.

Search area

Use this area to search for users, Application roles, and Catalog groups.

To initiate a search, enter the string for which you want to search in the **Name** field; select either **Application Roles**, **Catalog Groups**, **Users**, or **All** and click the **Search** button. The results are displayed in the Available Members list.

Shuttle

Use these buttons move accounts between the available and selected areas.

Selected Members

Use this area to view the accounts that you have selected from the **Available Members** area and moved to the **Selected Members** area.

Set Permission to

Available only when you are working with catalog object permissions. Use this box to select the permission for the accounts that are listed in the **Selected Members** area. For more information about the options in this list, see "Permission Definitions" and "Permissions Available by Object Type."

Add New Dimension dialog

Use this dialog to select the attribute or hierarchical column to use as a dimension for the KPI.

Components

List of Columns

Displays the subject area's attribute and hierarchical columns that you can use as dimensions for the KPI. Use this list to select a column.

Related Topics

"Creating KPIs"

Add Comment dialog

Use this dialog to add new comments to or reply to existing comments attached to initiatives, objectives, and KPIs. (Remember that a comment is associated with a specific point of view.)

For more information, see:

- "About Comments"

This dialog is also displayed as:

New Comment dialog
Reply dialog

Components

Subject
Use this box to enter the subject of the comment.

Comment
Use this box to enter your comment.

History
This area is not available when the New Comment dialog is displayed from the "Collaboration pane."

Displays any comments that previously have been added to the initiative, objective, or KPI for the current point of view.

To expand or collapse the History area, click the **Expand All** or **Collapse All** button.

Notes

- Ensure that you save objectives, initiatives, and KPIs after adding new comments to or replying to existing comments attached to them.

Add Dashboard Page dialog

Use this dialog to specify the name and description of the page that you are adding to a dashboard.

For more information, see "Adding New Pages to Dashboards."

Components

Page Name

Use this field to enter a name for the page.

Page Description

Use this field to enter a description for the page.

Add KPI dialog

Use this dialog to provide a label for a KPI usage or to pin (or set) the value of one or more KPI dimensions. You can pin a KPI to one or more values.

Pinning is optional. Typically, it is best not to pin most of the dimensions so that the data is controlled by the point of view settings. See "What Are Dimensions and Pinned Dimension Values?" for additional information about pinning.

You pin values of KPI dimensions, for example, when you add a KPI to one of the following tables:

- Initiatives & KPIs watchlist in the "Analytics pane" of the "Scorecard editor: Initiative Details tab"

- Objectives & KPIs table in the in the "Analytics pane" of the "Scorecard editor: Initiative Details tab"

- New KPI watchlist in the "KPI Watchlist editor: Performance tab"

When you view the KPI, the data displayed is determined by the dimension values that you selected.

This dialog also displays as:

Edit Watchlist Entry dialog

Components

KPI Name
Displays the name of the saved KPI that you are adding (for example, Revenue KPI).

Subject Area
Displays the name of the subject area that contains the KPI dimension or dimensions.

<Dimension>
This box is not available for a dimension whose value has been set in the KPI.

Use this box to specify one or more dimension values. Consider the following options:

- For all dimensions, you can select one or more column values or roll up value (for example, for the Dimensions.Geog dimension, you can drill and select North American, or drill further and select Los Angeles).

- Select **Point-of-View** to set no dimension value. If you use this option, at runtime a dimension field displays in the point of view area where the user can select one or more dimension values.

- Select **Search** to display the "Search Members dialog," where you select one or more values to pin the dimension.

- For the measures column, you can select **Use Variable** to set the dimension's value with either a session, repository, or global variable. When you select this option, the "Select Variable dialog" displays. See "Using Variables" for additional information.

> **Note:** You cannot pin multiple values for a KPI dimension when using session, repository, or global variables.

Label

Use this field to enter a user-friendly, descriptive KPI name to display in the watchlist or the Objectives & KPIs table.

> **Tip:** If you select a specific value or multiple values for a dimension, rather than the **Use Point-of-View** option, then enter a label that describes the pinning. For example, if you select **Central** for the Region dimension, you might enter **Sales Central Region**.

Add a Related Document dialog

Use this dialog to add links to business intelligence objects and documents that are stored in the Oracle BI Presentation Catalog or web pages that provide additional information about or can be used with the KPI.

Components

Name

Use this field to enter the name of the link that is displayed in the related documents table. The user clicks this link to access the corresponding web site, document, or business intelligence object.

Type

Use this list to indicate how you want to provide the path to the related document.

- Select **Catalog** and click the **Browse** button to navigate to the document or business intelligence object in the catalog.

- Select **Link** and enter or paste the URL of the online document or business intelligence object.

Catalog

This field displays if you select **Catalog** in the **Type** field.

Displays the location of the business intelligence object that you select from the catalog. To provide a location in this field, click the **Browse** button to access the "Select an Object from the BI Catalog dialog" and select a catalog object.

Browse

This option is available if you select **Catalog** in the **Type** field. Use this button to access the "Select an Object from the BI Catalog dialog" to browse the Presentation Services catalog and choose an object.

Link

This field displays if you select **Link** in the **Type** field.

Use to enter or paste the URL of the related object.

Related Topics

"KPI editor: Related Documents page"

"Collaboration pane"

Add/Remove Subject Areas dialog

Use this dialog to add or remove related subject areas from which to select columns.

> **Note:** In BI Composer, this dialog shows all Subject Areas, not just related ones.

For more information, see:

- "What Are Subject Areas and Columns?"
- "Specifying the Criteria for Analyses"
- "Creating Analyses Using BI Composer"
- "Creating Column Filters"
- "Creating a Column Prompt"

Components

List of Subject Areas

Displays the primary subject area, any related subject areas, and any external data sources that you have permission to access. The primary subject area (which you select when you create an analysis, a new named filter, or a new dashboard prompt) is always listed first.

A check mark beside a subject area identifies a related subject area that has been added. A grayed out check mark identifies the primary subject area or a related subject area whose data is currently being used in the analysis, named filter, or column prompt. You cannot remove a primary subject area. You can remove a related subject area only if its data is not currently being used.

Use this list to add or remove related subject areas. Check a related subject area to add it. Deselect a subject area to remove it.

Administration page

Use this page to administer Oracle BI Presentation Services. You perform administration tasks such as managing privileges and metadata for maps.

The functions of the Administration page are described in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition* and in *Security Guide for Oracle Business Intelligence Enterprise Edition*.

Components

Product Information

Use this collapsible section to see the following information about your installation of Oracle BI EE:

- **Product Version** — Specifies the version number for Oracle BI EE.

- **Catalog Path** — Specifies the complete directory name for the Oracle BI Presentation Catalog.

- **Oracle BI Server Data Source** — Specifies the name of the data source that is specified in the Oracle BI Server.

- **Available Paging Memory (MB)** — Specifies the amount of physical memory that is available plus any paging memory that is available. If this value is very low, then Oracle BI Presentation Services might run out of memory. Available for Windows systems only.

- **Available Virtual Address Space (MB)** — Specifies the amount of virtual address space remaining to process. If this value is very low, then Oracle BI Presentation Services might run out of memory. Available for Windows systems only.

- **Maintenance Mode** — Indicates whether Maintenance Mode is turned on or off. You modify this setting using the **Toggle Maintenance Mode** link on this page.

    When you put Presentation Services into Maintenance Mode, you make the catalog read-only so that users cannot modify its contents. Users can continue to perform tasks that do not involve writing to the catalog such as viewing existing objects (for example, dashboards and analyses). Tasks such as updating a user's "most recently used" list are not available.

    When Presentation Services is in Maintenance Mode, a lock file that is named root_maintenancemode.lck is created in the directory for the catalog. (On UNIX systems, that file is a link to a file that has a name such as root_maintenancemode_*number*.lck, meaning both files make up the lock file.) If you create a zip file for the catalog when Presentation Services is in Maintenance Mode, then the zip file includes the lock file. If you extract the contents of the zip file and open the catalog, then Presentation Services is placed in Maintenance Mode.

    Unlike previous releases, if you put Presentation Services into Maintenance Mode and Presentation Services is restarted, then Presentation Services starts with Maintenance Mode still turned on.

    As the administrator, you can perform maintenance tasks such as backing up and patching the catalog after you open the catalog in offline mode. For information, see "Offline Mode" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

Manage Catalog Groups

Use this link to display the "Administration: Manage Catalog Groups page" in which you manage Catalog groups.

Manage Privileges

Use this link to display the "Administration: Manage Privileges page" in which you view and administer privileges that are associated with various components. Privileges are actions that users have the right to perform.

Manage Sessions

Use this link to display the "Administration: Manage Sessions page" in which you view information about active sessions and about the cache for each analysis.

Manage Agent Sessions

Use this link to display the "Administration: Manage Agent Sessions page" in which you view information about currently active agent sessions that are triggered by Oracle BI Scheduler.

Manage Device Types

Use this link to display the "Administration: Manage Device Types page" in which you create, edit, view or delete device types for use with agents.

Toggle Maintenance Mode

Use this link to turn Maintenance Mode on or off. You can see the setting of the mode in the Product Information area. When Maintenance Mode is on, users cannot write to the Oracle BI Presentation Catalog.

Reload Files and Metadata

Use this link to reload XML message files, refresh metadata from the Oracle BI Server, and clear caches.

Reload Log Configuration

From the list of values, select the log level to use for messages for Presentation Services. After selecting the log level, click the link to have the change take effect without restarting Presentation Services.

Issue SQL

Use this link to display the "Administration: Issue SQL page" in which you enter a SQL statement to run against the Oracle BI Server.

Scan and Update Catalog Objects That Require Updates

Use this link to display the Scan and Update Catalog Objects That Require Updates page in which you can upgrade objects in the catalog that might be affecting performance. See "Updating Catalog Objects" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition* for information.

Manage Map Data

Use this link to display the "Administration: Manage Map Data page" in which you manage layers, background maps, and images.

Manage Marketing Jobs

Use this link to display the Marketing Job Management page in which you manage background jobs and the database cache.

Manage Marketing Defaults

Use this link to display the Manage Marketing Defaults and Contact Planning Rules pages, in which you select the default Campaign Load File Format, the default Global Audience segment and the Profile Dashboard for each Target Level.

Manage BI Publisher

Use this link to display the Administration page for BI Publisher where you can manage BI Publisher users, permissions, jobs, and files and folders.

For information, see *Administrator's Guide for Oracle Business Intelligence Publisher*.

Manage BI Mobile App Designer

Use this link to display the Administration page for BI Mobile App Designer.

Configure Crawl

Use this link to display the "Administration: Configure Crawls page" where you can configure and enable the crawl to index data models and the catalog.

Monitor Crawl

Use this link to display the "Administration: Monitor Crawls page" which contains information about scheduled, running, and completed crawls.

Administration: Configure Crawls page

Use this page to configure crawls for data models and the catalog.

The crawl indexes the items that you specify and makes them available to users when they use the full-text search in Presentation Services or the search in Visual Analyzer and BIAsk. In the crawl configuration, you can specify crawl criteria such as when and how often to run the crawls, which levels of the data model to index, and which catalog folders and objects to index.

Components

Enable Catalog Crawl

This field displays on the Configure Crawl's Data Model tab, only. Select this field if you want Oracle BI to run the scheduled data model crawls. Clear this field if you want Oracle BI to suspend running the data model crawls.

User to Run Crawl As

Type or search for the user specifically set up to run the crawl. This user's permissions are used while running the crawl and are applied against the objects, metadata, etc. being indexed. For example, if the user specified for the crawl does not have the permissions to access Social Security data, then Social Security data will not be included in the crawl and indexed.

Languages

Select the index's language. The crawl results are added to the index in the language that you specify. For example, if your company's headquarters are in the United States, but you have offices in Italy, then you can choose italiano to create an index in Italian.

If you select more than one language, then the index will contain entries in all the language you chose.

Start Date and Time

Specifies when the crawl will run. To modify this field, click **Select Date and Time** and specify the month, year, time, and time zone.

Run Every

Type how often you want the crawl to run. Use this field with the **Frequency** field.

Frequency

Select how often you want the crawl to run. Use this field with the **Run Every** field.

Select Data Models to Index

This table displays on the Configure Crawl's Data Model tab and lists all of the data models available for indexing.

Specify which data models, folders, subfolders, and columns you want to index. All child items inherit their parent level's setting. Note that you cannot index measures data.

Click a data model to expand its contents (folders, subfolders, and columns) and specify which items you want to index. Note the following information:

- Select **Index Metadata Only** to index the metadata.

- Select **Index** to index metadata and any data associated with the item.

- Select **Don't Index** to exclude the item from the index.

Index User Folders

This field displays on the Configure Crawl's Catalog tab, only. Select this field if you want to index all user folders and the catalog objects in shared folders that you specify in the table.

Select Catalog Object to Index

This table displays on the Configure Crawl's Catalog tab and lists all of the catalog objects available for indexing.

Click a shared catalog folder to expand its contents (folders, subfolders, and objects) and specify which items you want to index. All child items inherit their parent level's setting.

Administration: Issue SQL page

Use this page to enter a SQL statement to send directly to the Oracle BI Server. This feature is intended for testing the server only. Results are not formatted, and it is not possible to save the SQL statement that you issue here as an analysis. Not all SQL functions and procedures for Oracle BI Server are supported for use through the Issue SQL page, such as the NQSSetSessionVariables() procedure.

For more information, see Appendix C, "Logical SQL Reference."

Components

SQL
Use this field to enter a SQL statement to send directly to the Oracle BI Server.

Issue SQL
Click this button to send the SQL statement to the Oracle BI Server.

Logging Level
Use this box to select the Oracle BI Server logging level, from 0 through 7. Each user receives a default logging level during user creation in the BI Server Administration tool. Select **Default** in this box to specify the use of your default level.

For information on logging levels, see "Viewing and Configuring Diagnostic Log Files" *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

Use Oracle BI Presentation Services Cache
Use this box to specify whether to use the Oracle BI Presentation Services Cache. Deselect this box to specify that you do not want the query to use the Presentation Services cache. In general, you should avoid deselecting this box as disabling the cache has potential performance degradation issues.

Administration: Manage Agent Sessions page

Use this page to view information about currently active agent sessions that are triggered by Oracle BI Scheduler.

For more information, see "Monitoring Active Agent Sessions" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

Components

Agent Sessions

Displays a table with information about each agent session. You can see details such as the job identifier, the instance identifier, the primary agent, and the day and time at which the agent session was last accessed.

Click the **Sort** button at the top of various columns to sort the sessions. Click the link in the Primary Agent column to display the agent in the "Agent editor."

Click the **Expand** button to see the list of agents in that session.

Agents

Displays a table with information about each agent. You can see details such as the path for the agent and its state. The state can be either Created, Populated, or Conditional Request Resolved.

Click the link in the Path column to display the agent in the "Agent editor." Click the **Expand** button to see the list of recipients for that agent.

Recipients

Displays a table with the name and type of each recipient of the agent.

Administration: Manage Catalog Groups page

Use this page to manage Catalog groups. These groups are for backward compatibility with previous releases (prior to 11*g*) only.

For more information, see "Working with Catalog Groups" in *Security Guide for Oracle Business Intelligence Enterprise Edition*.

Components

Create a New Catalog Group

Use this button to display the "Add Groups dialog," in which you create a group.

Edit Selected Group

After selecting a group in the list, use this button to display the "Edit Groups dialog," in which you edit an existing group.

Delete Selected Groups

After selecting one or more groups in the list, use this button to delete the groups.

Name

Enter the name of a group that you need and click **Search** to display a list of groups that match that name. You generally must use this field only when you have a very long list of groups and are having difficulty finding the one that you need.

More Groups

Click this button to display either a list of additional groups or a message box that states that no other groups are available. Groups are displayed in lists of 25.

Administration: Manage Data Sources page

Use this page to manage data sources used in Visual Analyzer. This page is available only to users who have access to Visual Analyzer.

For information, see your Visual Analyzer documentation.

Administration: Manage Device Types page

Use this page to create, edit, view or delete device types for use with agents. The types that are specified on this page can be selected on the "Create Device dialog" from the "My Account dialog: Delivery Options tab."

For more information, see "Managing Device Types for Agents" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

Components

Device Type Name

Displays the names of device types that were previously created.

Category

Displays the category of the device type, such as mobile phone, pager, or handheld device.

Create New Device Type

Click this link to display the "Create New Device Type dialog."

Edit

Click this button to display the "Edit Device Type dialog."

Delete

Click this button to begin the process of deleting the device type. A confirmation dialog is displayed in which you verify the deletion of the device type.

Administration: Manage Map Data page

Use this page to administer maps and data, so that users can create map views. You perform administration tasks such as managing layers and background maps. Click **OK** when you have finished updating the page, to save your changes.

For more information, see "Administering Maps" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

Components

Layers
Use this tab to work with the layers for display on a map.

Background Maps
Use this tab to work with the main maps for use with map views.

Images
Use this tab to specify the images for use with map views. You specify images only if you want content designers to include them as part of formats on the map.

Import
Use the import buttons on each tab to display a dialog in which you can import layers, background maps, or images to the tab.

If a particular tab contains no items, then you can click the text in the nearly empty row to display the appropriate Import dialog.

Edit and Delete
Use the edit or delete button on each tab, after importing a layer, background map, or image to either display a dialog in which you can edit the item or delete it from the tab.

Sort
Use the sort buttons beside Name and Location on each tab to sort the layers, maps, or images.

Administration: Manage Privileges page

Use this page to view and administer privileges that are associated with various components. Privileges control the rights that users have to access the features and functionality of Oracle BI Presentation Services.

For more information, see "Managing Presentation Services Privileges" in *Security Guide for Oracle Business Intelligence Enterprise Edition*.

Components

Privilege Table

Use this table to:

- View privileges. The privileges are organized by categories (such as Access, Catalog, and so on). Users, roles, and Catalog groups who have explicit access to a privilege are identified to the right of each privilege.

- Administer a privilege by clicking the link for the users, roles, and groups who have explicit access to the privilege. Clicking the link displays the "Privilege dialog," where you can change the users, roles, and Catalog groups who are granted that privilege.

Administration: Manage Sessions page

Use this page to view information about active sessions and about the cache for each analysis. See *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition* for information on active sessions.

Components

Sessions area

Displays the total number of active sessions. Also displays a table that includes the following information about sessions that have been created for users who have logged in:

Field	Description
User ID	The name that the user entered when logging in.
Host Address	The name or IP address of the computer that initiated the HTTP connection to the Web server. This could be a user's PC, a handheld device, a firewall, and so on.
Session ID	A unique identifier assigned by Presentation Services for each client session.
Browser Info	Information about the browser from which the user logged on.
Logged On	The time stamp on which the user logged on.
Last Access	The time stamp of the last activity for this user on Presentation Services. This can be any kind of activity on the system, such as switching from one dashboard page to another.
Filter Cursors by Session	Select the option in the row for the session by which you want to filter the Cursor Cache table. The Cursor Cache table shows only cursors related to that session and that user.
Log Level	Select the level for logging messages for each session. By default, logging is disabled for each session.

Clear Filter

Use this button to remove any filters that you enabled in the Filter Cursors by Session field.

Cursor Cache area

Displays a table that includes the following information about each analysis:

Field	Description
ID	The unique internal cache identifier for this entry.
User	The name of the user who ran the analysis and last placed it into the cache. If two IDs are shown, then the second ID is impersonating the first. For example, the entry lhurley/administrator means that the Administrator account logged on and impersonated lhurley. This can happen when Oracle BI Scheduler starts an agent on someone's behalf. Oracle BI Scheduler logs on and impersonates that user so security and content filters still apply.
Refs	The number of references to this entry since it was placed into the cache.

Field	Description
Status	The status of the analysis that is using this cache entry: ■ **Starting** — The analysis is starting to run. ■ **Waiting on Parent** — A view in the analysis is waiting for the Oracle BI Server to finish returning the data for the query. ■ **Running** — The analysis is currently running. ■ **Finished** — The analysis has finished. ■ **Queued** — The system is waiting for a thread to become available so the analysis can be processed. ■ **Canceling** — The application is in the process of canceling the analysis. ■ **Error** — An error was encountered during the processing or running of the analysis. Look in the Statement column for information about the error.
Time	The time taken to process and run the analysis, displayed in one-second increments. A value of 0s (zero seconds) indicates that the analysis took under 1 second to complete.
Action	The following links that you can click to affect the analysis: ■ **Cancel** — Terminates the analysis. Is displayed for in-progress analyses. The user running the analysis receives an informational message indicating that the analysis was canceled by an administrator. ■ **Close** — Clears the cache entry associated with this analysis. Is displayed for completed analyses. ■ **View Log** — Displays the entry in the nQQuery.log file for this analysis (if logging is turned on for this user). This file logs query activity on the system at the individual user level. Query logging is turned off by default. It can be enabled for individual users at different logging levels. The administrator can use the Identity Manager to enable logging for a user. You can also view the nQQuery.log file (located by default in the Log directory in the Oracle Business Intelligence installation directory) using a text editor such as Windows Notepad. The administrator determines the maximum size of the nQQuery.log file by setting the USER_LOG_ FILE_SIZE parameter in the NQSConfig.INI file. ■ **Diagnostic** — Displays an HTML page of diagnostic information that you can share with Oracle Customer Support.
Last Accessed	The time stamp of the last time the cache entry for this analysis was used to satisfy an analysis.
Statement	The SQL statement that was issued for the analysis; or if the analysis resulted in an error, information about the nature of the error.
Information	Usage tracking information (for example, the name of the analysis that contains the query). Even if the Oracle BI system has been localized, catalog object names are displayed using the raw catalog path (for example, /shared/TeamA/brand_analysis).
Records	The number of records in the result set that have been seen (for example, 50+ to indicate that 50 records have been seen but there are additional records to be fetched or 75 to indicate that 75 records have been seen and there are no more records to be fetched).

Download

Use this button to export the entries in the table to a CSV file that you can store on a computer and share with others.

Cancel Running Requests

Use this button to cancel all requests that are running for analyses.

Close All Cursors

Use this button to close all cursors, which removes all information in the Cursor Cache table.

Sort By

Select the appropriate value to sort the entries by creation time, last accessed time, or user name. Sort the entries to find the ones in which you are interested more quickly.

Notes

Use the arrow button beside each column heading to sort the table by that value.

Administration: Monitor Crawls page

Use this page to monitor crawls for data models and the Presentation Catalog.

Components

Crawl Type

Select which crawl type you want to display in the table.

Status

Select which crawl status you want to display in the table.

Information Table

This table displays information about the scheduled, running, and completed crawls. The Progress column contains information about the number of different items crawled and the total time of the crawl.

Administration: Subject Area Manager page

???UPDATE THE "ADMINISTRATION PAGE" TOPIC TO POINT TO THIS TOPIC, ETC.???

Use this page to perform simple modifications to a selected subject area. For example, you can use this page to reorganize a subject area's tables and columns, change a presentation column's display name, and assign permissions to a presentation column. After you modify the subject area, you use can publish your changes to the Oracle BI Server without stopping and starting the BI Server.

For more information, see *Metadata Repository Builder's Guide for Oracle Business Intelligence Enterprise Edition*.

Components

Available Subject Areas

Use this list to select the subject area to modify.

Unmapped Columns List

By default, this list contains the business model columns that are not mapped to the physical layer schemas. Use the **View** button to change the columns in this list. You can choose to view all columns, unmapped columns, or mapped columns.

???Is this correct? Add more information here, for example, what do you do in this pane/why do they need to look at it? Can they only view here???

Subject Area List

This list contains the tables and columns in the subject area or presentation layer. Select a table or column and view or modify its properties in the Properties Area.

Note the following options:

- Click the **Add** button to add a new table to the subject area. ???Need more information here? What happens after you click OK in the Add New Table dialog? What does the user do next? How do they add columns, etc.???

- Click the **Up** and **Down** buttons to reorder the selected table or column within the subject area.

- Click the **Delete** button to remove the selected table or column from the subject area. ???When you do this, what happens other than the table or column is deleted from the presentation layer? Is this delete or hide????

Properties Area

This area displays the selected presentation table or column's properties. Use the fields in the General area to change the table or column's display name and description. Use the Permissions area to specify the users and application roles ability to access the table or column, and if they can write to the column.

You can clear the **Show all users/application roles** field to show only the users and application roles permissions set to values other than default. ???Do we need more information here???

Refresh

Use this button to refresh the unmapped column list, the subject area list, and selected presentation column's properties. ???Is this correct? When and why would they do this??

Publish

Use this button to publish your subject area changes to the Oracle BI Server. Clicking this button publishes the subject area without stopped and restarting the BI Server.

Advanced Page Properties

Use this dialog to specify the default navigation parameters for the dashboard page or dashboard. For more information, see "Setting Advanced Page Properties."

Component

Navigation Options

Incoming navigation parameters for the dashboard page or dashboard are:

- Prompted URL

- Go URL

- Navigate to BI Content Actions

Advanced SQL Filter dialog

Use this dialog to edit the SQL code that is generated for a column filter.

For more information, see "Creating and Editing the SQL Statements for a Column Filter in an Analysis."

Components

SQL

Use this field to modify the SQL WHERE clause to be used as a filter.

For descriptions of SQL clauses, see Appendix C, "Logical SQL Reference."

Related Topics

"Creating Column Filters"

Advanced Ticker Options dialog

Use this dialog to specify additional options for a scrolling ticker.

For more information, see

- "Results tab: Ticker editor"

Components

of Loops

Use this field to enter the number of times that the results scroll. The default is an infinite number of times.

You must specify a whole number.

Scroll Amount

Use this field to enter the number of pixels between successive redraws of the results.

Scroll Delay

Use this field to enter the number of milliseconds between successive redraws of the results.

Background Color

Use this field to enter the color to use for the background. Depending on what the browser supports, you can enter a color name, such as yellow or blue, or use the 6-digit hexadecimal format, such as #AFEEEE for pale turquoise. (You can omit the number sign character from the hexadecimal format.)

Additional Marquee Attributes

Use this field to enter other marquee options that the browser might support, such as ALIGN="top | middle | bottom" to align the ticker to the top, middle or bottom of the text around it. You can also add HTML to further customize the look of the ticker.

Agent editor

Use this editor to create or edit an agent.

For more information, see:

- "What Are Agents?"
- "Creating Agents"

Components

Overview
Displays a summary of the current settings for the agent. Use the **Plus** and **Minus** buttons to expand and collapse this summary.

General
Use the "Agent editor: General tab" to specify the priority of the content that the agent is to deliver and how to send the delivery content

Schedule
Use the "Agent editor: Schedule tab" to specify whether the agent is to be run based on a schedule, how often it runs, and when its running is to start and end.

Condition
Use the "Agent editor: Condition tab" to specify whether the agent always delivers its content and executes its actions, or conditionally delivers its content and executes its actions.

For more information about conditions, see Chapter 10, "Working with Conditions."

Delivery Content
Use the "Agent editor: Delivery Content tab" to specify the content to deliver with the agent, such as a dashboard page or a saved analysis.

Recipients
Use the "Agent editor: Recipients tab" to specify who is to receive the delivery content of the agent and who is allowed to subscribe to the agent.

Destinations
Use the "Agent editor: Destinations tab" to specify where the content is to be delivered.

Actions
Use the "Agent editor: Actions tab" to specify one or more actions to execute when the agent finishes.

For more information about actions, see Chapter 11, "Working with Actions."

Toolbar
The toolbar contains the following buttons:

- **Save this Agent** — Use this button to save the agent.
- **Save this Agent as** — Use this button to save a copy of the agent by another name.

- **Delete this Agent from the Catalog** — Use this button to delete the agent.

- **Discard changes made to this page** — Use this button to discard any changes you have made on the current tab.

- **Run Agent Now** — Use this button to run the agent.This is helpful, for example, to test the agent.

Agent editor: Actions tab

Use this tab of the "Agent editor" to specify one or more actions to execute when an agent finishes.

You can specify actions to execute under the following circumstances:

- Only if the agent condition evaluates to true or if there is no condition associated with the agent

- Only if the agent condition evaluates to false

For more information, see:

- "What Are Agents?"

- "Creating Agents"

- Chapter 11, "Working with Actions"

Components

Agent Condition True or No Condition Exists

Use this area to specify one or more actions to execute only if the agent condition evaluates to true or if there is no condition associated with the agent.

Agent Condition is False

This area is enabled only when a condition has been specified for the agent. See "Agent editor: Condition tab."

Use this area to specify one or more actions to execute only if the agent condition evaluates to false.

Invoke per Row

This box is enabled only when a condition has been specified for the agent. It is not available for Invoke Server Script actions, Invoke Agent actions, or actions for which one of the parameters is a result set mapping.

Use this box to specify whether to execute the action for each row returned by the condition. Select this box to execute the action for each row. Deselect this box to execute the action only once, regardless of the number of rows returned.

Add New Action

Use this button to display the "Create New Action dialog," where you create an action.

Add Existing Action

Use this button to display the "Select Existing Action dialog," where you select an existing action.

Edit Action

Use this button to display the "Edit Action dialog," where you edit the selected action. For inline actions, you can edit the action definition. For named actions, you can edit only parameter values.

Delete Action

Use this button to delete an action.

Agent editor: Condition tab

Use this tab of the "Agent editor" to specify whether an agent always delivers its content and executes its actions, or conditionally delivers its content and executes its actions.

To determine whether the agent delivers its content and executes its actions, you use a condition. (For more information on conditions, see Chapter 10, "Working with Conditions.")

For more information, see:

- "What Are Agents?"
- "Creating Agents"

Components

Settings

Use this box to select one of the following options:

- **Do Not use a Condition (always deliver content and run actions)** — Use this option to specify that the agent is always to deliver its content and execute its actions.

- **Use a Condition** — Use this option to specify that the agent is to conditionally deliver its content and execute its actions.

Create

Use this button to display the "Create Condition dialog," where you create an inline condition.

Browse

Use this button to display the "Select Condition dialog," where you select a named condition.

Edit Condition

This button is available only if you created an inline condition.

Use this button to display the "Edit Condition dialog," where you edit an inline condition. (You cannot edit named conditions.)

Customize

This button is available only if you selected a named condition that is based on an analysis that includes one or more prompted filters.

Use this button to display the "Customize Condition dialog," where you can customize the condition.

Test Condition

Use this button to test whether the condition evaluates to true or false.

Save To Catalog

This button is available only if you created an inline condition.

Displays the "Save As dialog," where you save the condition to the catalog as a named condition.

Agent editor: Delivery Content tab

Use this tab of the "Agent editor" to specify the content to deliver with the agent, such as a dashboard page or a saved analysis. You can also specify:

- The delivery format for the content, such as HTML, PDF, Excel, CSV Format, or Plain Text

- A subject line to include with the content

- A text message to provide context for an agent attachment

- A narrative text description of the conditional analysis (but only when you specify that the conditional analysis is also the delivery content)

- An explanation to deliver when an agent is to be delivered conditionally and the condition evaluates to false

For more information, see:

- "What Are Agents?"

- "Creating Agents"

Components

Subject
Use this field to enter the subject line for the agent.

Content
Use this box to select the type of content to deliver:

- **Analysis** — Use this option to deliver saved analyses (shared and private).

- **Dashboard Page** — Use this option to deliver dashboard pages from My Dashboard or dashboard pages from public (shared) dashboards.

- **Briefing Book** — Use this option to deliver a briefing book.

- **Condition Analysis** — This option is available only if you have specified a condition on the Conditions tab. Use this option to deliver the results of the analysis on which the condition is based.

> **Note:** If you attempt to clear the content or select different delivery content, and you have selected the option to show only relevant rows to each user on the "Agent editor: Recipients tab," then a message is displayed. The message alerts you that the option to show relevant rows will be reset if you proceed with clearing the content or selecting different delivery content. Click **Yes** to proceed, or **No** to retain the current delivery content choice. If you click **Yes**, then the recipients will still be determined from the conditional analysis, but users will receive all content, and not only the content that pertains to them.

Browse
Use this button to display the "Choose Delivery Content dialog," where you select the content.

Customize

(This button is not available if you have specified **Condition Analysis** as the delivery content. Instead, the customizations specified on the Conditions tab are used.)

Use this button to display the "Customize Delivery Content dialog," where you customize the content to be delivered.

Clear

Use this button to remove content previously selected.

Format

Use this box to select the format in which to deliver the content. The format options depend upon the type of delivery content. The format options are:

- **(Device default)** — Uses the device default to determine the content format.

- **HTML** — Sends delivery content as HTML.

- **Plain Text** — Sends delivery content in plain text format.

- **CSV Format** — Sends delivery content as a Comma Separated Value (CSV) attachment.

- **Tab delimited Format** — Sends delivery content as a tab-delimited attachment.

- **Excel 2007+** — Sends delivery content as a spreadsheet attachment.

- **PowerPoint 2007+** — Sends delivery content as a Powerpoint presentation attachment.

- **PDF** — Sends delivery content as a PDF attachment.

- **Narrative Text** — (This option is available only if you have specified the **Condition Analysis** as the delivery content.) Sends a narrative description of the results of the analysis on which the condition is based. If you select this option, a box is displayed in which you enter the narrative description to send. To include column n from the results in your text, use @n.)

Note: Content that is delivered to the Home page and dashboard is delivered in HTML only. (You specify whether content is to be delivered to the Home page and dashboard in the "Agent editor: Destinations tab."

Delivery

Use this area to select whether to deliver the content directly or as an attachment:

- **Deliver Results Directly** — This option is available only for these format options: **(Device default)**, **HTML** (except for dashboard pages), **Plain Text**, and **Narrative Text**. Use this option to deliver the content directly.

- **Deliver as Attachment** — Use this option to deliver the content as an attachment.

  If **CSV data**, **Excel**, or **PDF** is selected in the **Format** box, then this option is automatically selected.

  If you select the **Deliver as Attachment** option, in the **Attachment Note** field, then enter a text message to provide context for the agent attachment.

Attachment Note

Use this field to enter a text message to provide context for the agent attachment.

If Condition is False

Use this area to specify whether to deliver a text message to recipients when there is no agent content to deliver to them. To deliver a text message, select **Deliver this Message** and then enter the text message to be delivered.

Notes

- You can reference variables in the **Subject**, **Attachment Note**, and **If Condition is False Deliver this Message** fields. For the syntax to use, see "What Is the Syntax for Referencing Variables?" For more information on variables, see "Using Variables."

- To use the @ character, precede it with the \ (backslash) character to separate it from the variable syntax. For example, Dear @{NQ_SESSION.DISPLAYNAME}, \@ New York, is displayed as Dear Joe Smith, @ New York.

Agent editor: Destinations tab

Use this tab of the "Agent editor" to specify where content is to be delivered.

For more information, see:

- "What Are Agents?"
- "How Agents Work"
- "What Are Alerts?"
- "Creating Agents"

Components

Home Page and Dashboard

Use this box to specify whether content is to be delivered to the Home page and dashboard pages. (For how content is delivered as an alert to the Home page and dashboard, see "What Are Alerts?")

Devices

Use this option to specify whether content is to be delivered to specified devices. If you select this option, then you must select one of the following options:

- **Active Delivery Profile** — Use this option to specify that content is to be delivered to the devices specified in the active delivery profile.

  The active delivery profile is configured through the "My Account dialog: Delivery Options tab."

- **Specific Devices** — Use this option to specify that content is to be delivered to specific devices and then select one or more of the following device options:

  - **Email**
  - **Pager**
  - **Digital Phone**
  - **Handheld Device**

  If you select a specific device here, then the default device selected in the My Account dialog: Delivery Options tab overrides the devices that are set in the active delivery profile for a user. Devices that are specified here are used instead of the devices specified in the active delivery profile. An agent, for example, need not be dependent upon a user's configuration. The agent can be configured to use device information from default devices in the Devices area in the My Account dialog: Delivery Options tab.

  For more information about active delivery profiles and devices, see "Configuring Your Devices and Delivery Profiles."

Oracle BI Server Cache (For seeding cache)

This option is available only for administrators who have been granted the Manage Catalog Groups privilege.

Use this option to specify whether to seed the cache.

Administrators can create Server cache for individual users. The cache seeding operation enables administrators to run analyses on dashboard pages or analyses that are stored in the catalog, and to create a Server cache. This speeds up response time for users when they actually run the analyses on the dashboards. If data exists in the cache for a given analysis, then the data is deleted and refreshed when the agent runs.

The cache for the analysis or the dashboard page is created at the appropriate schedule for the indicated set of users.

> **Note:** To have the cache created for each user, select the **Run As Recipient** or **Specified User** box in the General tab.

Generally, if you are using the analysis that you have specified as the content for this agent to seed the cache, then you do not select any other user destinations (such as Email).

Agent editor: General tab

Use this tab of the "Agent editor" to specify the priority of the delivery content that an agent is to deliver and how to generate the delivery content.

For more information, see:

- "What Are Agents?"
- "Creating Agents"

Components

Priority

Use this option to specify the priority of the delivery content — **High**, **Normal**, **Low**. The priority works with the delivery profile for a user to determine the destination for delivery content of different priorities.

For more information on delivery profiles, see "What Are Devices and Delivery Profiles?" and "Configuring Your Devices and Delivery Profiles."

Run As

Use this option to specify how to generate the delivery content (that is, what user to run the query as):

- **Recipient** — Select this option to use the credentials of each recipient.

- **Specified User** — This option is available to all users, who have the Manage Catalog Groups privilege. Select this option to use the credentials of a specified user. All recipients receive the same content as if they were the specified user. Then specify the user by typing the user's name in the box to the right of the option or by clicking the **Set User** button to display the "Select User dialog," where you can select a user.

- **Use Agent Owner's Credentials** — This option is not available to administrators. Select this option to use the credentials of the agent owner. All recipients receive the same content as if they were the agent owner.

Created by

This information is displayed when the agent has been saved.

Displays the name of the person who created the agent.

Last Modified

This information is displayed when the agent has been saved.

Displays the date and time when the agent was last modified.

Description

This information is displayed when the agent has been saved.

Displays the description of the agent that was provided when the agent was saved.

You can edit the description of the agent by navigating to the agent on the "Catalog page" and using the **Properties** option on the **More** menu.

Agent editor: Recipients tab

Use this tab of the "Agent editor" to specify who is to receive the delivery content of the agent and who is allowed to subscribe to the agent.

For more information, see:

- "What Are Agents?"
- "Creating Agents"

Components

Select Recipients

Use this area to view and specify who is to receive the delivery content of the agent.

To:

- Add users, Application roles, and Catalog groups, click the **Add Recipient** button to display the "Select User dialog," where you select the users, Application roles, and Catalog groups.

- Add email recipients, click the **Add Email Recipient** button to display the "Enter Email Address dialog," where you enter their email addresses.

    The **Add Email Recipient** button is not available if you selected **Recipient** for the **Run As** option on the "Agent editor: General tab."

- Delete a selected recipient, select the recipient in the list and then click the **Delete** button.

- Show only a particular set of selected recipients, use the **Show** box to select one of the following options: **All**, **Users**, **Emails**, **Catalog Groups & Application Roles**.

    Note: When a user subscribes to and customizes an agent, if you then select the same user as a recipient, then the user's customizations are lost when the agent is next run.

Get Recipients from the Analysis Used in the Agent Condition

This box is enabled only if you have specified a condition that is based on an analysis for the agent. In addition, you must include the recipient information in the conditional result set (that is, you must include a column that contains who the recipient should be for each row).

Note: If you enable the Get Recipients from the Analysis Used in the Agent Condition checkbox then you must select a recipient username, not an email address in either the:

- Column Containing Recipients drop-down list

- 2nd Column Containing Recipients (optional)

    Each username in the username column is then queried in the LDAP server to fetch the email address.

Use this box to specify whether recipients are to be determined dynamically from the results of a conditional analysis. Select this box to have recipients determined dynamically from the results of a conditional analysis. Deselect this box to have the recipients determined from the Select Recipients area.

> **Note:** If you select the option to allow the recipients to be determined from the results of a conditional analysis and choose to show only relevant rows to each user, then it is assumed that you want the results of the conditional analysis set as the delivery content in the "Agent editor: Delivery Content tab." If the content has been set to something else (through clicking **Clear** or **Browse**), then a message is displayed asking if you want to update the delivery content to be the results of the conditional analysis. Click **Yes** to proceed and update the delivery content, or **No** to retain the current delivery content. If you click **No**, then the recipients will still be determined from the conditional analysis, but users will receive all content, and not only the content that pertains to them.

Column Containing Recipients

This box is available only if the **Get Recipients from the Analysis Used in the Agent Condition** box is selected.

Use this box to select the column in the conditional analysis that contains the desired recipients.

The column must contain usernames, not email addresses. Each username is then queried in the LDAP server to fetch the email address, or if the destination is set to **Active Delivery Profile**, then the user's profile is checked first to see if the user has explicitly created an email destination to override the LDAP email address.

2nd Column Containing Recipients (optional)

This box is available only if the **Get Recipients from the Analysis Used in the Agent Condition** box is selected. The column must contain usernames, not email addresses.

Use this box to optionally select an additional column in the conditional analysis that contains desired recipients.

Only Return Rows Relevant to the User Running the Agent

This box is available only if the **Get Recipients from the Analysis Used in the Agent Condition** box is selected.

Use this box to specify whether only rows in the results that are relevant to the user running the agent are sent in the delivery content. Select this box to send only rows that are relevant to the user running the agent. Deselect this box to send all rows.

Publish for subscription

Use this box to specify whether the agent is to be published so that users can subscribe. Note the following:

- When you deselect the **Publish Agent for subscription** box, any selected subscribers are disabled, and the **Allow Subscribers to Customize Agent** box is deselected and disabled.

- You can only publish agents that have content and actions (if any) that can be shared.

For more information on how to subscribe to agents, see "Subscribing to Agents."

Allow Subscribers to Customize Agent

This box is available only when the **Recipient** box is selected on the "Agent editor: General tab."

Use this box to specify whether subscribers can customize their subscription of the agent, for example, by providing values for a prompted filter associated with an analysis.

For more information on how to customize an agent subscription, see "Customizing Your Agent Subscriptions."

Agent Subscribers

Use this area to view and specify who is allowed to subscribe to this agent. In the list of agent subscribers, the **Name** column identifies the users, Application roles, and Catalog groups that are allowed to subscribe to the agent and the **Currently Subscribed** column identifies (with a check mark) those users, Application roles, and Catalog groups that are currently subscribed.

To:

- Add users, Application roles, and Catalog groups that are allowed to subscribe to this agent, click the **Add Subscriber** button to display the "Select User dialog," where you select the users, Application roles, and Catalog groups.

- Delete a user, Application role, or Catalog group from the list of users, Application roles, and Catalog groups who are allowed to subscribe to the agent, select the user, Application role, or Catalog group in the list and then click the **Delete** button.

- To unsubscribe a user, Application role, or Catalog group that is currently subscribed to the agent, select the user, Application role, or Catalog group in the list and then click **Unsubscribe**.

> **Note:** The **Unsubscribe** button is available only to administrators and users who have been granted the privilege Modify Current Subscriptions for Agents.

- Show only a particular set of users and groups who are allowed to subscribe to this agent, use the **Show** boxes. In the first box select the **All**, **Users**, or **Catalog Groups & Application Roles**, and in the second box select **All**, **Unsubscribed**, or **Subscribed**. To show:
  - All subscribed and unsubscribed users, Application roles, and Catalog groups, select **All** and **All**
  - All unsubscribed users, Application roles, and Catalog groups, select **All** and **Unsubscribed**
  - All subscribed users, Application roles, and Catalog groups, select **All** and **Subscribed**
  - All subscribed and unsubscribed users, select **Users** and **All**
  - Only unsubscribed users, select **Users** and **Unsubscribed**
  - Only subscribed users, select **Users** and **Subscribed**

- All subscribed and unsubscribed Catalog groups and Application roles, select **Catalog Groups & Application Roles** and **All**

- Only unsubscribed Catalog groups and Application roles, select **Catalog Groups & Application Roles** and **Unsubscribed**

- Only subscribed Catalog groups and Application roles, select **Catalog Groups & Application Roles** and **Subscribed**

Agent editor: Schedule tab

Use this tab of the "Agent editor" to specify whether the agent is to be run based on a schedule, how often it runs, and when its running is to start and end.

Agents can execute based on a specified schedule. You can define a starting date and time for the agent, a recurrence schedule, and an ending date.

You can also create a nonscheduled agent. This is useful when you want to create an agent that runs only as part of an agent chain, or an agent that is initiated by an external process.

For more information, see:

- "What Are Agents?"
- "Creating Agents"

Components

Enabled

This box is disabled when the **Frequency** box is set to **Never**.

Use this box to specify whether to enable the agent to run as scheduled. This is useful if you have defined a schedule for an agent but find you want to stop it for a certain period of time.

You also can enable and disable an agent's schedule from the "Catalog page." See "Disabling and Enabling Agents' Schedules."

Frequency

Use this box to select one of the following options to specify how often the agent runs:

- **Never** — Creates a nonscheduled agent.
- **Once** — Runs the agent one time only.
- **Daily** — Runs the agent on a daily schedule. If you select this option, then the following additional option is displayed:
  - **Days** — Use this box to specify the daily interval, such as every 3 days.
- **Weekly** — Runs the agent on a weekly schedule. If you select this option, then the following additional options are displayed:
  - **Weeks** —Use this box to specify the weekly interval, such as every 6 weeks
  - **On** — Use this option to specify the days of the week, such as Monday and Friday
- **Monthly** — Runs the agent on a monthly schedule. If you select this option, then the following additional options are displayed:
  - **On** — Use this option to specify either the day occurrence (such as the first Tuesday or the first day of the month) or the day of the month.
  - **Months** —Use this box to specify the months, such as March, June, September, December.

Start

Use this box to specify the date and time to start the agent and the time zone. Click the **Select Date and Time** button to display the Select Date and Time dialog, where you select the date, time, and time zone.

Re-run Agent Every

Use this box to specify whether to run the agent multiple times within a day. Select this box to run it multiple times within a day. Then enter the interval between executions (in minutes) and specify the time to stop the repetition by clicking the **Select Time** button to display a dialog in which to select the time.

Deselect this box to run it one time within the day.

End

Use this area to specify when to end the running of the agent:

- **No End Date** — Use this option to specify that the agent is to be run indefinitely.

- **Select End Date** — Use this option to specify an end date. Click the **Select Date** button to display the Select Date dialog, where you specify the date on which to end the running of the agent.

Notes

When you select the date and time, for time zones where daylight savings applies, the time zone reflects the daylight savings time. For example, if, during the summer months, you select **(GMT) Greenwich Mean Time: Dublin, Edinburgh, Lisbon, London**, this means BST (British Summer Time).

Alert dialog

Use this dialog to:

- View information about an alert
- View the content of an alert
- Clear an alert
- Edit the agent that generated an alert, if you have permission to modify the agent
- Run the agent that generated an alert, if you have permission to execute the agent

For more information, see:

- "What Are Alerts?"

  "Accessing and Managing Your Alerts"

Components

Alert Information

Displays the following information:

- **Priority** — Identifies the priority (**High**, **Normal**, or **Low**) of the alert.
- **Delivered** — Identifies the last delivery date and time of the alert.
- **Recurrence** — Identifies the number of occurrences of the alert.
- **Source Agent** — Identifies the name of the agent that generated the alert and includes the following buttons:
  - **Edit Agent** — (This button is available only if you have permission to modify the agent.) Use this button to display the agent that generated the alert in the "Agent editor," where you can edit the agent.
  - **Run Agent** — (This button is available only if you have permission to execute the agent.) Use this button to run the agent that generated the alert.

Alert Content

Displays the content of the alert.

Clear Alert

Use this button to delete the alert.

Alerts dialog

Use this dialog to:

- View a list of your alerts
- View the content for an alert
- Clear an alert
- Edit the agent that generated the alert, if you have permission to modify the agent
- Run the agent that generated the alert, if you have permission to execute the agent
- Subscribe to an RSS feed for alerts
- Clear all of your alerts

For more information, see:

- "Accessing and Managing Your Alerts"
- "Subscribing to an RSS Feed for Alerts"

Components

Alerts

Displays a list of your alerts, including the name, priority (**High**, **Normal**, or **Low**), last delivery date and time, and number of occurrences for each alert.

To view the latest occurrence of an alert, click its name. The "Alert dialog" is displayed, where you can view information about the alert and the content of the alert. You can also edit and run the agent that generated the alert.

Each alert contains a toolbar that displays when you hover over the alert name. The toolbar contains the following buttons:

- **Edit Agent** — (This button is available only if you have permission to modify the agent.) Displays the agent that generated the alert in the "Agent editor," where you can edit the agent.
- **Run Agent** — (This button is available only if you have permission to execute the agent.) Use this button to run the agent that generated the alert.
- **Clear alert/Clear all recurrences of this alert** — Use this button to delete the alert, or if the alert has recurrences, delete all recurrences of the alert.

Subscribe to RSS feed

Displays the browser's page that lets you subscribe to an RSS feed. Using this page, you can subscribe to an Oracle BI Alerts feed (that is, the channel that contains the delivered agents).

Clear All

Use this button to delete all alerts. When you clear all alerts, the **Alerts!** button in the global header and the Alerts area on the "Home page" are no longer displayed.

Refresh

Use this button to refresh the list of alerts.

Analysis editor

Use this editor to create or edit an analysis. Analyses let you explore and interact with information by visually presenting data in tables, graphs, pivot tables, and so on. You can include the views that you create in an analysis for display in dashboards.

For more information, see:

- "What Is the Process for Constructing Analyses?"
- "Saving Analyses"

Components

Criteria

Use the "Analysis editor: Criteria tab" to specify the criteria for an analysis, including columns and filters. You can work with selection steps after displaying the "Selection Steps pane."

Results

Use the "Analysis editor: Results tab" to create different views of the analysis results such as graphs, tickers, and pivot tables. You can also work with selection steps.

Prompts

Use the Analysis editor: Prompts tab to access the "Prompt editor" to create prompts that allow users to select values that dynamically filter all views within the analysis or all analyses on a dashboard.

Advanced

Use the "Analysis editor: Advanced tab" to examine or edit the XML code and logical SQL statement that is generated for an analysis.

Toolbar

The toolbar includes the following items:

- **Return to <dashboard name>** — This link displays if you are viewing a dashboard and click the embedded analysis' **Analyze** or **Edit** link. Use this link to return to the dashboard.
- **Save Analysis** — Use this button to save an analysis.
- **Save As** — Use this button to save an analysis as another name.

Related Topics

"What Is the Analysis Editor?"

Analysis editor: Advanced tab

Use this tab of the "Analysis editor" to examine or edit the XML code and logical SQL statement that is generated for an analysis. This tab is for use only by advanced users and developers who have the appropriate privileges. See "Examining the Logical SQL Statements for Analyses" for additional important information on working with this tab.

For more information, see:

- "Examining the Logical SQL Statements for Analyses"

- Appendix C, "Logical SQL Reference"

Components

Referencing the Results

Use this area at the top of the tab to access a link that is identified with the name of the analysis to display individual pages that contain links for refreshing, modifying, and viewing the results of the analysis. You can bookmark these pages for use as links from other web pages and portals.

This link executes for the analysis as it is currently saved. If you update the analysis later, then the link is also changed for those updates. The link is not visible if you have not yet saved an analysis.

Analysis XML

Use this area to view and modify the XML code for an analysis.

> **Caution:** Analyses are stored in the Oracle BI Presentation Catalog in XML format. If you change the XML code, then you change the analysis in the catalog.

Use the following components in this area:

- **XML Code Box** — Use this box to view the XML code for the analysis and to enter any changes to that code.

- **Apply XML** — Click this button to commit the XML code modifications that you made to the catalog.

- **Partial Update** — Use this box to specify whether to update the SQL statement and HTML code only for views or for the entire analysis in response to an event.

  – Select either **Default** or **Affected Views** to update the SQL statement and HTML code only for the views that have been affected by an event such as drilling or sorting. These settings ensure better performance because the SQL statement and HTML code is generated only for affected views, which prevents the entire analysis from redrawing.

  – Select **Entire Report** to rebuild and redraw the entire analysis.

  > **Note:** To apply this setting, you must also click the **Apply SQL** button at the bottom of the tab.

- **Bypass Oracle BI Presentation Services Cache** — Use this box to specify whether you want the query to use the Oracle BI Presentation Services Cache. In general, you should avoid selecting this box as disabling the cache has potential performance degradation issues.

  > **Note:** To apply this setting, you must also click the **Apply SQL** button at the bottom of the tab.

SQL Issued

Use this read-only box to view the SQL statement that is sent to the Oracle BI Server when the analysis is executed.

New Analysis

Click this button to display the "Analysis Simple SQL Statement dialog," in which you create an analysis using the SQL statement from the current analysis as the starting point. Any hierarchical columns, selection steps, groups, or formatting that are specified in the current analysis are removed before the dialog is displayed. You can edit the SQL statement in this dialog.

Advanced SQL Clauses

Use this area to modify the SQL statement for an analysis. You can include additional SQL clauses and change the subject area or the FROM clause for certain analyses. All but one of these features are disabled for analyses that contain hierarchical columns, member selections, or groups. Only the ability to specify a prefix is enabled.

Use the following components in this area:

- **Issue an Explicit Distinct** — Select this box to send a SELECT DISTINCT SQL statement to the Oracle BI Server. If you deselect this box, then a simple SELECT command is sent to the Oracle BI Server. The SELECT DISTINCT command ensures that you obtain only unique results, with no duplicate values.

- **Show Total value for all measures on unrelated dimensions** — Select this check box to include the ENABLE_DIMENSIONALITY variable at the beginning of the SQL statement:

  ```
  SET VARIABLE ENABLE_DIMENSIONALITY = 1;
  ```

  Setting ENABLE_DIMENSIONALITY may allow cross subject area queries to return non-null results for certain measure columns that would otherwise return null values when ENABLE_DIMENSIONALITY is not set. The measure columns may also contain duplicated values when ENABLE_DIMENISONALITY is set.

  > **Note:** The **Show Total value for all measures on unrelated dimensions** check box applies to Oracle BI EE 11.1.1.7.16 and later versions, and might not be available in earlier versions.

- **FROM** — Enter either the name of the subject area to use for the analysis or enter a complex FROM clause.

- **GROUP BY** — Enter a comma-delimited list of columns from the analysis to use in a GROUP BY command.

- **Prefix** — Enter any SQL statements to be run before the SQL statement for the analysis runs. For example, you can modify the values of session variables.

- **Postfix** — Enter any additional SQL clauses that you would like to include with the analysis, including a full SQL statement. For example, you can affect the SQL statement for the analysis by entering JOIN, UNION, or ORDER BY commands. If you include an ORDER BY command, then you override any ORDER BY commands from the SQL statement for the analysis.

  In general, only enter statements for **Postfix** if you are very familiar with SQL code.

Apply SQL

 Click this button to apply the:

- **Partial Update** box setting

- **Bypass Oracle BI Presentation Services Cache** box setting

- SQL statement modifications that you made

> **Note:** Use care when clicking this button. When you do, Oracle BI EE essentially creates a new analysis based on the SQL statement that you have added or modified. Therefore, you lose all views, formatting, and so on that you had previously created for the analysis. The XML code is also modified for the new analysis.

Query Performance

Use this area to set the following components:

- **When view prompts are used** — Use this area to specify, for views that have page edge prompts based on hierarchical columns, whether to improve query performance:

  - **Exclude prompt values that would return no results** — Select this option to exclude, in the page edge list, values that return no data.

    This option is recommended in most cases.

  - **Include prompt values that would return no results, if includes at least one hierarchical column** — Select this option to include, in the page edge list, values that return no data.

    This option is not valid for OLAP sources. It is only valid for relational physical sources.

- **Query sharing** — Use this area to specify whether to allow the Oracle BI Presentation Services query cache to be shared with other users:

  - **Do not share query** — Select this option to *not* allow the Presentation Services query cache to be shared with other users.

  - **Share query with multiple users (may improve performance after initial run)** — Select this option to allow the Presentation Services query cache to be shared with other users.

    Selecting this option improves query performance for users who access this analysis subsequent to the first user. Note that length of time that the Presentation Services query cache is available to other users depends on the cache settings at your organization. For more information on Presentation Services cache settings, see "Managing the Oracle BI Presentation Services Cache Settings" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

This option is recommended for an analysis that does not contain any specific user data and that will be accessed by many users.

You can view information about the cache for an analysis using the "Administration: Manage Sessions page."

This option impacts usage tracking. For more information on usage tracking, see "Managing Usage Tracking" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

Apply

Use this button to apply the settings for the options in the **Query Performance** area.

Notes

- You can also enter SQL statements using the "Administration: Issue SQL page."

- To combine an analysis with a similar analysis from the same subject area or another subject area, where you can perform Set operations such as UNION or INTERSECT on the results, click the **Combine results based on union, intersection, and difference operations** toolbar button on the "Selected Columns pane." For more information, see "Combining Columns Using Set Operations."

Analysis editor: Criteria tab

Use this tab of the "Analysis editor" for:

- "Specifying the Criteria for Analyses"
- "Editing the Formula for a Column"
- "Formatting Columns in Analyses"
- "Creating Column Filters"
- "Working with Selections of Data"

Common Components

Subject Areas

Use the "Subject Areas pane" to select the columns and hierarchy levels for an analysis and to work with subject areas.

Catalog

Use the "Catalog pane" to drag and drop objects from the catalog to add to the analysis.

General Components

Use the following components when you are not creating a direct database request.

Selected Columns

Use the "Selected Columns pane" to modify the columns and hierarchy levels that have been selected for an analysis.

Filters

Use the "Filters pane" to create new filters for an analysis.

Selection Steps

Use the "Selection Steps pane" to create and modify steps for data selections. This pane is not visible until you click the button on the toolbar to display it.

Toolbar

The toolbar contains the following buttons:

- **Show/Hide Filters pane** — Click this button to show and hide the "Filters pane."
- **Show/Hide Selection Steps pane** — Click this button to show and hide the "Selection Steps pane."
- **Edit Analysis Properties** — Click this button to display the "Analysis Properties dialog," where you specify properties for the entire analysis.

Direct Database Request Components

Use the following components when you create a direct database request.

For more information, see "Working with Direct Database Requests."

Connection Pool

Enter the name of the connection pool for the database that is defined in the physical layer of the Oracle BI Administration Tool. A sample name is sql_samples.

For information about connection pools, see *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

SQL Statement

Enter the SQL statement to send directly to the database. Oracle BI Server security rules for data are bypassed and cannot be applied when you send a direct database request.

The statement that you execute is affected by the user name that is specified for this connection pool in the Oracle BI Administration Tool. You might find that not all columns from the database are returned to you, if the specified user name is not permitted to see them.

Validate SQL and Retrieve Columns

Click this button to validate the SQL statement and retrieve any columns that you have specified in the request. The columns are displayed in the **Result Columns** area.

If any errors are returned from the database, then you see them in the area below this button. See *Oracle Database SQL Language Reference* for information on resolving any errors.

Bypass Oracle BI Presentation Services Cache

Use this box to specify whether to use the Oracle BI Presentation Services Cache. Select this box to specify that you do want the request to use the Presentation Services cache. In general, you should avoid selecting this box as enabling the cache has potential performance degradation issues.

Result Columns

Use this area to work with the columns that are returned, if any, from the valid SQL statement. This area includes each column name and data type with the following options:

- **Column Properties** — Click this button to display the "Column Properties dialog," in which you modify the properties of the column. The "Column Properties dialog: Conditional Format tab" is not available in this case, because you cannot apply conditional formatting to a column that is returned using a direct database request.

- **Edit Formula** — Click this button to display the "Change Aggregation Rule dialog," in which you modify the aggregation rule for the column.

To change which columns that are returned, modify and validate the SQL statement.

Analysis editor: Results tab

Use this tab of the "Analysis editor" to create different views of the analysis results such as graphs, tickers, and pivot tables. For more information, see "Displaying the Results of Analyses."

Components

Subject Areas
Use the "Subject Areas pane" to select the columns and hierarchy levels for an analysis and to work with subject areas.

Catalog
Use the "Catalog pane" to display objects from the catalog to use with views.

Views
Use the "Views pane" to create and modify views to work with analyses.

Compound Layout
Use the "Compound Layout" to assemble different views for display on a dashboard and to create additional layouts.

Selection Steps
Use the "Selection Steps pane" to create and modify steps for data selections.

Toolbar
This toolbar contains the following buttons:

- **Print this analysis** — Use this button to specify whether to print the views for the analysis as HTML or PDF.

- **Export this analysis** — Use this button to select an option for exporting the views for the analysis. For information, see "Export Menu Options for Views and Results."

- **Schedule** — Use this button to save the analysis and then display the "Agent editor," where you can create an agent from the analysis. For more information, see "Creating Agents from Analyses."

- **Show how results will look on a Dashboard** — Use this button to preview how the edited view is displayed on a dashboard.

  > **Note:** If the **Show how results will look on a Dashboard** button is not available, then the administrator has suppressed its display.

- Print & Export Options — Use this button to display the "Print & Export Options dialog," where you specify settings for printing and exporting.

- **Refresh the results of the current analysis** — Use this button to refresh the results of the current analysis. Clicking this button does not bypass the Oracle BI EE server cache.

- **New View** — Use this button to add a new view to the analysis and to access the recommended visualizations feature. The view is added to the current compound layout. You can select the **Recommended Visualization for** option to see a submenu of visualization specialties, such as **Analyzing Trends** or **Comparing Percentages**. Click on a visualization specialty to access the Select Visualization list, where you then choose from a ranking of recommended view types. If you would rather have the best view created for you immediately, without being presented with a list of recommendations, you can instead select the **Best Visualization** option.

  For information on recommended visualizations, see "What Is the Recommended Visualizations Feature?"

- **New Calculated Measure** — Use this button to display the "New Calculated Measure dialog," where you add a new calculated measure to all applicable views. This button is disabled for combined requests and direct database queries.

  > **Note:** To add a new calculated measure to a specific view, click the **New Calculated Measures** button from within the "Results tab: Data View editor."

- **New Group** — Use this button to display the "New Group dialog," where you create a group.

- **New Calculated Item** — Use this button to display the "New Calculated Item dialog," where you build calculated items.

- **Edit Analysis Properties** — Use this button to display the "Analysis Properties dialog," where you specify properties for the entire analysis.

- **Import formatting from another analysis** — Use this button to display the "Open dialog," where you select an analysis from which to import formatting for columns and views. For more information, see "Using a Saved Analysis to Modify the Cosmetic Appearance of Other Analyses."

- **Create Compound Layout** — Use this button to create an instance of the compound layout. A new compound layout is displayed in a tab in the "Compound Layout" and contains only a title.

- **Copy Compound Layout** — Use this button to create a copy of the current compound layout. The copy is displayed in a tab in the Compound Layout and contains the same views as the compound layout that you copied.

  When you copy, you do not actually create additional copies of the analysis or its views. The analysis and views exist only once. Any changes that you make to the analysis or its views are reflected in the multiple instances of the compound layout.

- **Delete Compound Layout** — Use this button to delete the current compound layout. The views on the layout are not deleted from the analysis. This button is not available if you attempt to delete the last compound layout in the analysis.

- **Rename Compound Layout** — Use this button to display the "Rename View dialog," where you provide a new name for the compound layout.

- **Show/Hide Selection Steps Pane** — Use this button to show or hide the display of the "Selection Steps pane" in the Results tab.

Analysis Properties dialog

Use this dialog to specify properties for an analysis.

For more information, see "Specifying the Criteria for Analyses."

Components

Results Display

Use the "Analysis Properties dialog: Results Display tab" to specify how results that are returned from an analysis are to be handled.

Interactions

Use the "Analysis Properties dialog: Interactions tab" to specify which interactions (for example, **Drill**) are available when users right-click in a graph, heat matrix, pivot table, table, treemap, or trellis view at runtime.

Data

Use the "Analysis Properties dialog: Data tab" to specify how data is to be handled in an analysis.

Analysis Properties dialog: Data tab

Use this tab of the "Analysis Properties dialog" to specify how data is to be handled in an analysis.

Components

Include Null Values

Use this check box to include null values in your analysis when the entire row or column contains all nulls. When this check box is selected, null values will not be suppressed for the analysis. This turns off null suppression for all views and applies to the entire edge (that is, the row and columns axis) of the analysis. See "Understanding Null Suppression" for additional information.

Display of Columns Added in Criteria Tab

Displays options to specify how columns that are added to an analysis from the "Analysis editor: Criteria tab" after displaying the analysis results are handled:

- **Display in existing and new views** — Use this option to specify that the newly added columns are to be included in any existing views as well as in any new views that are added.

- **Exclude from existing views, but display in new views** — Select this option to specify that the newly added columns are to be excluded from any existing views (that is, placed in the Excluded drop target) but included in any new views that are added.

  For more information on the Excluded drop target, see "Columns in the Excluded Drop Target."

Hierarchy Display

Use the buttons within this area as follows, to control the placement of a member total for hierarchical columns in this analysis:

- **Parent values before children** — Use this option to place the member total before the children.

- **Parent values after children** — Use this option to place the member total after the children.

Placement of added members

Use the buttons within this area as follows, to control how members are added to hierarchical columns in this analysis using selection steps:

- **Within the hierarchy**: Does not display duplicate members within all hierarchies in the analysis. If the member is in the view, within the hierarchy, then this setting is ignored. Applies only to level-based hierarchies.

- **Outside the hierarchy**: Members are added at the bottom. Members, groups, and calculated items are added below the last members at the top level of the hierarchy, in the order in which they are added.

For more information on selection steps, see "Creating Selection Steps."

Analysis Properties dialog: Interactions tab

Use this tab of the "Analysis Properties dialog" to specify which interactions (for example, **Drill**) are available when users right-click in a graph, heat matrix, pivot table, table, or trellis view at runtime.

Note that the administrator can specify defaults for these right-click interactions. For more information, see "Manually Configuring for Interactions in Views" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

See "Interactions in Views" for additional information.

Components

Views Run-time Options

Use this area to specify which interactions are available when users right-click in a graph, heat matrix, pivot table, table, or trellis view at runtime. One or more of the following interactions are available:

- **All Interactions**
- **Drill (when not a primary interaction)**

> **Note:** You set **Drill** as a primary interaction in the "Column Properties dialog: Interaction tab" when you specify **Drill** as the value for the **Column Heading** or **Value** field.

- **Move Columns**
- **Sort Columns**
- **Add/Remove Values**
- **Create/Edit/Remove Groups**
- **Create/Edit/Remove Calculated Items**
- **Display/Hide Sub-totals**
- **Display/Hide Running Sum**
- **Include/Exclude Columns**

Restore Admin Settings

Use this button to restore the **Views Run-time Options** settings to the default settings specified by the administrator.

Analysis Properties dialog: Results Display tab

Use this tab of the "Analysis Properties dialog" to specify how results that are returned from an analysis are to be handled.

Components

No Results Settings

Use this box to select the type of message (default or custom) that is displayed if no results are returned from an analysis. You might see the message, for example, if you have a very restrictive filter placed on the columns in the analysis. You do not see the custom message if you simply create the analysis and include no columns.

Header

Edit the header to use for the custom message. Available only when you specify a custom message for **No Results Settings**.

Message

Edit the message to use for the custom message. Available only when you specify a custom message for **No Results Settings**.

View for Text Delivery

Use this box to manually control which compound layout, including its associated views, is sent to a particular destination. For more information, see "Customizing Views for Delivery to Agent Users."

Analysis Simple SQL Statement dialog

Use this dialog to enter simple SQL statements that you can use to easily create an analysis. This dialog is displayed from the following places:

- When you select **New** in the global header and select **Analysis** or when you click **Analysis** in the Create area of the Home page, then select **Create Analysis from Simple Logical SQL**. The dialog is displayed with no existing SQL statement.

- When you select **New Analysis** when examining the SQL statement for an existing analysis in the "Analysis editor: Advanced tab." The dialog is displayed using the SQL statement from the current analysis as a starting point.

For information, see "Creating New Analyses" and "Examining the Logical SQL Statements for Analyses."

Analytics pane

Use this pane as follows:

- For an initiative or objective, to specify basic information about the initiative or objective, to identify the KPIs and other initiatives or objectives that support and measure the performance of the initiative or objective, and to add action links.

- For KPI details, to view basic KPI settings and a graph that presents actual values and target values, to pin dimensions, and to run actions.

For more information, see:

- "Working with KPI Details"
- "Creating Initiatives"
- "Creating Objectives"

This pane is part of the "Scorecard editor: KPI Details tab," the "Scorecard editor: Initiative Details tab," and the "Scorecard editor: Objective Details tab."

Components for KPI Details

History

Displays a graph that presents actual values and target values that enable you to view KPI performance over time or using dimensions selected from the following:

- The point of view area
- The **Dimensionality** area below the graph

The graph shows multiple time periods only if trending was enabled in the KPI's definition.

Parent Initiative or Parent Objective

Displays the name of the parent initiative or the parent objective whose progress is measured by the KPI.

Actions

Displays the action links associated with each KPI performance level or range. Use to perform actions in response to the KPIs current performance state. (You add or edit the action links in the KPI definition. See "Adding Actions to KPIs" and "Editing Actions and Action Links Added to KPIs.")

Performance

Displays the following KPI values and data:

- **Actual** — The KPI value that was manually entered, calculated, or referenced from the subject area.

- **Change** — If you enabled trending, this is the value by which the current actual value differs from that from the previous period. For example, if the actual value for an "Annual Sales" KPI is 30000 and was 2650 last year, the change is 27350.

- **Target** — The value that you want the KPI to achieve.

- **Variance** — The amount by which the actual value differs from the target value.

- **% Variance** — The amount by which the actual value differs from the target value expressed as a percentage.

- **% Change** — If you enabled trending, this is the value by which the actual value differs from that from the previous period, as a percentage.

Indicator Type

Displays the following options to indicate whether the performance of the KPI drives other KPIs, or is affected by the performance of other KPIs, or other data or processes:

- **Undefined** — Use this option to not define an indicator type.

- **Leading** — Use this option to indicate that the performance of the KPI drives the performance of other KPIs. For example, a Sales KPI would lead a Profits KPI.

- **Lagging** — Use this option to indicate that the performance of the KPI is affected by the performance of other KPIs, or by other data or processes.

Perspective

Displays the perspectives available for the scorecard. Select the perspective with which to align the initiative or objective. For example, you might align an objective for Increased Product Sales with the Financial perspective.

For more information on perspectives, see "What Are Perspectives?"

Dimensionality

Displays the dimensions associated with the KPI. Use this area to pin the dimensions.

Pinning is optional. Typically, it is best not to pin most of the dimensions so that the data is controlled by the point of view settings. For more information about pinning, see "What Are Dimensions and Pinned Dimension Values?"

To pin a dimension, click the down-arrow button to the right of the dimension and select one of the following options:

- A specific value. (Note that you can also select multiple values by holding down the **CTRL** key and clicking each value.)

- **Use Point-of-View** — Use this option to use the value (or values) currently selected in the point of view area.

- **Search** — Use this option to display the "Search Members dialog," where you select one or more values to pin the dimension.

- **Use Variable** — Use this option to display the "Select Variable dialog," where you specify a variable to use to set the value. For more information on variables, see "Using Variables."

Note: You cannot pin multiple values for a KPI dimension when using session, repository, or global variables.

Components for Initiatives and Objectives

Score

Displays the score for the initiative or objective in a gauge and numerically.

For more information on scores, see "Understanding Initiative or Objective Performance Assessment."

Parent Initiative or Parent Objective

Displays the name of the parent initiative (for an initiative) or the parent objective (for an objective).

Start Date

This box is available only for initiatives.

Use this box to specify the date on which the initiative is to begin and the time zone. To select a date, click the **Select Date** button to display the Select Date dialog.

Due Date

This box is available only for initiatives.

Use this box to specify the date on which the initiative is due and the time zone. To select a date, click the **Select Date** button to display the Select Date dialog.

Completion Date

This box is available only for initiatives.

Use this box to specify the date on which the initiative was actually completed and the time zone. To select a date, click the **Select Date** button to display the Select Date dialog.

Children

Displays for the initiative or objective:

- The number of its child initiatives or child objectives in each status.

- The number of its child KPIs in each status.

If there is at least one child objective, initiative, or KPI for a particular status, the status name is a hyperlink that displays the "Scorecard editor: Breakdown tab," showing the child object or objects.

Descendants

Displays for the initiative or objective:

- The number of its descendant initiatives or objectives in each status.

- The number of its descendant KPIs in each status.

If there is at least one descendant objective, initiative, or KPI for a particular status, the status name is a hyperlink that displays the "Scorecard editor: Breakdown tab," showing the descendant object or objects.

Perspective

Displays the perspectives available for the scorecard. Select the perspective with which to align the initiative or objective. For example, you might align an objective for Increased Product Sales with the Financial perspective.

See "What Are Perspectives?" for additional information.

Assessment Formula

Displays the following options to specify the rule to be used to assess the overall performance of the initiative or objective:

- **Worst case** — Use this option to specify that the status of the worst performing child KPI or objective is to be used.

- **Best case** — Use this option to specify that the status of the best performing child KPI or objective is to be used.

- **Most Frequent (Worst Case)** — Use this option to specify that, if half the child KPIs and objectives have high performance and half have low performance, then use the status of the worst performing child KPI or objective.

- **Most Frequent (Best Case)** — Use this option to specify that, if half the child KPIs and objectives have high performance and half have low performance, then use the status of the best performing child KPI or objective.

- **Weighted** — Use this option to use a weighted average based on the weights you have assigned to the child KPIs and objectives.

Indicator Type

Displays the following options to indicate whether the performance of the objective drives other objectives, or is affected by the performance of other objectives or other data or processes:

- **Undefined** — Use this option to not define an indicator type.

- **Leading** — Use this option to indicate that the performance of the objective drives the performance of other objectives. For example, an objective for Increased Sales would drive an objective for Increased Profits.

- **Lagging** — Use this option to indicate that the performance of the objective is affected by the performance of other objectives or by other data or processes.

Priority

This box is available only for initiatives.

Displays the options **High**, **Medium**, and **Low** to identify the importance and urgency of an initiative.

Actions

Displays the action links that have been added to an initiative or objective, including the text of the action links, the actions associated with the links, and under which states of the objectives or initiatives the action links are enabled.

Use this area to view and manage action links:

- To add a new action link, click the **New Row** button to display the "Action Link dialog,"

- To edit an action link, select the link in the list and click the **Edit Row** button to display the "Action Link dialog."

- To delete an action link, select the link in the list and click the **Delete Row** button.

Initiatives & KPIs or Objectives & KPIs

Lists the following:

- For an initiative, the KPIs and the child initiatives that are used to evaluate the performance of the initiative

- For an objective, the KPIs and the child objectives that are used to evaluate the performance of the objective

Use this watchlist to view and manage these initiatives, objectives, and KPIs. For more information about watchlists, see "Watchlists."

To add a KPI to the watchlist, drag it from the "Catalog pane for Scorecard" and drop it on the watchlist. The "Add KPI dialog" is displayed, where you pin dimension values or assign a label for this usage of the KPI.

Watchlists

A watchlist is a table that lists scorecard objects (that is, initiatives, objectives, and KPIs) that are related to a particular aspect of a scorecard or are grouped together for a particular purpose.

See "Understanding Watchlists" for additional information.

Components

Objects

Displays these options:

- **Open** — This option is not available in the New KPI watchlist. Use this option to open the selected initiative, objective, or KPI.

- **Open KPI Definition** — This option is available only in the New KPI watchlist. Displays the "KPI editor," where you edit the selected KPI.

- **Edit Watchlist Entry** — This option is available only in the New KPI watchlist. Displays the "Edit Watchlist Entry dialog," where you edit the dimension values and label for the selected KPI.

- **Delete** — This option is not available in the New KPI watchlist or the Breakdown watchlist. Use this option to delete the selected initiative, objective, or KPI.

- **Remove KPI** — This option is available only in the New KPI watchlist. Removes the selected KPI from the watchlist.

- **Analyze** — Use this option to create an analysis based on the KPI. The analysis is automatically saved in the catalog in the My Folders/Drills folder.

  > **Note:** Because the My Folders/Drills folder is used for temporary storage, the analysis might not persist after the Oracle Business Intelligence session ends. To preserve the analysis, copy it to another directory. For example, to preserve an analysis that you plan to use in a shared dashboard, copy it to a folder in /Shared Folders.

- **Contact Owner** — Use this option to display the "Contact Owner dialog," where you can send a message to the business owner of the selected initiative, objective, or KPI.

- **Add KPI** — This option is available only for the watchlist in the New KPI Watchlist editor, and for the watchlists on the Objective Details and Initiative Details tabs in the Scorecard editor. Use this option to display the "Select a KPI dialog," where you select a KPI to add.

View

Displays these options:

- **Show More Columns** — Use this option to display the "Show More Columns dialog," where you add columns to or remove columns from the watchlist.

  You can also rearrange columns, but column rearrangement is not persisted.

  Table D–7 lists and describes some of the commonly used columns.

- **Change Column Labels** — This option is available only in a New KPI watchlist. Use this option to display the "Change Column Labels," where you change the labels of the columns. Table D–7 lists and describes some of the commonly used columns.

- **Clear Column Sort** — This option is available only in a smart watchlist. Use this option to clear any column sorting in effect.

  With this option, the order of the rows may change. If the filter criteria for the smart watchlist does not imply a sort order (for example, Best Performance implies sorting on the% variance), the rows might display indentation to show object hierarchy.

Summary

Displays, of the initiatives, objectives, and KPIs that are used to evaluate the performance of this initiative, objective, or KPI, the number that fall into each assessment range, for example, OK (2), Critical (1). For a smart watchlist, it also displays the total number of objects that are listed.

Pinned Key Performance Indicator (in a cell in the Label column)

This blue pin indicates that a KPI has one or more pinned dimensions. See "What Are Dimensions and Pinned Dimension Values?" for additional information.

Sort Ascending

This button is not available in all watchlists. Displayed when you hover the mouse pointer over a column heading. Use this button to sort the values in a column by ascending order.

Column sorting is preserved only in smart watchlists. In a smart watchlist, column sorting:

- Can be cleared using the **Clear Column Sort** option on the View menu.

- Is preserved when the smart watchlist is saved, but only if the Scorecard editor is in Edit mode. It is not preserved if the Scorecard editor is in View mode.

- Disables any indentation in the watchlist.

Sort Descending

This button is not available in all watchlists. Displayed when you hover the mouse pointer over a column heading. Use this button to sort the values in a column by descending order.

Column sorting is preserved only in a smart watchlist. In a smart watchlist, column sorting:

- Can be cleared using the **Clear Column Sort** option on the View menu.

- Is preserved when the smart watchlist is saved, but only if the Scorecard editor is in Edit mode. It is not preserved if the Scorecard editor is in View mode.

- Disables any indentation in the watchlist.

Red asterisk (in a cell in the Status column)

This symbol is available only if there are status overrides applied to an initiative, objective, or KPI. Use this symbol to display the "Status window," where you can view the overrides that previously have been applied or apply another override.

Blue triangle (in the upper-right corner of a cell in the Status column and in other columns for a KPI)

This symbol is available only if there are comments attached to an initiative, objective, or KPI for the current dimension settings. Use this button to display the "Status window," where you can read the comments that previously have been added, add another comment, or reply to a comment.

Highlighted Actual Value or Target Value Cells

A box displays around actual values and target values that have been set to writeable in the "KPI editor: General Properties page." This means that you or the end user can modify the value and submit that value to the repository. If you submit a value for a value to which you were not granted access, then the box will display red and the "Insufficient dimensional slice security for slice with dimension values" error message displays. For more information, see "What Are Target Settings?"

Right-click menu in a column cell

The options that are available depend on the tab in which the watchlist is displayed and on the column in which you right-clicked, and can include the following:

- **Action Links** — Displays the action links that are available for the current status of the initiative, objective, or KPI. Click a link to execute the action.

- **Open KPI** (for a cell in a KPI row only) — Displays the KPI details for the selected KPI (that is, the details are displayed in the "Scorecard editor: KPI Details tab").

- **Remove KPI** (for a cell in a KPI row only) — Use this option to remove the selected KPI from the KPI watchlist.

- **Open Initiative** or **Open Objective** (for a cell in an initiative or objective row only) — Use this option to open the selected initiative or objective (that is, it is displayed in the "Scorecard editor: Initiative Details tab" or "Scorecard editor: Objective Details tab" in the current mode).

- **Delete Initiative** or **Delete Objective** (for a cell in an initiative or objective row only) — Use this option to delete the selected initiative or objective.

- **Analyze** (for a cell in a KPI row only) — Use this option to create an analysis based on the selected KPI. The analysis is automatically saved in the catalog in the My Folders/Drills folder.

  > **Note:** Because the My Folders/Drills folder is used for temporary storage, the analysis might not persist after the Oracle Business Intelligence session ends. To preserve the analysis, copy it to another directory. For example, to preserve an analysis that you plan to use in a shared dashboard, copy it to a folder in /Shared Folders.

- **Contact Owner** — Use this option to display the "Contact Owner dialog," where you compose a message to the business owner.

- **Add Comment** (for a cell in the Status column only) — Displays the "Add Comment dialog," where you add a comment to an initiative, objective, or KPI for the current point of view.

- **Override Status** (for a cell in the Status column only) — Displays the "Status Override dialog," where you override the status of an initiative, objective, or KPI for the current point of view or cancel an override.

■ **View KPI Contribution Wheel** (for a cell in a KPI row only) — Use this option to view a KPI contribution wheel based on the selected KPI.

Status window

The Status window shows the following information:

- If you are working with comments, all the comments that have been added to, and all status overrides and override cancellations that have been applied to an initiative, objective, or KPI for the current point of view.

- If you are working with status overrides, all status overrides and override cancellations that have been applied to an initiative, objective, or KPI for the current point of view.

Use this window to view and manage this information as follows:

- To add a new comment, click the **New Comment** button to display the "Add Comment dialog."

- To override a status or cancel an override, click the **New Override** button to display the "Status Override dialog."

- To expand or collapse all comments, click the **Expand All** or **Collapse All** button.

- To expand or collapse an individual comment, click the **Expand** or **Collapse** button.

- To reply to a comment, click **Reply** to display the "Reply dialog."

- To pin the Status window so that it stays open as you work, click the **Pin** button in the top-right corner of the window.

Apply Saved Filter dialog

Use this dialog to specify how to add a named filter to the analysis with which you are working.

For more information, see:

- "Applying a Named Filter to an Analysis"
- "Creating Column Filters"

This dialog is also displayed with the following name, with fewer options that are read-only:

View Saved Filter dialog

Components

Clear all existing filters before applying

Use this option to remove all existing filters from the analysis before adding the named filter.

Apply contents of filter instead of a reference to the filter

Select this option to add the filter as an inline filter. The filter is added to the "Filters pane," where you can edit it. Any changes that you make to the filter are saved with the analysis, but not to the catalog.

Deselect this option to add the filter as a named filter. Deselecting this option adds a reference to the filter (that is, add the filter as a named filter). The filter is added to the Filters pane, where you can view it but not edit it.

Archive dialog

Use this dialog to specify if and how you want to apply the existing folder or object permissions and if you want to include timestamps when preparing the archive file. See "What is Archiving?"

Components

Keep Permissions

Use this option to maintain the object or folder's existing permissions. If you do not select this option, then the archiving process does not include any permissions. Upon unarchiving, the system assigns the parent folder's permissions to all of the objects and folders.

Keep Timestamps

Use this option to maintain the CreationTime, LastModified, and LastAccessed timestamps assigned to the object or folder. Upon unarchiving, the LastModified timestamp is updated to indicate the time at which the object or folder is unarchived. If you select this option, the **Old** option in the Paste Overview area of the Preferences dialog is available when unarchiving. You use the **Old** option to overwrite existing catalog items that are older than the catalog items in the archive.

If you do not select this option, then the archiving process does not include timestamp information and the **Old** option in the Paste Overview area of the Preferences dialog is not available.

Notes

Before you archive, ensure that the **Archive\Unarchive** privilege is assigned to your account.

Bar Graph (*Layer*) dialog

Use this dialog to specify the formatting of bar graphs on a map view. The bar height varies with metric values. For pie graphs, the slice size varies as a percentage of the whole.

For more information, see "Editing Map Views."

This dialog is also displayed as:

Pie Graph (*Layer*) dialog

Components

Name

Displays the name of the data column whose values are displayed in graphs on the map and used as their labels.

Name Automatically

Use this box to specify whether you want to enter the label for the graphs, rather than having the label specified automatically as the column name.

ToolTips

Use this list to select the column whose name is used as the tooltip when you hover over a value of the data column on the map.

Bar Size or Slice Size

Use this list to specify the measure column whose values control the size of the bars or slices, such as Dollars or Units.

Graph Size

Use this box to specify the size in pixels of each graph that is displayed on the map.

Bars or Slices

Use this list to select the attribute column whose values show as bars or slices in the graphs, such as Product or Channel.

For example, you can create pie graphs that have a slice for each Product. The size of the slice depends on the Dollars sold for that Product.

BI Composer wizard

Use this wizard to create, edit, or view an analysis, without the complexities of the "Analysis editor."

The steps of this wizard display the following panels:

- "BI Composer wizard -- Create Analysis: Select Columns panel"
- "BI Composer wizard -- Create Analysis: Select Views panel"
- "BI Composer wizard -- Create Analysis: Edit Table panel"
- "BI Composer wizard -- Create Analysis: Edit Graph panel"
- "BI Composer wizard -- Create Analysis: Sort and Filter panel"
- "BI Composer wizard -- Create Analysis: Highlight panel"
- "BI Composer wizard -- Create Analysis: Save panel"

For more information, see:

- "What Is an Analysis?"

  "What Is BI Composer?"

- "Creating Analyses Using BI Composer"
- "Editing Analyses Using BI Composer"
- "Editing Analyses Created by Using the Analysis Editor"

Components

BI Composer train

This train is available only after you select a subject area in the Subject Areas tab and click **Create**, or select an existing analysis in the Catalog tab and click **Edit**.

Use the buttons in this train to navigate the steps of the BI Composer wizard. The availability of some buttons depend on your actions. For example:

- The **Select Columns** button is the only button enabled until you select at least one column in the Select Columns panel.
- The **Edit Table** and **Highlight** buttons are enabled only if you select a tabular view in the Select Views panel.
- The **Edit Graph** button is only enabled if you select a graph view in the Select View panel.

You can navigate among the enabled steps in any order. For example, from the **Highlight** step, you can click the **Select Views** button to navigate back to the Select Views step. You do not have to navigate these steps in order.

Catalog tab

This tab is not available in Oracle BI EE.

Displays the following folders from the Oracle BI Presentation Catalog:

- **My Folders** — Contains your personal folders and analyses

- **Shared Folders** — Contains the folders and analyses that you have permission to access

You use this tab to select an existing analysis to edit or view.

For more information on the Oracle BI Presentation catalog, see "What is the Oracle BI Presentation Catalog?"

Reload

Use this button to refresh the objects that are displayed in the Catalog tab.

Subject Areas tab

This tab is not available in Oracle BI EE.

Displays the list of available subject areas. You use this tab to select a subject area from which you want to select columns to create an analysis.

For more information on subject areas, see "What Are Subject Areas and Columns?"

Edit

Use this button to display the "Edit Analysis Analysis_Name: Select Columns panel," where the analysis that is selected in the Catalog tab is available for you to edit.

View

Use this button to display the analysis that is selected in the Catalog tab for viewing.

Create

Use this button to display the "BI Composer wizard -- Create Analysis: Select Columns panel," where you create an analysis using columns from the subject area selected in the Subject Areas tab.

View Area

Displays the analysis that is selected in the Catalog tab for viewing.

Collapse (Restore) Pane

Use this toggle button to collapse and restore a pane. For example, you might want to collapse the Catalog and Subject Areas pane to provide more room for the display of one of the panels, such as the Select Views panel.

BI Composer wizard -- Create Analysis: Select Columns panel

Use this panel of the "BI Composer wizard" to select the columns that are to be included in the analysis. You can also:

- Specify column interactions
- Specify a column formula
- Rename a column
- Hide a column

For more information, see:

- "What Are Subject Areas and Columns?"
- "What Is BI Composer?"
- "Creating Analyses Using BI Composer"
- "Editing Analyses Using BI Composer"

This panel is also displayed as:

Edit Analysis *Analysis_Name*: Select Columns panel

Components

Subject Area: *Subject_Area_Name*

Displays the subject area from which to select columns to be included in the analysis.

Use this area to select a column to add to the analysis. To do so, expand the subject area folder that contains the column that you want, select the column, and then click **Add**.

To manage a subject area folder, right-click the folder to display the following options:

- **Collapse** — Use this option to collapse the selected folder.
- **Expand** — Use this option to expand the selected folder.
- **Expand All Below** — Use this option to expand all folders below the selected folder.
- **Collapse All Below** — Use this option to collapse all folders below the selected folder.
- **Show As Top** — This option is not supported for BI Composer.

For more information on subject areas and columns, see "What Are Subject Areas and Columns?"

Add

This button is available only if one or more subject areas are available and you have permission to access them.

Use this button to display the "Add/Remove Subject Areas dialog," from which you can add or remove subject areas.

Selected Columns

Displays the columns that have been added to the analysis.

To:

- Change a column name or specify a formula for a column, select the column and click **Column Properties** to display the "Column Properties dialog for BI Composer."

- Specify what happens when you click either the column heading or a column value in the column or hierarchy level, select one of the following options in the **Interaction** list for the column:

  - **Default** — Specifies what happens by default when you click the column heading or a value. The default depends what is defined in the Oracle BI repository.

  - **Drill** — Specifies that you drill up or down after clicking the column heading or a value.

  - **Navigate to Transaction** — Invokes an action (called a Contextual Event action) that passes the row context to the ADF page when you click the column heading or a value.

    For more information on an ADF Contextual Event action, see "Passing Business Intelligence Content with the Oracle BI EE Contextual Event Action" in *Developer's Guide for Oracle Business Intelligence Enterprise Edition*.

  - **None** — Specifies that nothing happens when you click the column heading or a value. This option turns off drilling for attribute columns; it does not turn off drilling for hierarchical columns.

- Hide a column in the view, select the **Hidden** box for the column.

- Remove a column from the list, select the column and click **Remove**.

- Remove all columns from the list, click **Remove All**.

> **Note:** **Interaction** is for column values only. However, you can drill on column headings as well. Drill is the default behavior for column headings.

Add

Use this button to add the column selected in the Subject Area: *Subject_Area_Name* list to the Selected Columns list.

Remove

Use this button to remove the selected column from the Selected Columns list.

Remove All

Use this button to remove all columns from the Selected Columns list.

Up and Down Arrows

Use these buttons to reorder the columns in the list and, thus, change the order of the columns in the analysis.

BI Composer wizard -- Create Analysis: Select Views panel

Use this panel of the "BI Composer wizard" to:

- Select the views that are to be included in the analysis. You can include one of each of the following types of views:

  - Title

  - Tabular

  - Graph

    > **Note:** Some graph types (for example, gauges) are not supported.

  For more information on views, see "What Are Views?"

- Preview the results.

For more information, see:

- "What Is BI Composer?"

- "Creating Analyses Using BI Composer"

- "Editing Analyses Using BI Composer"

This panel is also displayed as:

Edit Analysis *Analysis_Name*: Select Views panel

Components

Title
Use this field to enter the title for the analysis.

Table
Use this box to select the type of tabular view to include in the analysis:

- **None** — Use this option to specify no tabular view.

- **Table (recommended)** — Use this option to specify a table. (This is the recommended table type for nonhierarchical data).

- **Summary Table** — Use this option to specify a table that also includes summaries of the data (for example, grand totals).

- **Pivot** — Use this option to specify a pivot table (recommended for hierarchical data).

- **Summary Pivot** — Use this option to specify a pivot table that also includes summaries of the data (for example, grand totals).

Graph
Use this box to select the type of graph view to include in the analysis:

- **None** — Use this option to specify no graph view.

- **Bar (recommended)** — Use this option to specify a bar graph. (This is the recommended graph type by default.)

- **Area** — Use this option to specify an area graph.

- **Scatter** — Use this option to specify a scatter graph.

- **Pie** — Use this option to specify a pie graph.

- **Line-Bar** — Use this option to specify a line-bar graph.

Layout

Use this box to select the placement of the tabular and graph views in the analysis. The options are:

- **Table above Graph**

- **Table below Graph**

- **Table to left of Graph**

- **Table to right of Graph**

Preview

Use this box to specify whether to display a preview of the results:

- Select this box to display a preview of the actual analysis and data.

    > **Note:** Selecting this box might impact performance if the query for data results in very large data sets.

- Deselect this box to display an image that represents each view in the analysis.

Show how results will look on a dashboard

Use this button to show a fully interactive view where you can page through large result sets, drill, and so on.

Report XML

Use this button to show the XML code for the analysis. This information is helpful for debugging purposes.

BI Composer wizard -- Create Analysis: Edit Table panel

This panel is available only if you have added a tabular view to the analysis using the "BI Composer wizard -- Create Analysis: Select Views panel."

Use this panel of the "BI Composer wizard" to:

■ Edit the layout of the tabular view (if you have included a tabular view). You can create prompts, use a column to section the analysis, and exclude certain columns from the tabular view.

■ Preview the results.

For more information, see:

■ "What Is BI Composer?"

■ "Creating Analyses Using BI Composer"

■ "Editing Analyses Using BI Composer"

This panel is also displayed as:

Edit Analysis *Analysis_Name*: Edit Table panel

Components

Rows

This target area is available only for a pivot table.

Displays the columns that are to be shown as rows in a pivot table.

Use this target area to modify the way that data is arranged in the pivot table by moving rows to different target areas.

To move a column, select the column, click **Move To**, and then select one of the options on the **Move To** menu.

Columns

Displays the columns that are to be shown as columns in a table or pivot table.

Use this target area to modify the way that data is arranged in the table or pivot table by moving columns to different target areas.

To move a column, select the column, click **Move To**, and then select one of the options on the **Move To** menu.

Move To

Displays the following options to move a column to a different target area:

■ **Rows** — (This option is not available in the **Move To** menu in the **Rows** target area.) Moves the column to the **Rows** target area.

■ **Columns** — (This option is not available in the **Move To** menu in the **Columns** target area.) Moves the column to the **Columns** target area.

■ **Prompt For** — (This option is not available in the **Move To** menu in the **Prompt For** target area.) Moves the column to the **Prompt For** target area.

■ **Section By** — (This option is not available in the **Move To** menu in the **Section By** target area.) Moves the column to the **Section By** target area.

- **Excluded** — (This option is not available in the **Move To** menu in the **Excluded** target area.) Moves the column to the **Excluded** target area.

Additional Layout Options

Use this option to display the following target areas **Prompt For**, **Section By**, and **Excluded**.

Prompt For

Displays the columns that are to be displayed as prompts.

Use this target area to move a column to another other target area.

To move a column, select the column, click **Move To**, and then select one of the options on the **Move To** menu.

Section By

Displays the columns that are to be to used to divide the table or pivot table into sections.

Use this target area to move a column to another target area.

To move a column, select the column, click **Move To**, and then select one of the options on the **Move To** menu.

Excluded

Displays the columns that are to be excluded from the view.

Use this target area to move a column to another target area.

To move a column, select the column, click **Move To**, and then select one of the options on the **Move To** menu.

Up and Down Arrows

Use these buttons to reorder the columns in the target areas.

Preview

Use this box to specify whether to display a preview of the results:

- Select this box to display a preview of the actual analysis and data.

> **Note:** Selecting this box might impact performance if the query for data results in very large data sets.

- Deselect this box to display an image that represents each view in the analysis.

Show how results will look on a dashboard

Use this button to show a fully interactive view where you can page through large result sets, drill, and so on.

Report XML

Use this button to show the XML code for the analysis. This information is helpful for debugging purposes.

BI Composer wizard -- Create Analysis: Edit Graph panel

This panel is available only if you have added a graph view to the analysis using the "BI Composer wizard -- Create Analysis: Select Views panel."

Use this panel of the "BI Composer wizard" to:

- Edit the properties and layout of the graph (if you have included a graph view). You can create prompts, use a column to section the analysis, and exclude certain columns from the graph.

- Preview the results.

For more information, see:

- "What Is BI Composer?"

- "Creating Analyses Using BI Composer"

- "Editing Analyses Using BI Composer"

This panel is also displayed as:

Edit Analysis *Analysis_Name*: Edit Graph panel

Components

Subtype
Use this box to select the graph subtype.

Vary Color By
This target area is not available for pie graphs.

Displays the columns for which each column value or column value combination is to be shown in a different color.

Use this target area to modify the way that data is arranged in the graph by moving columns to different target areas (or positions).

To move a column, select the column, click **Move To**, and then select one of the options on the **Move To** menu.

Group By or Points
This target area is named Group By for bar, area, and line-bar graphs, and Points for scatter graphs.

This target area not available for pie graphs.

Displays the columns for which the axis labels are to be clustered into groups. For example in a vertical bar graph whose criteria includes the Region, District, and Dollars column, if this target area contains the Regions column, then the data is grouped by region on the horizontal axis.

Use this target area to modify the way that data is arranged in the graph by moving columns to different target areas (or positions).

To move a column, select the column, click **Move To**, and then select one of the options on the **Move To** menu.

Slices

This target area is available only for pie graphs.

Displays the columns for which each column value or column value combination is to be shown as a separate slice of the pie.

Use this target area to modify the way that data is arranged in the graph by moving columns to different target areas (or positions).

To move a column, select the column, click **Move To**, and then select one of the options on the **Move To** menu.

Pies

This target area is available only for pie graphs.

Displays the columns for which each column value or column value combination is to be shown as a separate pie.

Use this target area to modify the way that data is arranged in the graph by moving columns to different target areas (or positions).

To move a column, select the column, click **Move To**, and then select one of the options on the **Move To** menu.

Move To

Displays the following options to move a column to a different target area:

- **Group By** — (This option is not available in the **Move To** menu in the **Rows** target area.) Moves the column to the **Rows** target area.

- **Vary Color By** — (This option is not available in the **Move To** menu in the **Columns** target area.) Moves the column to the **Columns** target area.

- **Prompt For** — (This option is not available in the **Move To** menu in the **Prompt For** target area.) Moves the column to the **Prompt For** target area.

- **Section By** — (This option is not available in the **Move To** menu in the **Section By** target area.) Moves the column to the **Section By** target area.

- **Excluded** — (This option is not available in the **Move To** menu in the **Excluded** target area.) Moves the column to the **Excluded** target area.

Additional Layout Options

Use this option to display the following target areas **Prompt For**, **Section By**, and **Excluded**.

Prompt For

Displays the columns that are to be displayed as prompts. Use this target area to move a column to another other target area.

To move a column, select the column, click **Move To**, and then select one of the options on the **Move To** menu.

Section By

Displays the columns that are to be to used to divide the graph into sections. Use this target area to move a column to another target area.

To move a column, select the column, click **Move To**, and then select one of the options on the **Move To** menu.

Excluded

Displays the columns that are to be excluded from the view. Use this target area to move a column to another target area.

To move a column, select the column, click **Move To**, and then select one of the options on the **Move To** menu.

Up and Down Arrows

Use these buttons to reorder the columns in the target areas.

Preview

Use this box to specify whether to display a preview of the results:

■ Select this box to display a preview of the actual analysis and data.

> **Note:** Selecting this box might impact performance if the query for data results in very large data sets.

■ Deselect this box to display an image that represents each view in the analysis.

Show how results will look on a dashboard

Use this button to show a fully interactive view where you can page through large result sets, drill, and so on.

Report XML

Use this button to show the XML code for the analysis. This information is helpful for debugging purposes.

BI Composer wizard -- Create Analysis: Sort and Filter panel

Use this panel of the "BI Composer wizard" to:

- Specify sorting for the results that are displayed in graphs, pivot tables, and tables. You can sort attribute and measure columns. You cannot sort hierarchical columns. For more information on the types of columns, see "What Are the Types of Columns?"

- Create filters on attribute and measure columns. You cannot create filters on hierarchical columns.

  For more information on filters, see "What are Filters and Selection Steps?"

- Preview results.

For more information, see:

- "What Is BI Composer?"

- "Creating Analyses Using BI Composer"

- "Editing Analyses Using BI Composer"

This panel is also displayed as:

Edit Analysis *Analysis_Name*: Sort and Filter panel

Components

Expand Sort or Collapse Sort

Use this button to expand or collapse the Sort area.

Sort

Use this area to specify and manage sorting. This area contains the follow components:

- **Add Sort** — Use this button to select the column on which to specify a sort order and to add a sort order entry to the Sort table.

- **Sort Table** — Displays an entry for each column that is to be sorted. You manage each entry as follows:

  - To specify the sort order, click a sort order option, for example, **Ascending**, or **Low to High**.

  - To prioritize the sort entries, use the up and down arrows to reorder the entries in the table.

  - To delete an entry, click **Delete**.

Expand Filter or Collapse Filter

Use this button to expand or collapse the Filter area.

Filter

Use this area to specify and manage filters. This area contains the follow components:

- **Add Filter** — Use this button to select the column on which to filter and to add a filter entry to the Filter table. When selecting the column on which to filter you can select one of the columns in the analysis or one of these options:

- **More Columns** — Use this option to display the Select Column dialog, where you select a column from the same subject area as the columns in the analysis but is not included in the analysis.

- **Saved Filters** — Use this option to display the Saved Filters dialog, where you can select a filter that has been saved to the catalog.

- **Show** — Use this box to select one of the following options to combine filters:

  - **Data Satisfying All Filters** — Use this option to specify that the criteria specified in each filter must be met.

  - **Data Satisfying Any Filter** — Use this option to specify that the criteria that is specified in at least one of the column filters must be met.

- **Filters Table** — Displays an entry for each column that is to be filtered. You manage each entry as follows:

  - To specify the operator for the filter, select the operator in the **Operator** box. The operator list from which you can select is populated based on the type of column. For more information about each operator, including the **is prompted** operator option, see "Operators."

  - To specify one or more values to use when applying the filters, enter or select the value or values in the **Value** field. Use a semicolon to separate multiple values.

    You can use the **Search** button (available only for certain operators) to display the "Select Values dialog," where you can search for a value. (Note that this version of the Select Values dialog contains only a limited number of the components of the standard version.)

  - To delete an entry, click **Delete**.

- **Saved Filters Table** —Displays an entry for each saved filter that you added using the **Save Filters** option. You manage each entry as follows:

  - To delete an entry, click **Delete**.

Preview

Use this box to specify whether to display a preview of the results:

- Select this box to display a preview of the actual analysis and data.

> **Note:** Selecting this box might impact performance if the query for data results in very large data sets.

- Deselect this box to display an image that represents each view in the analysis.

Show how results will look on a dashboard

Use this button to show a fully interactive view where you can page through large result sets, drill, and so on.

Report XML

Use this button to show the XML code for the analysis. This information is helpful for debugging purposes.

BI Composer wizard -- Create Analysis: Highlight panel

This panel is available only if you have added a tabular view to the analysis using the "BI Composer wizard -- Create Analysis: Select Views panel."

Use this panel of the "BI Composer wizard" to:

- Apply conditional formatting to measure columns in tabular views. Conditional formatting helps direct attention to a data element if it meets a certain condition. For example, you can show below-quota sales figures in a certain color.

  (You cannot apply conditional formatting to attribute or hierarchical columns.)

- Preview the results.

For more information, see:

- "What Is BI Composer?"
- "Creating Analyses Using BI Composer"
- "Editing Analyses Using BI Composer"

This panel is also displayed as:

Edit Analysis *Analysis_Name*: Highlight panel

Components

Expand Formatting or Collapse Formatting
Use this button to expand or collapse the Formatting area.

Formatting
Use this area to specify and manage conditional formatting on columns. It contains the follow components:

- **Add Column Format** — Use this button to select the column to which to apply conditional formatting and to add a formatting entry to the Formatting table.

- **Formatting Table** — Displays an entry for each column to which conditional formatting is to be applied. You manage each entry as follows:

  - To enter the values for the threshold that divide each formatting range, use the threshold fields.

    For example, suppose that you are working with the # of Orders column, and you want orders that fall below 5000 highlighted in red, orders between 5000 and 8000 highlighted in yellow, and orders over 8000 highlighted in green. To do so, in the first threshold field, you enter 5000, and in the second threshold field you enter 8000.

  - To select the color to represent each formatting range, click the down arrow to the right side of the **Color** box to display the color dialog.

  - To delete an entry, click **Delete**.

Preview
Use this box to specify whether to display a preview of the results:

- Select this box to display a preview of the actual analysis and data.

> **Note:** Selecting this box might impact performance if the query for data results in very large data sets.

■ Deselect this box to display an image that represents each view in the analysis.

Show how results will look on a dashboard
Use this button to show a fully interactive view where you can page through large result sets, drill, and so on.

Report XML
Use this button to show the XML code for the analysis. This information is helpful for debugging purposes.

BI Composer wizard -- Create Analysis: Save panel

Use this panel of the "BI Composer wizard" to save the analysis with the same name or with a different name. You can also:

- Create new folders in which to save the analyses

- Rename folders and analyses

- Delete folders and analyses

- Expand and collapse folders

For more information, see:

- "What Is BI Composer?"

- "Creating Analyses Using BI Composer"

- "Editing Analyses Using BI Composer"

This panel is also displayed as:

Edit Analysis *Analysis_Name*: Save panel

Components

Analysis Name
Use this field to enter a name for the analysis.

Description
Use this field to enter a description of the analysis.

Save In
Use this area to select the location in which to save the analysis.

To:

- Create a new folder, click **Create New Folder** to display the Create New Folder dialog, where you enter the name of the folder.

- To manage an existing folder, right-click the folder to display the following options:

  - **Delete** — Use this option to delete the selected folder.

  - **Rename** — Use this option to display the Rename dialog, where you enter a new name for the folder.

  - **Collapse** — Use this option to collapse the selected folder.

  - **Expand** — Use this option to expand the selected folder.

  - **Expand All Below** — Use this option to expand all folders below the selected folder.

  - **Collapse All Below** — Use this option to collapse all folders below the selected folder.

  - **Show as Top** — This option is not enabled and should be ignored.

BI Publisher Report Properties dialog

Use this dialog to specify the information for adding an Oracle BI Publisher report to a dashboard page.

For more information, see "Adding Oracle BI Publisher Reports to Dashboard Pages."

Components

Embedded Content

Use this button to specify that the report is to be embedded in the dashboard, rather than displaying as simply a link to BI Publisher. This option is selected by default for reports.

For more information about embedded content, see "Adding Content to Dashboards."

Width and Height

Use these fields to specify the width and height of the report on the dashboard, if the report is embedded.

Link

Use this box to specify that a link is to be displayed on the dashboard (rather than embedding the report in the dashboard). The text of the link is the name of the report. By clicking the link, you open the report in BI Publisher.

Break dialog

Use this dialog to add page and column breaks to the layout of a dashboard page.

For more information, see "Properties Buttons for Objects."

Components

No Break

Use this option to place the column next to the column that is above it.

Column Break

Use this option to place the column beneath the column that is currently to the left of it (or next to it).

Page Break with Column Break

Use this option to place the column on another page in printed and PDF versions. This option also places the column below the column that it is next to, if you have not selected the **Column Break** option.

Bubble (*Layer*) dialog

Use this dialog to specify the formatting of bubbles on a map. Bubble size represents the value of a metric. Bubble location indicates the geographic region. Bubbles, images, and shapes can apply to both polygon layers and point layers. Point layers cannot use a color fill format.

For more information, see "Editing Map Views."

This dialog is also displayed as:

Bubble (Custom Point Layer) dialog
Color Fill (*Layer*) dialog
Image (Custom Point Layer) dialog
Image (*Layer*) dialog
Line (*Layer*) dialog
Variable Shape (Custom Point Layer) dialog
Variable Shape (*Layer*) dialog

Components

Name

Displays the name of the data column whose values are displayed as bubbles, color fills, images, lines, or shapes on the map and used as their label.

Name Automatically

Use this box to specify whether you want to enter the label for the bubbles, color fills, images, lines, or shapes, rather than having the label specified automatically as the column name.

X (longitude) and Y (latitude)

Available only for the custom point layer and only if the **Single Column** box is not selected. Use this list to select the columns whose values specify the longitude and latitude of the point to represent on the map as a bubble, image, or shape.

You must specify different columns for longitude and latitude. These columns must store longitude and latitude values, values from a coordinate system that can identify a point, or address values that can be converted to longitude and latitude using the ETL system. The column values must adhere to the WGS84 coordinate system.

Single Column

Use this box to indicate that the values from one column specify the coordinates of the points to represent on the map. The column is specified in the **Location** box.

Location

Available only for the custom point layer and only if the **Single Column** box is selected. Use this list to select the column whose values specify the longitude and latitude of the point to represent on the map as a bubble, image, or shape. Ensure that the column contains both longitude and latitude values and that the values are stored in (Longitude, Latitude) order. If the values in the column are stored in (Latitude, Longitude) order, then the formats are displayed at incorrect locations.

Delimiter

Available only for the custom point layer and only if the **Single Column** box is selected. Use this box to enter the delimiter that is used in the single column that you specified in the **Location** box that holds the longitude and latitude values, such as a comma. This box has no default values. If you do not specify the proper delimiter, then the format cannot be displayed appropriately on the map.

ToolTips

Use this list to select the column whose name is used as the tooltip when you hover over a value of the data column on the map.

Shape

Available only for shapes. Use this list to select the shape to include on the map. You can select Circle, Triangle, or Diamond.

Vary Size By or Vary Color By or Vary Image By

Use this list to specify the measure column whose values control the lines, the images, the color fills, or the size of the bubbles or shapes, such as Dollars or Units. For example, you can vary the *color* of the shapes by one measure column and the *size* of the shapes by another measure column.

The following formats have specific attribute associations:

- Vary Size By and Vary Color By apply to shapes and bubbles.

- Vary Image By applies to images.

- Vary Width By and Vary Color By apply to shape lines.

Minimum Size

Available only for bubbles and shapes. Enter the minimum size of the bubbles or shapes.

Maximum Size

Available only for bubbles and shapes. Enter the maximum size of the bubbles or shapes.

Color

Available only for bubbles and shapes. Use this list to select the color for the bubbles or shapes on the map. For shapes, this box is disabled when you click **Vary By Measure**. When varying color by measure, you specify a palette of colors that corresponds to the binned values of the measure.

Bin Type

Use this list to select the type of grouping for the values to indicate using images, lines, or shapes. You can select one of the following types:

- Percentile Binning — Group geographies by their rank, such as the top 33%. Percentile threshold values are specified automatically; you cannot modify them.

- Value Binning — You specify the minimum and maximum values for each of the groups.

- Continuous Color — For color fill only. A gradient of color is varied and applied to the ranks of the geographies. You make no specifications for minimum and maximum values.

Bins

Use this list to select the number of bins for grouping the values to indicate using color fills, images, lines, or shapes. You can select various integers, Quartile (4), or Decile (10). The number of bins that you select corresponds to the number of colors that the map format shows.

Style

Available only for lines, shapes, and color fills. Use this list to select the shape or gradient to display. The number of colors in the style depends on the number that is specified for **Bins**.

Minimum and Maximum

Use these boxes to enter the minimum, maximum, and other values for the bins. You can enter the values only if you select Value Binning for **Bin Type**. If you select Percentile Binning, then the values are specified automatically.

Label

Enter the labels for the bins. Labeling a bin helps users understand what a particular bin, or bucket, means. A label for the top quartile might say "Top Selling Products" instead of "Top 25%". You can customize these labels, and the map provides automatic bin labels for particular types of data sets (percentage bins).

Image

Available only for images. Use this list to select the images for the bins. Click an image to display the "Select Image dialog" where you select the image for the bin. Images are shown at a latitude and longitude coordinate.

Color

Available only for color fill and lines. Use this list to select the colors for the bins. Click a color to display a dialog where you select the color for the bin.

Allow Dashboard Users to Edit Thresholds

Available only for color fill and lines when **Bin Type** is set to Percentile Binning or Value Binning. Select this box to display a slider component that enables end users to dynamically adjust threshold values. These adjustments allow users to perform visual analysis on their map data, which is sometimes referred to as "what-if analysis."

If you allow users to edit thresholds and they modify them, then the setting for **Bin Type** is automatically changed to Value Binning from any other settings.

This option is not available when **Vary Width By Measure** is selected.

For information, see "Modifying Thresholds for Formats on a Map View."

Transparency

Available only for bubbles, color fill, and shapes. Specifies how transparent the format is when applied to the map. You specify transparency as a percentage that ranges from 0 through 100. The default is 25%. A value of 0% renders the format as a solid color, which is fully opaque. A value of 100% results in the format being invisible. The effects of the transparency setting can be optically measured by the visibility of the checkered background in the **Style** and **Color** boxes of this dialog.

See the **Notes** section for more information about how the **Transparency** field works in relation to label layers.

Line Width

Available only for lines. Specifies the width of the line in pixels. The default value is 8, while the minimum value is 1 and the maximum is 16.

This option is not available when **Vary Width By Measure** is selected.

Vary Width By Measure

Available only for lines. Use this check box to specify whether the width of a line for a measure will vary. When this check box is selected, **Line Width** and **Allow Dashboard Users to Edit Thresholds** are disabled.

Vary Width By

Available only when **Vary Width By Measure** is selected for a line. Use this list to select the measure whose line thickness you wish to vary.

Minimum Width

Available only when **Vary Width By Measure** is selected for a line. Enter a number in pixels that represents the minimum width for the line.

Maximum Width

Available only when **Vary Width By Measure** is selected for a line. Enter a number in pixels that represents the maximum width for the line.

Notes

When you specify a value in the **Transparency** field, you must be aware of the label layers that are in use. By default, label layers are added for every visible layer on the map. You switch labels on or off using the "Map Properties dialog: Labels tab."

When a label layer is applied to a map, the layer uses the style that was defined in Oracle Map Builder. This style might be opaque, which blocks the map from being displayed in its entirety. If you then try to apply a transparent format to that map, the display of the map is still blocked. To ensure that format transparency is not blocked, do one of the following:

■   Ensure that the style for the layer does not use an opaque color fill.

■   Hide the opaque label layers using the Labels tab of the Map Properties dialog.

Catalog page

Use the Catalog page to locate objects in the catalog and perform tasks specific to those objects. The objects and options that are available to you are determined by your system privileges and the permissions assigned to individual folders and objects.

Use the Catalog page to:

- Perform basic tasks. For example, open, copy, delete, search for objects, and create folders.

- Move objects by dragging and dropping them to different locations within the catalog.

- Perform object-specific tasks. For example, assigning an agent or adding an object to a briefing book.

- Archive specific folders, objects, or the entire catalog.

- Set permissions on individual objects and folders.

For more information, see:

- "What is the Oracle BI Presentation Catalog?"

- "Who Uses the Catalog?"

- "Searching for Objects in the Catalog"

- "Object-Specific Tasks"

Components

Folders pane

Use the "Folders pane" to display the catalog as a directory hierarchy or to display only those folders and objects that you created or that you marked as your favorites.

Search pane

Use the "Search pane" to provide search criteria and initiate a catalog search.

Catalog area

Use the "Catalog area" to view the results of your search, open folders to browse content, and initiate tasks specific to an object.

Tasks pane

Use the "Tasks pane" to initiate tasks specific to an object.

Preview pane

Use the "Preview pane" to preview the object that you selected in the Catalog area. This pane is not visible until you click the button to display it.

Toolbar

The buttons that are enabled for the toolbar vary between object types. The toolbar contains the following buttons:

- **User View** — Defaults to **User View**. You can select **Admin View** if you have administrative permissions. Admin View enables you to perform all

administrative tasks and access the catalog root folders, which provide detailed information about all users and system objects.

■ **New** — Use to create new objects. After you select the object to create, the object's editor displays where you can begin building the object.

If you have administrative permissions, then the New menu displays the **Folder** link that you can select to create a catalog folder.

■ **Refresh** — Use to update the catalog with content or folder changes.

■ **Up** — Use to navigate to a parent folder or directory.

■ **Show/Hide folders panes** — Use to hide or show the Folders pane and Tasks pane.

■ **Search** — Use to display the Search pane. Deselect this button to display the Folders pane.

■ **Change list view type** — Use this list to select how much information about folders and objects to display in the Catalog area.

■ **Descriptive** — Select to display the object or folder's name, type, owner, and date modified and Expand, Open, Edit, and More links. This view enables you to perform tasks directly from the object's listing.

■ **Details** — Select to display the object or folder's name, type, owner, and date modified.

■ **List** — Select to display object and folder name, only.

■ **View** — Use to view the selected object. For example, if you select a report and click this button, the report viewer launches and shows you the report.

■ **Edit** — Use to modify a selected object using the associated editor or run a script, URL, or web service action.

■ **Print** — Use to print an analysis, a dashboard, or a dashboard page. For more information, see:

– "Printing Views"

– "Printing Dashboard Pages"

■ **Export** — Use to export an analysis, a dashboard, or a dashboard page. For more information, see:

– "About Exporting Results"

– "About Exporting Dashboards and Dashboard Pages"

■ **Delete** — Use to remove a selected object or folder from the catalog.

When deleting shared folders or objects, be aware that other users who have added shared objects to their personal dashboards no longer have access to them.

■ **Copy** — Use to copy a selected object or folder to paste in another directory.

■ **Paste** — Use to paste a copied object to another location.

Location

Displays the directory path of a selected object. Use as a way to determine where you are within the directory structure.

Show Hidden Items

Select to display all object-related settings and data such as system privileges, metadata, and cached data. When you select this option, hidden folders, including the following folders, are displayed: _Portal, _Filters, _Prefs, _Alerts, _Agents, and _Delivers.

Catalog area

Use this area to view your search results and browse business intelligence objects and folders. If you use the full-text search, messages will display at the top of the Catalog area indicating the indexing status (indexing makes the objects available to the search) or if you need to refine your search.

You can also use this pane to perform object-specific tasks and to move objects by dragging and dropping them to different areas within the Catalog. You can drag and drop objects within the Catalog area or from the Catalog area to the "Folders pane."

This area is part of the "Catalog page."

For more information, see:

- "What is the Oracle BI Presentation Catalog?"
- "Who Uses the Catalog?"
- "Searching for Objects in the Catalog"
- "Object-Specific Tasks"

Components

Type

Use this list to specify which object type to display in the catalog area. Selecting an object type applies only to the folder that you are viewing and not to the whole catalog. For example, if you are viewing content in the /My Folders location and select the Dashboard object type, only the dashboards within the /My Folders location display in the Catalog area.

Sort

This field displays if you selected either the **List** or **Descriptive** view type in the **Change list view type** list located in the "Catalog page" toolbar.

Use this list to specify how you want to sort the objects in the Catalog area. By default, objects display in alphabetical order (A-Z). For example, you can select the Last Modified Ascending option to view the object chronologically.

Show More Details

This field displays if you selected the **Descriptive** view type in the **Change list view type** list located in the "Catalog page" toolbar.

Use to display more information about specific object types. For example, if the Catalog pane listing contains agents and you select the **Show More Details** option, the information listed with the agent includes last run, next run, recipient, and priority information.

Object/Folder Links

Use to view a list of catalog objects and to initiate a specific task from an object. The way in which the objects display in this area (for example, list or details) is determined by the view type selection that you made in the **Change list view type** list located in the "Catalog page" toolbar.

The tasks available for each object depend upon the object's type, the object's permissions, and your privileges. The tasks that display in the Catalog area also display in the "Tasks pane." For descriptions of these tasks, see "Tasks Options."

If the Catalog area displays results from a full-text search and those results contain dashboards, the Catalog area provides the **Open with Search Filter** option which, when clicked opens and applies the search criteria values as prompt values to the dashboard.

Catalog pane

Use this pane to add objects from the Oracle BI Presentation Catalog to analyses, dashboards, and so on. The objects available for you to add depend on the task that you are performing. For example, if you are creating:

- A dashboard, you can add objects that are appropriate to add to a dashboard (such as pages, columns, analyses, and prompts) and for which you have appropriate permissions.

- An analysis, you can add saved columns, filters, calculated items, and groups for which you have appropriate permissions.

This pane is displayed in numerous places, including the tabs of the "Analysis editor," the "Dashboard builder," and the "New Calculated Item dialog."

For more information, see:

- "Specifying the Criteria for Analyses"

- "Adding Content to Dashboards"

Components

List

This box is not available in the Dashboard builder or the New Calculated Item dialog.

Use this box to select which objects to display in the Catalog Tree. The options can vary depending on whether the Catalog pane is displayed but can include the following:

- **All** —Use this option on the "Analysis editor: Criteria tab" to display all filters (for Criteria tab only), calculated items, and groups. On all other tabs of the Analysis editor, use this option to include all calculated items and groups.

- **Filters** — Use this option to display only filters.

- **Calculated Items** — Use this option to display only calculated items.

- **Groups** — Use this option to display only groups.

- **Saved Columns** — Use this option to display saved columns.

Catalog Tree

Displays catalog objects that are appropriate for the task that you are currently performing and for which you have appropriate permissions.

Use this tree to:

- Add a saved column, filter, calculated item, and group to an analysis. To do so, select the saved column, filter, calculated item, or group and click the **Add More Options** button.

- Add an object to a dashboard. To do so, drag and drop the object to the "Page Layout area."

- Add a group or calculated item as a selection step. To do so, drag and drop the object to the appropriate column in the "Selection Steps pane."

Toolbar

This toolbar is available only in the Catalog pane displayed in the tabs of the Analysis editor.

The toolbar contains the following buttons:

- **Add More Options** — Use this button to add a saved column, filter, calculated item, or group to the analysis. To do so, first select the object, and then click this button:

  - For a filter, the "Apply Saved Filter dialog" is displayed, where you specify how the filter is to be applied to the analysis.

  - For a group, the following options are displayed:

    * **Add** — Use this option to add the group to the analysis. You see an "Add: *group-name*" step in the Selection Steps pane. You see an outline value for the group in a table or pivot table.

    * **Add Members** — Use this option to add the members of the group to the analysis. You see an "Add: Members of *group-name*" step in the Selection Steps pane. You do not see an outline value in a table or pivot table; you see the members of the group.

  - For a calculated item, use this button to add the calculated item to the analysis.

  - For a saved column, the following options are displayed:

    * **Add** — Use this option to add the saved column to the analysis. Any changes made to the saved column in the catalog will impact the analysis.

    * **Add Copy** — Use this option to copy the saved column to the analysis. Any changes made to the saved column in the catalog will not impact the analysis.

- **View** — This button is available only when you select a filter. Use this button to view information about the selected object. When you click this button, the appropriate view dialog displays. For example, from the "View Saved Filter dialog," you can view the filter's Catalog path and the syntax of the filter (for example, Region is equal to/is in EASTERN REGION; SOUTHERN REGION).

- **Edit** — Use this button to edit the selected object.

- **Refresh** — Use this button to refresh the objects that are displayed in the Catalog Tree. For example, if you cannot locate a specific saved filter, then click the **Refresh** button to display it in the Catalog Tree.

Catalog pane for KPI Contribution Wheel

Use this pane to work with objects in the Oracle BI Presentation Catalog. For example, you can add a predefined KPI to the "KPI Contribution Wheel editor: Diagram tab" or add "Related Documents"to the "KPI Contribution Wheel editor: Details tab."

For more information, see "Creating KPI Contribution Wheels."

This pane is part of the "KPI Contribution Wheel editor."

Components

Catalog Tree

Displays catalog objects for which you have appropriate permissions.

Use this tree to work with the catalog objects. For example, you can add a KPI to the "KPI Contribution Wheel editor: Diagram tab" by dragging and dropping it.

Toolbar

The toolbar contains the following buttons:

- **Open** — Use this option to open the selected object. (Whether you can open an object and whether the object opens as read-only depends on your privileges and permissions and on the type of object.)

- **Refresh** — Use this button to refresh the objects that are displayed in the Catalog Tree. For example, if you cannot locate a specific saved filter, then click the **Refresh** button to display it in the Catalog Tree.

Catalog pane for Scorecard

Use this pane to work with objects in the Oracle BI Presentation Catalog. For example, if you are creating an objective, you can add predefined KPIs to evaluate the objective's performance and progress by dragging and dropping KPIs from this pane to the objective.

For more information, see:

- "Creating Objectives"

- "Creating Initiatives"

This pane is part of the "Scorecard editor" and the "KPI Watchlist editor."

Components

Catalog Tree

Displays catalog objects for which you have appropriate permissions.

Use this tree to work with the catalog objects. For example, you can add a KPI to an objective or initiative by dragging and dropping it, you can open a KPI, and so on.

Toolbar

The toolbar contains the following buttons:

- **New Object** — (This button is available only in the KPI Watchlist editor when the editor is displayed within a scorecard.) Displays these options:

  - **New Folder** — Use this option to create a folder. To rename the folder, right-click the folder, select **Rename**, and enter a new name.

  - **KPI** — Use this option to create a KPI. When you select this option the Select Subject Area menu is displayed, where you select the subject area, and then the "KPI editor" is displayed.

  - **Create Agent** — (This option is available only when you select a KPI.) Use this option to display the "Create New Agent dialog," where you create an agent from the KPI.

- **Open** — Use this option to open the selected object. (Whether you can open an object and whether the object opens as read-only depends on your privileges and permissions and on the type of object.)

- **Delete** — (This option is available only in the KPI Watchlist editor when the editor is displayed within a scorecard.) Use this option to delete the selected folder or object.

- **Refresh** — Use this button to refresh the objects that are displayed in the Catalog Tree. For example, if you cannot locate a specific saved filter, then click the **Refresh** button to display it in the Catalog Tree.

Causal Linkage dialog

Use this dialog to specify the strength of a cause and effect relationship, and how the values of one impact the values of the other.

For more information, see:

■   "Related Items pane"

Components

Strength

Use this box to specify whether the strength of the cause and effect relationship is **Strong**, **Moderate**, or **Weak**.

Proportionality

Use this box to specify whether changes in performance or value in the cause and effect relationship are directly proportional (**Direct**) or inversely proportional (**Inverse**).

Cause & Effect Map Preferences dialog

Use this dialog to specify how cause and effect relationships are to be displayed on a cause & effect map.

For more information, see:

- "What Are Cause & Effect Maps?"
- "Creating Cause & Effect Maps"

Components

General

Use the "Cause & Effect Map Preferences dialog: General tab" to specify which types of cause and effect relationships are to be displayed on a cause & effect map. You can also specify the slant of the lines that link objects and how many levels of the strategy hierarchy are to be displayed.

Hidden Nodes

Use the "Cause & Effect Map Preferences dialog: Hidden Nodes tab" to specify which objectives and KPIs on a cause & effect map are to be hidden.

Cause & Effect Map Preferences dialog: General tab

Use this tab of the "Cause & Effect Map Preferences dialog" to specify which types of cause and effect relationships are to be displayed on a cause & effect map. You can also specify the slant of the lines that link objects and how many levels of the strategy hierarchy are to be displayed.

For more information, see:

- "What Are Cause & Effect Maps?"

- "Creating Cause & Effect Maps"

Components

Show Link Strengths

Displays the following boxes to specify which types of cause and effect relationships are to be displayed on the map:

- **Strong** — Use this option to specify that strong cause and effect relationships are to be displayed.

- **Moderate** — Use this option to specify that moderate cause and effect relationships are to be displayed.

- **Weak** — Use this option to specify that weak cause and effect relationships are to be displayed.

Show Link Interactions

Displays the following boxes to specify whether only associated objectives and KPIs whose changes in performance or value are directly proportional to the objective are to be displayed on the map, or only associated objectives and KPIs whose changes in performance or value are inversely proportional to the objective are to be displayed on the map, or both:

- **Direct** — Use this option to specify that only associated objectives and KPIs whose changes in performance or value are directly proportional to the objective are to be displayed.

- **Inverse** — Use this option to specify that associated objectives and KPIs whose changes in performance or value are inversely proportional to the objective are to be displayed.

Link Angle

Use this box to specify the degree to which the lines that link objects on the map are to slant. To use straight lines, specify 0.

Number of Levels

Use this box to specify how many influencing, child objectives, to display on the map. This is helpful to reduce the visual complexity of the map.

Related Topics

"Cause & Effect Map Preferences dialog: Hidden Nodes tab"

Cause & Effect Map Preferences dialog: Hidden Nodes tab

Use this tab of the "Cause & Effect Map Preferences dialog" to specify which objectives and KPIs on a cause & effect map are to be hidden.

You might, for example, want to hide some nodes so that you can view only the nodes for which you are the business owner.

For more information, see:

- "What Are Cause & Effect Maps?"
- "Creating Cause & Effect Maps"

Components

Associated Objectives and KPIs (left pane)
Displays all objectives and KPIs that are associated with the objective or KPI that is the root of the map.

Hidden Objectives and KPIs (right pane)
Displays all objectives and KPIs that are to be hidden on the map.

Shuttle
Use these buttons move objectives and KPIs between the two panes.

Cause & Effect Map tab: Details tab

Use this tab of the "Scorecard editor: Cause & Effect Map tab" to specify supporting information for a cause & effect map.

For more information, see:

- "What Are Cause & Effect Maps?"
- "Creating Cause & Effect Maps"

Components

Name

Displays the name of the cause & effect map.

Description

Use this field to enter a description of the cause & effect map.

Business Owner

Displays the user ID of the person responsible for managing the cause & effect map. To specify the business owner, click the **Set User** button to display the "Business Owner dialog," where you can search for and select the business owner.

Objectives and KPIs

Lists the objectives and KPIs that are displayed in the cause & effect map.

Use this watchlist to view and manage these objectives and KPIs. For more information about watchlists, see "Watchlists."

Related Documents

Use the "Related Documents area" to view and manage documents that provide supporting information to the cause & effect map.

Related Documents area

Displays the documents that provide supporting information to a scorecard object, such as an objective.

Use this area to view and manage the documents:

- To add a new document, click the **New Row** button to display the "New Related Document dialog."

- To edit document, select the document in the list and click the **Edit Row** button to display the "Edit Related Document dialog."

- To delete a document, select the document in the list and click the **Delete Row** button.

Cause & Effect Map tab: Diagram tab

Use this tab of the "Scorecard editor: Cause & Effect Map tab" to create a diagram that illustrates the cause and effect relationships of an objective or KPI.

For more information, see:

- "What Are Cause & Effect Maps?"

- "Creating Cause & Effect Maps"

Components

Diagram

Use this area to drag and drop the objective or KPI whose cause and effect relationships you want to diagram.

Each node (that is, the representation of an objective or KPI) on the diagram shows the status of the objective or KPI by displaying the icon and color that represents the assessment range. A KPI node also displays the actual value of the KPI and the percent variance from the target.

To:

- Display options that allow you to work with a node, right-click the node or click the **Options** button (on the right side of the node) to display the "Node Options Menu."

- Display additional performance data for the KPI, such as target value or variance, click the down arrow at the bottom center of the node. To collapse this data, click the up arrow.

- Edit a causal linkage, right-click the linkage line and select **Edit Causal Linkage**. The "Causal Linkage dialog" is displayed.

- Delete a causal linkage, right-click the linkage line and select **Delete Causal Linkage**.

- Zoom in and out of the diagram or to set preferences, use the toolbar buttons on the "Scorecard editor: Cause & Effect Map tab."

- Work with comments (if any), click the **Comment** button in the upper-right corner of a node to display the "Status window," where you can read the comments that previously have been added, add another comment, or reply to a comment. See "About Comments."

- Work with status overrides (if any), click the red asterisk in a node to display the "Status window," where you can view the overrides that previously have been applied or apply another override. See "About Status Overrides."

- View a KPI contribution wheel diagram, right-click the KPI and select **View KPI Contribution Wheel** from the context menu (see "About KPI Contribution Wheel Diagrams" for additional information). Note that you can also click the **Options** button on the right side of the node and select **View KPI Contribution Wheel** from the "Node Options Menu."

Legend

Use the "Legend pane" to view the legend for the cause & effect map.

Change Aggregation Rule dialog

Use this dialog to select the aggregation rule for a column when performing a direct database request. For more information, see "Working with Direct Database Requests."

Components

Column

Displays the name of the column for which you are changing the aggregation rule.

Aggregation Rule

Use to select the aggregation rule for this column. In this dialog, **Default** indicates the default aggregation rule; that is, the rule that is determined by the Oracle BI Server (such as the rule that is defined in the Oracle BI repository).

For a list of the valid values, see "Aggregation Rules and Functions."

Change Column Labels

Use this dialog to change the labels of the columns (such as **% Change**) that are displayed in a KPI watchlist.

Table D–7, " Commonly Used KPI Data Columns" describes some of the commonly used columns.

You can change the column labels in a stand-alone KPI watchlist and watchlists in Objectives, Initiatives, Perspectives, Smart Watchlists, Custom Views, Strategy Tree Views, Strategy Maps, and Cause Effect Maps. You cannot add additional customizations to a watchlist on a dashboard (except to show or hide columns temporarily), but must instead use the Scorecard or KPI Watchlist editors to add the customizations.

For more information, see:

- "What Are KPI Watchlists?"
- "Creating KPI Watchlists"
- "Watchlists"

Components

Column
Use this box to enter a new label for the column. For example, you might want to change the **% Change** column label to **Percent Change**.

Choose Request Column dialog

Use this dialog, when adding an inline action to an agent that is conditionally executed based on an analysis, to select a column in the analysis whose value is to be used as the value of an action parameter.

For more information, see:

- "What Are Actions?"
- "Adding Actions to Agents"
- "Agent editor: Actions tab"

Components

Columns
Use this list to select the request column whose value is to be used as the value of an action parameter.

Name
Displays the name of the selected column.

Note

- If the action is being executed per row, then the value from each row is passed to the parameter; otherwise, the value from the first row are passed.

Related Topics

Chapter 10, "Working with Conditions"
"Agent editor: Condition tab"

Choose Starting Nodes dialog

Use this dialog to select the nodes (that is, initiatives, objectives, and KPIs) with which you want to start in a smart watchlist.

For more information, see:

- "Filter pane: Relationship tab"
- "What Are Smart Watchlists?"

Components

Available Nodes

Displays the nodes in the "Strategy pane" and the "Initiatives pane." Use this area to select the nodes that you want to start with in a smart watchlist and move them to the Select Nodes area.

Selected Nodes

Use this area to view the nodes that you have selected to start with in a smart watchlist.

To remove nodes from this area, select them and click either **Remove** (for one node) or **Remove All** (for multiple nodes).

Collaboration pane

Use this pane to identify information that is helpful for collaborating on KPI details, an initiative, or an objective, including the business owner, key resources, and related documents.

For more information, see:

- "Working with KPI Details"
- "Creating Initiatives"
- "Creating Objectives"

This pane is part of the "Scorecard editor: KPI Details tab," "Scorecard editor: Initiative Details tab," and "Scorecard editor: Objective Details tab."

Components

Comments

Displays the comments that have been added to the KPI, initiative, or objective. For more about comments, see "About Comments."

Use this area to view and manage the comments. Before you begin to work with comments, ensure that the point of view controls reflect the values for which you want to add or view comments.

To:

- Add a new comment, click the **New Comment** button to display the "New Comment dialog."
- Reply to a comment, click the **Reply** link to display the "Reply dialog."
- Expand or collapse all comments, click the **Expand All** or **Collapse All** button.
- Expand or collapse an individual comment, click the **Expand** or **Collapse** button.

Business Owner

Displays the user ID of the person responsible for managing the initiative, objective, or KPI. To specify the business owner, click the **Set User** button to display the "Select Business Owner dialog," where you can search for and select the business owner.

Related Documents

(for KPI details) Displays links to documents that provide supporting information to the KPI. You added these links when you created or edited the KPI. For more information, see "Creating KPIs."

(for initiatives and objectives) Use the "Related Documents area" to view and manage documents that provide supporting information to the initiative or objective.

Key Resources

This area is available only for initiatives.

Displays the key resources for an initiative, that is the users who are working on an initiative.

Use this area to view and manage the key resources:

- To add a new key resource, click the **New Row** button to display the "Key Resource dialog."

- To edit a key resource, select the key resource in the list and click the **Edit Row** button to display the "Key Resource dialog."

- To delete a key resource, select the key resource in the list and click the **Delete Row** button.

Color Selector dialog

Use this dialog to specify the color in which the cells that contain the KPI's actual values are displayed. The color that you choose reflects the value's performance levels.

Components

Color Samples

Use these samples to select a color. When you select a color, a sample of the color and its hexadecimal value displays in the **Customizations** field.

Customizations

Use this box to modify the selected color's hexadecimal value or enter the hexadecimal value corresponding to the desired color (for example, #FF0000 or #996600).

Related Topics

"Creating KPIs"

Column Properties dialog

Use this dialog to:

- Edit the properties for a column or hierarchy level to control the appearance and layout of a column or hierarchy level and its contents
- Specify formatting to apply only if the contents of the column or hierarchy level meet certain conditions
- Specify the interactions that are to occur when users click in a data view
- Set the properties of a column that affect write back

This dialog is also displayed as:

Hierarchical Level Properties dialog

For more information, see:

- Chapter 8, "Formatting Analyses, Views, and Dashboard Pages"
- "Adding Actions to Analyses"
- "Editing Actions and Action Links Added to Analyses"

Components

Style

Use the "Column Properties dialog: Style tab" to format the content of columns and hierarchy levels.

Column Format

Use the "Column Properties dialog: Column Format tab" to modify how folder and column headings are displayed in the analysis and to specify how repeated values display in the column.

Data Format

Use the "Column Properties dialog: Data Format tab" to override the data's default display characteristics.

Conditional Format

Use the "Column Properties dialog: Conditional Format tab" to add a condition, or filter, to the column or hierarchy level.

Interaction

Use the "Column Properties dialog: Interaction tab" to specify what you want to happen when the user clicks a value for a column or hierarchy level.

Write Back

Use the "Column Properties dialog: Write Back tab" to set the properties of a column that enables it for writing back values from a table.

Save As Default

Use this button to affect the default property settings for columns and hierarchy levels, based on the specifications in this dialog. You need the appropriate privileges to save the properties as a systemwide default.

- Select **Reset dialog values to column defaults** to return the property values for the column or hierarchy level back to the last saved default values.

  To restore the defaults that were shipped with the product, you must manually delete the default formats file from the Oracle BI Presentation Catalog.

- Select **Save as the system-wide default for <name>** to save these properties as the system-wide default for this column or hierarchy level in all analyses in which it is used.

- Select **Save as the system-wide default for this data type** to save these properties as the system-wide default for all columns or hierarchy levels that have the same data type as this column or hierarchy level.

- Select **Delete the system-wide default for <name>** to remove properties saved as the system-wide default for this column or hierarchy level in all analyses in which it is used.

- Select **Delete the system-wide default for this data type** to remove properties saved as the system-wide default for all columns or hierarchy levels that have the same data type as this column or hierarchy level.

Click **OK** to save these properties for this column or hierarchy level in this analysis only.

The **Save as Default** button applies slightly differently to the various tabs of this dialog:

- The properties on the Style, Column Format, and Data Format tabs are saved or restored when you select an option with this button.

- The settings on the Conditional Format tab cannot be saved or restored.

- On the Write Back tab, only the **Enable Write Back** property can be saved or restored.

- On the Interaction tab, you can save and restore properties, but the display differs for action links. If you set the interaction mode to action links, then you can create action links and they are displayed in the Action Links area of the tab.

Column Properties dialog: Column Format tab

Use this tab of the "Column Properties dialog" to modify how folder and column headings are displayed in the analysis and to specify how repeated values display in the column or hierarchy level.

This dialog is also displayed as:

Hierarchical Level Properties dialog: Level Format tab

For more information, see Chapter 8, "Formatting Analyses, Views, and Dashboard Pages."

Components

Hide
Not available for hierarchy levels. Use this box to hide the column in the analysis. You can hide columns whose appearance adds no value to the analysis. Hidden columns do not affect the aggregation of the values. For example, you want to build an analysis that includes only customers located in Illinois. To build the proper filter, you must include the column called Customers.State. Because this column was added for filtering purposes, only, and its appearance adds no value to the analysis, then you can hide this column.

Folder Heading and Column Heading
Not available for hierarchy levels. Use these fields to view or modify the name of the folder or column that is provided by the repository in which the column resides. To modify this field, you must first select the **Custom Headings** box, then you can specify a different heading to use. To modify the heading's appearance, click the **Edit Format** button.

You can reference variables in the **Folder Heading** and **Column Heading** fields. For the syntax to use, see "What Is the Syntax for Referencing Variables?" For more information on variables, see "Using Variables."

Edit Format
Use this button to modify the corresponding heading's format. For example, you can modify the heading to be displayed in 14-point bold Helvetica font. Any formatting changes that you specify override the Oracle BI EE style sheet and any formatting preferences that you specified on the "Column Properties dialog: Style tab" for this column.

Custom Headings
Use this box to enable the **Folder Heading** and **Column Heading** fields for editing. The fields are read-only until you select this box.

Contains HTML Markup
If you are customizing the headings, use this option to work with HTML codes, as described in "Working with HTML Markup."

Show TimeZone
This box displays only for the columns and hierarchy levels that have the date/time data type. Use this box to include the Time Zone button with the column or hierarchy

level. Click the box multiple times to move through the three different states. When the box is selected, the button is displayed. When the box is not selected, the button is not displayed. When the box appears to be not available, then the default system behavior is used.

The Time Zone button displays with the data column or hierarchy level in a view, and you can click the button to view the name of the display time zone. For more information about modifying the time zone, see "Display Time Zone" in "Column Properties dialog: Data Format tab."

Value Suppression

Use the buttons in this area to affect the display of repeating data values for the column or hierarchy level.

The data in one column or hierarchy level of a folder might be repeated in relation to rows of data in other columns or hierarchy levels in the folder. For example, if one column lists customer names and another column lists the regions that those customers are in, then the region data could be repeated for each customer row. You can choose to display duplicate data only once, or display it for every row. Displaying repeating or duplicated data only once can make a table somewhat easier to read, and can make distinctions in that data more apparent.

You can select one of the following buttons:

- **Suppress** — Displays repeating data only once and suppresses the duplicate rows in the column or hierarchy level.

- **Repeat** — Displays repeating data for every row in the column or hierarchy level.

Column Properties dialog: Conditional Format tab

Use this tab of the "Column Properties dialog" to add a condition to a column or hierarchy level. You specify a condition to affect the formatting of values based on certain criteria. The formatting that you specify for a column or hierarchy level on this tab is visible in any view that can display data and its formatting, except for graphs, funnel graphs, and gauges. For information on conditional formatting in graphs, see "Graph Formatting Based on Columns."

This dialog is also displayed as:

Hierarchical Level Properties dialog: Conditional Format tab
Conditional Formatting dialog

For more information, see "Applying Conditional Formatting to Tables, Pivot Tables, Performance Tiles, Graphs, Heat Matrices, and Trellises."

Components

Add Condition

Use this button to begin the process of creating a conditional format by adding a condition to any type of column or to a hierarchy level.

When you access the "New Condition dialog" from the Conditional Format tab, the dialog shows the options that apply to conditional formats. For example, the Operator list contains the operators that are used in conditional formats, and you can apply presentation variables. For information on presentation variables, see "Using Variables."

When you have created a conditional format, you see it listed at the top of this tab. Use the buttons that are displayed with the conditional format to edit the condition, format the values, or delete the format.

Clear All

Use this button to delete from the tab any conditional formats that you have created. This button is available only when at least one format exists.

Column Properties dialog: Data Format tab

Use this tab of the "Column Properties dialog" to override the data's default display characteristics by specifying custom formats. The options that display on this tab depend upon the data type (text, numeric, or date) of the column or hierarchy level. For example, if the data type is numeric, then you can add the thousands separator to the values.

This dialog is also displayed as:

Data Format dialog
Hierarchical Level Properties dialog: Data Format tab

For more information, see:

- "Custom Format Masks"
- "Custom Format Strings"

Components

Override Default Data Format

This box is displayed for all data types.

Use this box to specify to enter an override format for the column or hierarchy level. Selecting this box enables the remainder of the settings on the tab.

Treat Text As

This list is displayed for the text data type.

Use this list to specify how you want to display the text for the values. You can select from options such as plain text, HTML, or a link. Based on your choice, the "Custom Text Format" field displays the applicable HTML string used to display the data.

If you select the **Custom Text Format** option, then you can type the custom format into the **Custom Text Format** field.

Custom Text Format

This field is displayed for the text data type.

Use this field to view the HTML string that corresponds to the option that you selected in the **Treat Text As** list. This field is read-only for all options except the **Custom Text Format** option.

When you specify the **Custom Text Format** option, you use this field to write HTML calls that provide formatting. You can also type any valid HTML string, including JavaScript, VBScript, and so on.

The first character must be an at sign character (@). This enables devices that are incapable of displaying the custom format to display the data in the appropriate default format.

For example, the following example HTML code sets the width and height of a column or hierarchy level in tables and pivot tables. In the example, the text html enclosed in brackets ([html]) means to use HTML, and the at sign (@) character represents the dynamic contents of the column or hierarchy level.

```
@[html]<span style="width:200px; height:50px">@</span>
```

If you are unfamiliar with HTML, JavaScript, VBScript, and so on, then consult a third-party reference.

Treat Numbers As

This list is displayed for the numeric data type.

Use this list to specify how you want to display the number values. You can select from options such as **Currency**, **Percentage**, and **Month Name**. The option that you select determines the fields that display in the Data Format tab.

Currency Symbol

This list is displayed if you selected the **Currency** option in the **Treat Numbers As** list.

Use this list to select the currency symbol to be displayed in the column or hierarchy level. For example, you can select the British Pound or the Polish Zloty.

To use the symbol of a user's preferred currency, select the **User's Preferred Currency** option. (Users specify their preferred currencies in the "My Account dialog.")

Negative Format

This list is displayed if you selected the **Number**, **Currency**, or **Percentage** option in the **Treat Numbers As** list.

Use this field to specify how you want negative numbers to be displayed in the column or hierarchy level. For example, you can select negative numbers to be displayed as -123 or (123).

Decimal Places

This list is displayed if you selected the **Number**, **Currency**, or **Percentage** option in the **Treat Numbers As** list.

Use this list to specify how many numbers you want to include after the decimal point when displaying the value in a view. For example, you can specify two decimal places. Decimal values are always rounded rather than truncated.

In this list, you can use the **up to** options to indicate the maximum number of decimal places to include. In the database, values for a single column or hierarchy level can be stored with various numbers of decimal places. Some might have 2, 4, or 6 for example. If you specify **up to 4** in this list, then values are displayed with no more than 4 decimal places, but potentially with less if the value has less than 4 decimal places.

Use 1000's Separator

This box is displayed if you selected the **Number**, **Currency**, or **Percentage** option in the **Treat Numbers As** list.

Select this box to include a separator, such as a comma, in numbers that are 1000 or greater.

Scale for % (x 100)

This box is displayed if you selected the **Percentage** option in the **Treat Numbers As** list.

Select this box to multiple the data by 100 to display it as a percentage.

For example, suppose that you had a column that contained the ratio 0.0326 (meaning 3.26 percent). Selecting this box multiples the ratio 0.0326 by 100 to display 3.26% (rather than 0.0326%).

Custom Numeric Format

This field is displayed if you selected the **Custom** option in the **Treat Numbers As** list.

Use this field to enter a custom number format or to create a custom format mask for a numeric field. See "Custom Format Strings" for custom format strings that you can enter or see "Custom Format Masks" to create a custom format mask for a numeric field.

You can use the number sign (#) to include significant digits, and the number zero (0) to include as many digits as specified, even if the number does not contain that detail.

For example, specifying ##.# in the United States shows 12.34 as 12.3, and specifying ##.000 shows 12.34 as 12.340

Date Format

This list is displayed for the date and time zone data type.

Use this list to specify how you want the date to display in the column or hierarchy level. For example, 5/8/2003 07:34:57 AM or 05/08/2003 7:34:57. If you select the **Custom** option, then you can create a date format in the **Custom Date Format** field.

Custom Date Format

This field is displayed for the date and time zone data type and only if you selected the **Custom** option from the **Date Format** list.

Use this field to enter a date format. For custom format strings that you can enter, see "Custom Format Strings."

Display Time Zone

This list is displayed for the date and time zone data type.

Use this list to select and apply a specific time zone to the column or hierarchy level. Note the following default conditions:

- If you select the **Default** option and the administrator has specified a system default time zone, then the system default time zone is used to display the time value in the column or hierarchy level.

- If you select the **Default** option and the administrator has not specified a system default time zone, then the user's preferred time zone is used to display the time value in the column or hierarchy level.

- If you select the **Data time zone** option, then the time values are displayed in the column or hierarchy level exactly as they are stored in the database.

- If you select a specific time zone (for example, **GMT +05:45 Kathmandu**) and the administrator has specified a system default time zone, then the system's default time zone is converted into the specific time zone that you selected.

Data Time Zone Offset

This field is displayed for the date and time zone data type.

Use this field to specify an offset for the time zone that you selected. For example, suppose you selected **GMT +05:45 Kathmandu**. You can specify an offset of 15 minutes to use when displaying time values for columns or hierarchy levels.

Column Properties dialog: Interaction tab

Use this tab of the "Column Properties dialog" to specify what you want to happen when the user clicks a column heading or value (for example, the user can click a column value to drill down into the data that was summed to create the column value).

This dialog is also displayed as:

Hierarchical Level Properties dialog: Interaction tab

For more information, see:

- "Interactions in Views"
- "About Drilling in Results"
- "What Are Actions?"
- "Adding Actions to Analyses"
- "Editing Actions and Action Links Added to Analyses"

Components

Column Heading: Primary Interaction and Value: Primary Interaction

Use this box to specify what happens when you click either the column heading or a value in the column or hierarchy level. The values that are available depend on the type of column and on column heading versus value.

- **Default (type)** — Specifies what happens by default when you click the column heading or a value. When you first install Oracle Business Intelligence, the default depends on the type of column. You can change the default by selecting another option from this list, then clicking the **Save as Default** button to save that option as the default for the column.

- **None** — Specifies that nothing happens when you click the column heading or a value. This option turns off drilling for attribute columns; it does not turn off drilling for hierarchical columns.

- **Drill** — Not available for hierarchical column headings. Specifies that you drill up or down after clicking the column heading or a value for a column.

- **Action Links** — For hierarchical column headings, this option is **Drill + Action Links**. Displays the Action Links area, where you add action links that apply when you click the column heading or a value.

- **Send Master-Detail Events** — Available only for attribute column values and is shown as **Drill + Send Master-Detail Events** for hierarchical column values. Use this option to specify that data views in this analysis are to act as master views in master-detail relationships and send master-detail events. This option also displays the **Specify channel** field, which you must complete if you select this option.

  For more information on master-detail relationships, see "What Is Master-Detail Linking of Views?"

Specify channel

This field is displayed only if you select **Send Master-Detail Events** in the **Primary Interaction** field for a value.

Use this field to enter one or more channels on which data views are to send master-detail events. Note that the name of the channel is case sensitive.

Action Links

The Action Links area is displayed if you select **Action Link** from the **Column Heading: Primary Interaction** box or **Value: Primary Interaction** box.

Displays the action links that have been added to a column heading or value, including the text of the action links, the actions associated with the links, and whether the action links are always enabled or enabled conditionally.

Use this area to view and manage action links:

- To add a new action link, click the **Add Action Link** button to display the "New Action Link dialog," where you create an action link.

- To edit an action link, select the link in the list and click the **Edit Action Link** button to display the "Edit Action Link dialog."

- To delete an action link, select the link in the list and click the **Delete Action Link** button.

- To specify that, when only one action link is available at runtime, the action link is to be executed immediately rather than be displayed in a menu for selection, select the **Do not display in a popup if only one action link is available at run time** box.

- Select the **Enable on Totals** check box when your analysis contains a total or grand total, and the associated attribute or measure column contains an action link or a conditional action link and you want the action link (or conditional action link) to be applied to both the column and the total or grand total. This does not apply to column heading action links and by default, this behavior is turned off.

Column Properties dialog: Style tab

Use this dialog to specify properties for displaying values in various locations such as in a column or hierarchy level of data, in a view such as a table, and in a column or section that you are adding to a dashboard page.

In this dialog, a setting of Default (System) indicates that a user has not yet overridden the default values that were provided during installation. Each property has only one default setting at a time.

For table, pivot table, and trellis views, the formatting that you specify in this dialog applies to the look of the view. The formatting is displayed slightly differently in a pivot table. For example, the default colors differ for tables and pivot tables.

For more information, see:

- Chapter 8, "Formatting Analyses, Views, and Dashboard Pages"
- "Adding Content to Dashboards"
- "Changing the Properties of Objects Added to Dashboard Pages"

This dialog is also displayed as:

Column Properties dialog
Edit Column Format dialog
Edit Font Format dialog
Edit Format dialog
Format Caption dialog
Format Container dialog
Format Legend View dialog
Format Logo dialog
Format Narrative View dialog
Format Static Text View dialog
Format Subtitle dialog
Format Text dialog
Format Time dialog
Format Title dialog
Format Title View dialog
Hierarchy Level Properties dialog: Style tab
Section Heading Properties dialog
Section Properties dialog
Sections Formatting dialog: Sections Format tab
Values Formatting dialog

Components

> **Note:** Not all components are available in each version of this dialog.

Toolbar

The toolbar displays only in those instances in which you can copy and paste cell formatting properties from one location to another. The toolbar contains the following buttons:

- **Clear Cell Format (restore defaults)** — Use this button to remove the specifications that you have made and to return the settings to the values that they had when defaults were last saved.

  The **Clear Cell Format (restore defaults)** and the **Copy Cell Format** buttons affect the settings in the following ways:

  - If the dialog has no tabs, then the button affects all the settings in the dialog.

  - If the dialog has multiple tabs, then the button affects only those settings in the tab in which the button is displayed.

- **Copy Cell Format** — Use this button to copy the formatting specifications from the dialog, so that you can apply them elsewhere.

- **Paste Cell Format** — Use this button to paste the formatting that you have copied into the appropriate location.

Caption

This box applies to totals that you include with tables and pivot tables. Use this box to specify custom text to insert into a total heading. Enter the text as follows

- @ — Displays the value of the data

  For example, if a total is specified for the Region column, and you enter the following text into the Caption field for the total heading:

  - All values in the @

  The total heading would display the following text for the Western Region:

  - All values in the Western Region

- "@" — Displays the @ symbol

- "\"" — Displays the double quote

- "\\" — Displays the \ symbol

- \ — Displays the \ symbol

  The double quote syntax is not limited to a single character. In general you can use a backslash escaped string inside double quotes. For example:

  "1234567890\\abc\\d\"x\"yz!@#$%^&*()-+=_{}[];:'|?/><,.` ~"

  Is displayed as:

  1234567890\abc\d"x"yz!@#$%^&*()-+=_{}[];:'|?/><,.` ~

For more information, see "Adding Totals to Tables and Pivot Tables."

Family

Use this box to select the font family.

Size (Cell)

Use this field to enter the font size.

Color

Use this box to select the font color.

Style

Use this box to select the font style, such as bold or italic.

Effects

Use this box to select the font effects, such as underline or strike through.

Horizontal Alignment

Use this box to select the type of horizontal alignment, such as left, right, or center.

Background Color

Use this box to select the color of the background.

Vertical Alignment

Use this box to select the type of vertical alignment, such as top, bottom, or center. Vertical alignment does not have any impact unless the column spans multiple rows of other columns.

Image

Use this field to specify the image to display inside of the cell. When you click the field, the Graphics dialog is displayed. For more information, see "Graphics dialog."

Wrap Text

Use this box to wrap the text within the column.

Note that if the width of a word extends beyond the width of the column, then the column is extended so as not to divide the word.

Border Position

Use this box to select the position of the border of the cell, column, or section, such as none or all. You can select or deselect custom borders by clicking the top, bottom, left, and right borders near the Position list.

Border Style

Use this box to select the style of the border, such as single, double, or thick.

Border Color

Use this box to select the color of the border.

Size (Additional Formatting Options)

These options are available only when this dialog is displayed as the Column Properties dialog or the Section Properties dialog.

Use these options to specify how a container (that is, a column or section) in a dashboard page is to be sized:

- **Best Fit** — The way this option sizes the container depends on the setting of the **Page Size** option in the "Dashboard Properties dialog." If **Page Size** is set to:
  - **Fit Content**, then this option:
    - * Sizes the container to fit the content
    - * Aligns content within the container to the left, by default
  - **Fill Browser Window**, then this option:
    - * Expands the container to fill the browser window, if the browser window is bigger than the content
    - * Aligns content within the container to the center, by default

This **Best Fit** option is the default for new dashboards.

- **Specific Size** — Sets the container to the size specified in the **Width** and **Height** fields. If the container is smaller than needed to fit the content, a scroll bar is displayed.

  If a dashboard page contains a frozen column, you might need to set this option to ensure that any remaining content on the page will be visible. For more information on freezing a column, see "Properties Buttons for Objects."

  Note that this option is set automatically if you enter a value in the **Width** or **Height** field.

- **Minimum Size** — Sets the container to at least the size specified in the **Width** and **Height** fields but increases the size if necessary to accommodate the content. A scroll bar is never displayed with this option.

When you print a dashboard page that includes a container in which a scroll bar is displayed, the entire container is printed, including the scroll bar.

You can also set the page size (either **Fit Content** or **Fill Browser Window**) at the dashboard level. For more information, see "Dashboard Properties dialog."

Width

Use this field to specify the width of the cell, column, or section on the page.

> **Note:** You can enter a percent sign (%) immediately following the number of pixels in the **Width** field. If you set the column properties for a dashboard page, and then select the **Printable PDF** option, the **Width** field cannot exceed 100%. See "Printing Dashboard Pages" for additional information.

Height

Use this field to specify the height.

Indent (Left Padding)

Use this field to specify the indent (that is, the left padding).

Right Padding

Use this field to specify the indent (that is, the right padding).

Top Padding

Use this field to specify the indent (that is, the top padding).

Bottom Padding

Use this field to specify the indent (that is, the bottom padding).

Use Custom CSS Style

Use this box to specify a custom cascading style sheet style to use for formatting, for example, background-color: #ff0000; font-size:28pt.

Use Custom CSS Class

Use this box to specify a custom cascading style sheet class to use for formatting.

Notes

- Attributes within the Border, Additional Formatting Options, and Custom CSS Style Options (HTML only) sections are not available for performance tile views.

- Export to Excel 2007+ and export to PDF do not support custom CSS styles. When you export an analysis, for which a custom CSS style or custom CSS class has been specified, to Excel 2007+ or to PDF, the customization will be lost. (See "Export Menu Options for Views and Results.")

Column Properties dialog: Write Back tab

Use this tab of the "Column Properties dialog" to set the properties of a column that affect writing back values to the data source to expose the write-back capability in tables. To use write back, you must also use the "Table Properties dialog: Write Back tab." Write back is not available for hierarchical columns.

For more information, see "Modifying Values and Performing Write Back."

This dialog is also displayed as:

Write Back Settings dialog

Components

Enable Write Back

Use this box to allow users to modify values in the column, if the following are true:

- If the column has been enabled for write back in the repository.

- If the column has a data type of measure, text, or date and time.

  Use care when allowing users to enter decimal values. Presentation Services simply sends the value that the user types to the Oracle BI Server, which must be configured to handle users by locale. For example, the Oracle BI Server must be aware of the locale for each user, so that it can properly handle a decimal value that includes either a period or comma as a decimal separator.

If the column has not been enabled for write back in the repository, then the **Enable Write Back** box is disabled.

When you select this box, additional options for write back are displayed.

Text Field Width

Use this box to select the width for the text field where users enter values, for text columns. Use the box to scroll among the values.

This box is not available on the Write Back Settings dialog.

Column Properties dialog for BI Composer

Use this dialog to perform the following tasks in the "BI Composer wizard -- Create Analysis: Select Columns panel":

- Enter a different name for a column

- Specify a formula for a column (such as adding a Rank or Percentile function).

For more information, see:

- "What Is BI Composer?"

- "Creating Analyses Using BI Composer"

- "Editing Analyses Using BI Composer"

Components

Column Name
Use this field to enter a new name for the column.

Column Formula
Use this field to enter a simple formula for the column.

You can edit the formula for an attribute column or a measure column. This editing affects the column only in the context of the analysis and does not modify the formula of the original column in the subject area. (This functionality is not available for hierarchical columns.)

A column formula specifies what the column values represent. In its most basic form, such as "Base Facts"."1-Revenue", a column takes the data from the data source as is. You can edit the formula to add functions, conditional expressions, and so on. This editing enables you to present analysis results in a variety of ways. For example, suppose that you want to perform what-if analysis and show what the revenue might be by product if you increased revenue by 10%. You can see this increase by changing the formula for the Revenue column to show the revenue increased by 10%.

> **Note:** There are no predefined column formulas or functions available for BI Composer.

Compound Layout

Use this area in the "Analysis editor: Results tab" to assemble different views for display on a dashboard. The views are displayed in separate containers within a compound layout. Each container has a toolbar.

Use this area also to view multiple compound layouts, each on its own tab. For more information, see "Creating Additional Compound Layouts."

Components

Views

Displays the views assembled for display on a dashboard, according the selected compound layout.

When you run a new analysis, the default assemblage of views can include a title view and either a table or pivot table view. The administrator might have configured a different default assemblage for your company.

Toolbar

The toolbar for each view contains the following buttons:

- **Format Container** — Use this button to display the "Format Container dialog" where you format the container in a compound layout for the view. For example, you can place a green background behind the view in the compound layout. To format the view itself, click the **Edit View** button.

- **View Properties** — Use this button to display the properties dialog for the view.

- **Edit View** — Use this button to display the editor for the view.

- **Remove View from Compound Layout** — Use this button to remove the view from a compound layout. The view remains as part of the analysis.

Contact Owner dialog

Use this dialog to send a message to the business owner of a Scorecard object, such as an initiative or objective.

For more information, see:

- "Contacting Business Owners"

Components

Owner
Displays the name of the person who is responsible for managing and improving the business value and performance of the scorecard object.

Subject
Use this box to enter the subject of your message.

Priority
Displays the options **High**, **Normal**, and **Low** to identify the importance and urgency of your message.

Message
Use this box to enter the text of your message.

Content Properties dialog

Use this dialog to specify the properties for the content in a table or pivot table view using the Layout pane.

For more information, see "Setting Properties for View Bodies and Drop Targets."

Components

Hide Content (show sections only)

Use this box to hide content and show only sections.

Limit columns based on section values

Use this box to specify whether to show only columns that have valid data within sections. For a column to be suppressed, all data values for the measure column must be null.

Limit rows based on section values

Use this box to specify whether to show only rows that have valid data within sections.

> **Note:** **Limit columns based on section values** and **Limit rows based on section values** are not affected by the **Include Null Values** option for analyses or views. See "Understanding Null Suppression" for additional information.

The remaining components of this dialog are described in "Column Properties dialog: Style tab."

Create Delivery Profile dialog

Use this dialog to create a delivery profile.

You can create any number of delivery profiles. However, only one profile can be active at any given time.

For more information, see:

- "What Are Devices and Delivery Profiles?"

- "Configuring Your Devices and Delivery Profiles"

This dialog is also displayed as:

Edit Delivery Profile dialog

Components

Name
Use this field to enter the name of the delivery profile. For example, for your office phone, you might use Phone - Office.

Device Priorities
Use this area to indicate, for each of your delivery devices, what priority content is to be delivered to the device. To do so, next to each delivery device to use when this profile is the active profile, select one or more of the priority content options — **High**, **Normal**, or **Low**.

For example, if you have a pager as one of your delivery devices, you might associate it with high priority content only. When you know that you must be away from your office frequently, and out of email range, you might associate your email device with low priority content.

> **Note:** Do not set the priority for devices that you do not want to use. Devices that do not have a priority selected are not used by the profile.

Create Device dialog

Use this dialog to create a delivery device.

For more information, see:

- "What Are Devices and Delivery Profiles?"
- "Configuring Your Devices and Delivery Profiles"

This dialog is also displayed as:

Edit Device dialog

Components

Name

Use this field to enter the name of the device.

Category

Use this box to select the device category. For example, if you are adding an email device, select **Email**. The value in this box affects the values that are available in the **Device Type** box.

Device Type

Use this box to select the type of device. For example, if you are adding an email device, select either **HTML Email** for **Plaintext Email**.

The list of device types is specified on the "Administration: Manage Device Types page."

Address/Number

Use this field to enter the address for the device. For example, for an email device, enter the email address or for a phone, enter the phone number.

> **Note:** When typing a phone number for a device, do not use punctuation such as spaces, dashes, or parentheses.

Create New Action dialog

Use this dialog to create an action.

For more information, see Chapter 11, "Working with Actions."

This dialog is also displayed as:

Add New Action dialog
New Action dialog
Edit Action dialog

Components

Browse

This button is not available for all action types.

Displays one of the following dialogs:

- For a Navigate to BI Content action, the "Select BI Content For Action dialog," where you select the Oracle BI EE content to which to navigate

- For a Navigate to EPM Content action, the "Select the Hyperion resource you want this action to invoke dialog," where you select the EPM content to which to navigate

- For an Invoke a Web Service action, the "Select Web Service Operation dialog," where you select a Web Service operation to be invoked

- For an Invoke a Java Method action, the "Select Java Method dialog," where you select the Java method to be invoked

- For an Invoke a Browser Script action, the "Select Script Function dialog," where you select the function to be invoked

    > **Note:** Before a JavaScript function can be used in an action, your administrator must first include it in the JavaScript file that contains user-defined scripts.

- For an Invoke Agent action, the "Select Existing Agent dialog," where you select the agent to be invoked

    > **Note:** In order for Hyperion resources, Web Service operations, EJBs, and functions to be exposed in their respective dialogs, some setup is required beforehand. For how to expose Hyperion resources, Web Service operations, EJBs, and functions in their respective dialogs, see *Integrator's Guide for Oracle Business Intelligence Enterprise Edition*.

URL

This field is available only for Navigate to a Web Page and Invoke an HTTP Request actions and only if URL aliases have been defined for these actions.

Use this field to enter the URL of the web page.

Be sure to encode the URL, if required. See "About Encoding the URL for a Navigate to a Web Page or Invoke an HTTP Request Action."

> **Tip:** Copy the URL from the browser and paste it in this field.

If URL aliases have been defined for Navigate to a Web Page and Invoke an HTTP Request, and you want to specify an alias for the URL, click the **Show URL location aliases** button (that is, the down arrow) and select the alias.

For more information on defining URL aliases, see *Integrator's Guide for Oracle Business Intelligence Enterprise Edition*.

Request

Use this box to select one of the following options:

- **GET** — Use this option to retrieve information from the URL. Any parameters added to the action are appended to the URL using the following syntax:

  `&paramName1=paramValue1&paramName2=paramValue2 (and so on)`

- **POST** — Use this option to post information to the URL. Any parameters added to the action are posted to the URL as name value pairs.

This field is available only for Invoke an HTTP Request actions.

Define Parameters

This button is available only for Navigate to a Web Page and Invoke an HTTP Request actions

Use this button to display the **Define Parameters** area. It also automatically parses the specified URL for parameters and lists them in the **Define Parameters** area.

For example, this URL:

`http://finance.google.com/finance?q=ORCL`

Becomes this:

`http://finance.google.com/finance?q=@{1}`

And an action parameter with the name 1 and a default value of ORCL is displayed in the **Define Parameters** area.

Any part of a URL can be converted into a token if the token name matches the parameter name. When an action is executed, the value of the parameter is used in the final URL.

Language

This box is available only for Invoke Server Script actions.

Use this box to select the script type — either **JavaScript** or **VB Script**.

Script Path

This field is available only for Invoke Server Script actions.

Use this field to enter the path of the script to be executed. By default, the scripts are stored in the following directory: *ORACLE_INSTANCE*\bifoundation\OracleBISchedulerComponent\coreapplication_obisch*n*\scripts\common. For example D:\OBI11g\instances\instance1\bifoundation\OracleBISchedulerComponent\coreapplication_obisch1\scripts\common.

However, the Administrator can change this default path by modifying the value of the DefaultScriptPath element in the instanceconfig.xml file for Scheduler. For more information on the DefaultScriptPath element, see "General Scheduler Configuration Settings that Affect Agents" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.)

Function Name

This field is available only for Invoke a Browser Script actions.

Use this field to enter the name of the JavaScript function to be executed. Click **Browse** to display the "Select Script Function dialog," where you can select a script.

Path

This field is available only for Invoke Agent actions.

Displays the path to the agent that is to be invoked.

Execute for Recipients

This box is available only for Invoke Agent actions.

Use this box to select one of the following options to specify the scope of the recipients:

- **of specified Agent** — Specifies the recipients of the agent to be invoked (that is, the agent specified in the **Path** box).

- **of current Agent** — Specifies the recipients of the current agent (that is, the agent to which the action is being added).

- **of both specified and current Agent** — Specifies the recipients of both the agent to be invoked and the current agent.

- **common to specified and current Agent** — Specifies the recipients that are common to both the agent to be invoked and the current agent.

- **of specified Agent, and not current Agent** — Specifies the recipients of the agent to be invoked but with the recipients of the current agent excluded.

Define Parameters

Use this area to define the action parameters.

Depending on the action type, some action parameters might be displayed automatically in this area. For example:

- For an Invoke a Web Service action, the parameters are read and displayed from the Web Service Definition Language file.

- For an Invoke a Browser Script action, the parameters are read and displayed from the script file, if they have been declared and published in the file.

- For a Navigate to E-Business Suite action, these parameters are displayed:

  - **FunctionCode** — The name of the function that relates to the target E-Business Suite form, for example, GLXIQJRN.

  - **ConnectionPool** — The name of the connection pool for the Oracle E-Business Suite database in the Oracle BI repository, for example, EBS12.

    You can also define optional parameters for passing the context from Oracle Business Intelligence to EBS forms.

This area includes, depending on the type of action, some of the following buttons and columns:

- **Add Document Parameter** — This button is available only for an Invoke Server Script action. Use this button to add a document parameter. A document parameter enables you to pass either the delivery content or the results of the analysis on which the agent condition is based to the script.

- **Add Parameter** — Use this button to add a parameter. (Whether you can add a parameter for an action, depends on the action type.)

- **Delete Parameter** — Use this button to delete a parameter.

- **Name** — Use this column to view, edit, or enter the name of the parameter.

  For Navigate to a Web Page and Invoke an HTTP Request actions, to embed a parameter value anywhere within the URL, enter the token @{Name} where 'Name' is the value specified in the Name column below. There is no limit to the number of parameters that can be embedded.

- **Prompt** — Use this column to enter the prompt to be displayed to users, if the user is to provide the parameter value.

- **Value** — Use this column to specify the parameter value. To specify a the value:

  – For a parameter row, click the **Change type of value** button to select one of the following types of values and then specify the value:

    * **Value** — Select this option to specify a value and then enter the value in the field.

    * **Session Variable** — Select this option to use the value of a session variable, and then enter the name of the session variable in the field, or click the **Show popular Session variables** button (to the right of this field) and select a session variable from a list of commonly-used variables.

    * **Repository Variable** — Select this option to use the value of a repository variable and then enter the name of the repository value in the field.

    * **Request Column** — Select this option to display the "Choose Request Column dialog," where you select the column in an analysis whose value is to be used as the value of an action parameter.

      This option is available only when you are adding an inline action to an agent that is conditionally executed based on an analysis.

    * **Column Value** — Select this option to use a column value in your analysis criteria and then click the **Column Value** button and select the column.

      For example, suppose you have the Region and District columns in your analysis criteria and define an action link on the District column that maps a parameter to the Region column. When you execute that action link (by clicking on a district), the region value for that district is used. Note that in a pivot table, the mapped values depend on the current layout or state of the table.

      This option is available only when you are adding an inline action to an analysis.

    For more information on session and repository variables, see "Using Variables."

  – (for an Invoke Server Script action only) For a document parameter row, click the **Format** button to select the format in which the content is to be passed (**PDF**, **MIME HTML**, **Text**, **XML**, **Comma-separated values**, **Excel**, **Excel 2000**, **Microsoft PowerPoint**) and then select the type of content to be passed. Valid types of content are:

* Delivery Content — Use this option to specify that the delivery content of the agent is to be passed. (You specify the delivery content in the "Agent editor: Delivery Content tab.")

* Condition Analysis — Use this option to specify that the results of the analysis on which the agent condition is based is to be passed. (You specify the analysis on which an agent condition is based in the "Agent editor: Condition tab.")

- **Fixed** — Use this column to specify whether to allow users to see but not set the parameter. Select the box to allow users to see but not set the parameter. Deselect this box to allow users to see and set the value.

- **Hidden** — Use this column to specify whether to hide the parameter from users. Select the box to hide the parameter from users. Deselect this box to show the parameter to users.

- **Optional** — Use this column to specify whether the parameter requires a value before the action can be executed. Select this box to make the value optional. Deselect this box to make the value required.

Filters

This area is available only for an action that invokes an agent that is conditional based on an analysis that filters its data by a column prompt.

Use this area to map any column of the specified agent (that is, the agent to be invoked) that contains a column prompt to any to column of the current agent (that is, the agent to which the action is being added). At runtime, the system generates a filter based on the data returned by the execution of the conditional analysis of the current agent.

For more on how filters work in an Invoke Agent action, see *Integrator's Guide for Oracle Business Intelligence Enterprise Edition*.

Options

This button is available only for actions where it is appropriate to display information to users. For example, this option is not available for actions added to agents.

Use this button to display the "Action Options dialog," where you specify information to display to users when they run an action.

Save As

This button is available only on the Edit Action dialog for named actions.

Use this button to display the dialog, where you save the action to the catalog as a new action with another name.

Notes

- Some action types (for example, Navigate to Siebel CRM and Invoke a Web Service) require some configuration before you can use them. For more information on the required configuration, see *Integrator's Guide for Oracle Business Intelligence Enterprise Edition*.

About Encoding the URL for a Navigate to a Web Page or Invoke an HTTP Request Action

If the URL that you specify for a Navigate to a Web Page or Invoke an HTTP Request action contains characters outside the ASCII character set or contains characters in an international language, you must encode it. Encoding involves replacing the characters that are outside the ASCII character set or the characters in an international language with "%" and the two hexadecimal digits that correspond to the character values in the ISO-8859-1 character set. Note the following about encoding the various parts of a URL:

- **The protocol (that is, http:// or https://)** — You usually do not need to encode this part.

- **The address (for example, foo.example.com:9704)** — You usually do not need to encode this part unless it contains characters in an international language.

- **The path (for example, /a/path/to/a/resource)** — You must encode this part if it contain characters that require encoding. If you used variables for parts of the path, then you do not need to encode those parts as they are encoded automatically when the variable is substituted with a value.

- **The query string (that is, the part of the URL which follows the path and is separated from it by a '?')** — You must encode this part if the names of the query parameters (for example, report=foo&destination=email) or any fixed values (unless they come from an analysis) contain characters that require encoding. (Within the query string, individual parameters are separated by a '&' character, for example, analytics/saw.dll?report=foo&destination=email.)

The following example shows an encoded URL:

```
http://myservice.example.com:4579/path/to/my%20service/endpoint/@{bivariable1}?par
ameter1=fixed&parameter2=@{bivariable2}
```

 Note that in the example URL:

- The path required encoding, as indicated by the %20.

- The @{...} parts did not require encoding as it included variables, which are encoded automatically.

- If @{bivariable2} or @{bivariable1} expands to a company name, for example, "Example Corporation", then the ' ' (space) in "Example Corporation" is replaced automatically with the encoded form "Example%20Corporation".

Create New Agent dialog

Use this dialog to create an agent from a KPI.

For more information, see:

- "Creating Agents from KPIs"
- Chapter 9, "Delivering Content"

Components

Name
Use this field to enter a name for the agent.

Description
Use this field to enter a description of the agent.

Location
Use this field to select a folder or create a folder in which to save the agent. To create a folder, click the **New Folder** option in the list to display the "Create New Folder dialog." To select a folder that is not listed, click the **Folder** button to display the "Select Agent Location dialog."

Trigger Agent if KPI Status is
Use this box to select the KPI status that is to initiate the agent to deliver its content and execute its actions.

Qualify
Displays the dimensions that must be pinned. Select a value for each dimension.

> **Note:**   You cannot pin multiple values for a KPI dimension when creating an agent.

Create New Device Type dialog

Use this dialog to create a delivery device type. This dialog is displayed from the "Administration: Manage Device Types page."

For more information, see "Managing Device Types for Agents" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

This dialog is also displayed as:

Edit Device Type dialog

Components

Name
Enter the name of the device type.

Category
Use this box to select the category of the device type. Select from **Mobile Phone**, **Pager**, or **Handheld Device**.

Domain
Enter the domain or email extension of the service provider, such as pagenet.net.

Custom Permissions dialog

Use this dialog to assign a specific permission or build a specific set of permissions for a catalog object. For information about assigning detailed privileges that further refine the tasks users can perform, see "Managing Presentation Services Privileges" in *Security Guide for Oracle Business Intelligence Enterprise Edition*.

For more information, see:

- "What Are Permissions?"
- "Assigning Permissions"
- "Permission Definitions"

Components

Read

Use this option to enable users to view, but not modify, the object.

Execute

Use this option to enable users to run or launch the programs or applications associated with the object, such as an agent or the actions for an action link.

Traverse

Use this option to give the user authority to bypass any permissions set on the folder that would prevent the user from accessing the object from the Catalog, a dashboard, or WebCenter Portal application page. Note that this option does not change the folder's permissions.

For example, if you grant users the **Traverse** permission to the /Shared Folders/Test folder, then they *can* access objects, through the Catalog or embedded in dashboards or WebCenter Portal application pages, stored in the/Shared Folders/Test folder and stored in sub-folders, such as the /Shared Folders/Test/Guest folder. However, users *cannot* access (meaning view, expand, or browse) the folder and sub-folders from the Catalog.

Write

Use this option to enable users to modify the object.

Delete

Use this option to enable users to delete the object.

Change Permissions

Use this option to enable users to modify or assign other permissions to the object.

Set Ownership

Use this option to enable users to specify the owner of the object.

Run Publisher Report

This option displays for all object types; however, you can only apply it to Oracle BI Publisher objects. Use this option to allow the user to run the report. When the user runs the report, the report is compiled using the most current data.

Schedule Publisher Report

This option displays for all object types; however, you can only apply it to Oracle BI Publisher objects. Use this option to allow the user to schedule the report.

View Publisher Output

This option displays for all object types; however, you can only apply it to Oracle BI Publisher objects. Use this option to allow the user to view, but not run or modify, the report.

Custom View Properties dialog

Use this dialog to specify a background image, a background color, or both for the diagram in a custom view.

For more information, see:

- "Custom View tab: Diagram tab"
- "What Are Custom Views?"
- "Creating Custom Views"

Components

Background Image

Use this field to enter the URL to the background image.

Note that when you enter a URL in the **Background Image** field, the **Width** and **Height** fields are automatically populated with the actual image size (if possible).

Note: A custom view uses the Adobe Flash component to render its content. The background image is fetched by the Adobe Flash component and rendered. Flash components have security restrictions on the content to which they have access. Generally, Flash components can load or render the content from the same domain from which the original Flash movie was downloaded (that is, the Oracle BI Server). If you want a background image from any other server or domain, then the remote server must allow access to the BI Server's domain to retrieve the image. This is done by configuring the crossdomain.xml on the remote server. For how to configure the crossdomain.xml on the remote server, see the following knowledge base article:

http://kb2.adobe.com/cps/142/tn_14213.html#main_Cross_domain_policy_files

---

Position

Use this area to specify the position of the background image in the diagram. To do so, specify the following:

- In the **pixels from left** box, the number of pixels from the left of the diagram at which to position the image.
- In the **pixels from top** box, the number of pixels from the top of the diagram at which to position the image.

Size

Use this area to specify whether to maintain the aspect ratio or to size the image to fit the diagram. To do so, select one of the following options:

- **Maintain aspect ratio** — Use this option to maintain the aspect ratio. A visual indicator showing that the width and height of the image are tied together is displayed.
- **Size to fit** — Use this option to size the image to fit the diagram. Note that when you select this option, the **Width** and **Height** fields are disabled.

Background Color

Use this box to display the Color dialog, where you select the color to use for the background of the diagram.

Custom View tab: Details tab

Use this tab of the "Scorecard editor: Custom View tab" to specify supporting information for a custom view.

For more information, see:

- "What Are Custom Views?"
- "Creating Custom Views"

Components

Name
Displays the name of the custom view.

Description
Use this field to enter a description of the custom view.

Business Owner
Displays the user ID of the person responsible for managing the custom view. To specify the business owner, click the **Set User** button to display the "Business Owner dialog," where you can search for and select the business owner.

Objectives and KPIs
Lists the objectives and KPIs that are displayed in the custom view.

Use this watchlist to view and manage these objectives and KPIs. For more information about watchlists, see "Watchlists."

Related Documents
Use the "Related Documents area" to view and manage documents that provide supporting information to the custom view.

Custom View tab: Diagram tab

Use this tab of the "Scorecard editor: Custom View tab" to create a diagram that shows a customized view of your business and strategy data.

For more information, see:

- "What Are Custom Views?"
- "Creating Custom Views"

Components

Diagram area

Use this area to drag and drop objectives and KPIs to show in your customized view.

Each node (that is, the representation of an objective or KPI) on the diagram shows the status of the objective or KPI by displaying the icon and color that represents the assessment range. A KPI node also displays the actual value of the KPI and the percent variance from the target.

To:

- Display options that allow you to work with a node, click the **Options** button (on the right side of the node) to display the "Node Options Menu."

- Display additional performance data for the KPI, such as target value or variance, click the down arrow at the bottom center of the node. To collapse this data, click the up arrow.

- Zoom in and zoom out of the diagram, or to specify a background image, a background color, or both for the diagram, use the toolbar buttons on the "Scorecard editor: Custom View tab."

- Work with comments (if any), click the **Comment** button in the upper-right corner of a node to display the "Status window," where you can read the comments that previously have been added, add another comment, or reply to a comment. See "About Comments."

- Work with status overrides (if any), click the red asterisk in a node to display the "Status window," where you can view the overrides that previously have been applied or apply another override. See "About Status Overrides,"

- View a KPI contribution wheel diagram, right-click the KPI and select **View KPI Contribution Wheel** from the context menu (see "About KPI Contribution Wheel Diagrams" for additional information). Note that you can also click the **Options** button on the right side of the node and select **View KPI Contribution Wheel** from the "Node Options Menu."

Customize Condition dialog

Use this dialog to customize a condition that is based on an analysis that includes one or more prompted filters. (A prompted filter is a filter whose operator is set to **Is Prompted.**)

For more information, see "Agent editor: Condition tab."

This dialog is also displayed as:

Customize Delivery Content dialog

Components

Edit the Prompted Filters

Displays the prompted filters associated with the analysis.

Click the **Edit** button adjacent to a prompted filter to display the "Edit Parameter Filter dialog," where you edit the filter.

Customize Gauge Limit dialog

Use this box to customize the minimum or maximum gauge limit.

For more information, see "Gauge Properties dialog: Scale tab."

Components

Gauge Limit

Use this box to specify the custom gauge limit by selecting one of the following options:

- **Static Value** — Select this option to specify a static value, such as 1000. You can specify either an actual value or a percentage. The value you specify depends on the range of data points. For example, the maximum gauge limit should be more than the maximum data point so that all data points are shown on the gauge.

- **Variable Expression** — Select this option to specify a string. When you select this option, the **Default Value** field is displayed in which you enter the string.

  You can reference one or more variables in the string (or expression). For example, you might reference a presentation variable named MaxSales. For guidelines on referencing a variable in an expression, see Table 2–2. For more information on variables, see "Using Variables."

- **Column** — Select this option to specify a measure column and then select the name of the column, for example, Dollars.

  > **Note:** Only columns that are in the metadata repository or that are based on repository columns (such as Dollars*0.10) are displayed as selections.

- **SQL Statement** — Select this option to specify a SQL statement and enter the SQL statement, for example:

  ```
  "Sales Measure"."Year Ago Dollars"*10
  ```

Customize Scale Marker dialog

Use this dialog to set the value for one of the following items for a graph:

- Position of a line scale marker
- Low value of a range scale marker
- High value of a range scale marker

To set the value, you can use a static value, a presentation variable, a measure column, or a SQL query. If a value is not valid, then the scale marker is ignored.

For more information, see "Scale Markers dialog."

Components

Static Value

Use this option to set the value to a hard-coded value that you specify. If you select this option, then enter the hard-coded value in the field to the right of the option.

Variable Expr

Use this option to set the value to the value of a presentation variable. If you select this option, then enter the presentation variable in the field to the right of the option and a default value in the **(default)** field.

Column Name

Use this option to set the value based on a measure column. If you select this option, then select the measure column in the box to the right of the option.

Note that using a measure column could yield numerous values. Only the first value is applied.

SQL Query

Use this option set the value based on the results of a SQL query. If you select this option, then enter the SQL query in the box beneath the option.

Note that the results could be a table but only the first row and first column cell value is applied.

Customize Subscription to *Agent* dialog

Use this dialog to customize an agent subscription.

For more information, see "Customizing Your Agent Subscriptions."

Components

Condition

Use "Customize Subscription to Agent dialog: Condition Parameters tab" to customize prompted filters for an analysis that is used in an agent condition.

Content

Use "Customize Subscription to Agent dialog: Content Parameters tab" to customize prompted filters for an analysis that is the delivery content for an agent.

Customize Subscription to *Agent* dialog: Condition Parameters tab

Use this tab of the "Customize Subscription to Agent dialog" to customize prompted filters for an analysis that is used in an agent condition.

For more information, see "Customizing Your Agent Subscriptions."

Components

Edit the prompted filters
Displays the prompted filters that you can customize.

Modify operator/value for this parameter
Use this button to display the "Edit Parameter Filter dialog," where you can customize the prompted filters.

Customize Subscription to *Agent* dialog: Content Parameters tab

Use this tab of the "Customize Subscription to Agent dialog" to customize prompted filters for an analysis that is the delivery content for an agent.

For more information, see "Customizing Your Agent Subscriptions."

Components

Edit the prompted filters
Displays the prompted filters that you can customize.

Modify operator/value for this parameter
Use this button to display the "Edit Parameter Filter dialog," where you can customize the prompted filters.

Dashboard builder

Use this Dashboard builder to build or edit dashboards. The process of building or editing a dashboard includes:

- Adding and changing pages, objects, and other content on the dashboard
- Changing the properties of the dashboard

For more information, see:

- "Creating Dashboards"
- "Editing Dashboards"
- "Changing the Properties of a Dashboard and its Pages"
- "Changing the Properties of Objects Added to Dashboard Pages"

Components

Page Tabs
Use the tabs across the top of the editor to select the dashboard page to edit.

Dashboard Objects
Use the "Dashboard Objects pane" to select the objects to include on a dashboard page and drag and drop them to the Page Layout area.

Catalog
Use the "Catalog pane" to select objects from the Oracle BI Presentation Catalog to include on a dashboard page and drag and drop them to the Page Layout area. This adds a shortcut to the content as saved in the catalog. If the content changes, then the change is reflected on the dashboard page.

To locate the content, you can browse by either the catalog folder it is stored in, or by the dashboard on which it is located.

Page Layout
Use "Page Layout area" to layout and place the content (that is, objects from the Dashboard Objects pane and the Catalog pane) to include on a dashboard.

Toolbar
The toolbar contains the following buttons:

- **Add Dashboard Page** — Use this button to display the "Add Dashboard Page dialog," where you create a page in this dashboard. The page is displayed in a new tab in the Dashboard builder.
- **Delete Current Page** — Use this button to delete the current dashboard page.
- **Tools** — Use this button to display a menu with the following options.
    - **Dashboard Properties** — Use this option to display the "Dashboard Properties dialog," where you specify properties of the dashboard and of dashboard pages.

- **Print & Export Options** — Use this option to display the "Print & Export Options dialog," where you specify for a dashboard page the settings for printing and exporting to Excel.

- **Page Report Links** — Use this option to display the "Report Links dialog," where you specify the links to apply to all analyses in the dashboard page, unless customized settings have been specified for particular analyses.

- **Prompts Buttons on Current Page** — Use this option to specify whether to include or exclude the prompt's **Apply** and **Reset** buttons on the dashboard page at runtime. This setting applies to the dashboard page and overrides the **Apply** and **Reset** button settings for the prompt definition and dashboard properties unless the **Prompts Apply Button** and **Prompts Reset Button** fields on the "Dashboard Properties dialog" are set to Use Page Settings.

  Note the following options, which are available for **Apply** buttons and **Reset** buttons:

  * **Use Prompt Setting** — Choose this option to use the buttons as defined in the prompt definition. These settings were specified in the "Prompt editor."

  * **Show All Apply Buttons** or **Show All Reset Buttons** — Choose this option to show the buttons for the prompts. This setting overrides the prompt definition button settings or dashboard properties button settings unless the **Prompts Apply Button** and **Prompts Reset Button** fields on the "Dashboard Properties dialog" are set to Use Page Settings.

  * **Hide All Apply Buttons** or **Hide All Reset Buttons** — Choose this option to hide the buttons for the prompts. This setting override the prompt definition button settings or dashboard properties button settings unless the **Prompts Apply Button** and **Prompts Reset Button** fields on the "Dashboard Properties dialog" are set to Use Page Settings.

- **Allow Saving Personal Customizations** — Use this option to specify whether users can save personal customizations. For more information on allowing the saving of personal customizations, see "Controlling Access to Saved Customization Options in Dashboards" in *Security Guide for Oracle Business Intelligence Enterprise Edition*.

- **Publish Page to Dashboard** — Use this option to display the "Publish Page to Dashboard dialog," where you specify the dashboard to which you want to publish the current dashboard page. See "Publishing Dashboard Pages."

- **Advanced Page Properties** — Use this option to set navigation parameters for the current dashboard page. See

■ **Preview** — Use this button to view how a dashboard page is displayed to an end user. This is helpful to see what the page looks like before you save the content.

■ **Run** — Use this button to exit the Dashboard builder and return to the dashboard in runtime.

■ **Save** — Use this button to save your changes to the dashboard.

■ **Save Dashboard As** — Use this button to save the dashboard by another name.

Page Layout area

Use this area to layout and add the content that you want on a dashboard by dragging and dropping objects from the "Dashboard Objects pane" and "Catalog pane." After you drop an object to this area, you can modify the object using the buttons on its Toolbar.

This area is part of the "Dashboard builder."

Components

Object Representations
Each object that you drag and drop to the Page Layout area is represented by a rectangle.

Object Toolbars
Each object dropped to the Page Layout area contains a toolbar that displays when you hover over the object. The Object Toolbar contains the following buttons:

- **Properties** — Use this button to select from various options for modifying the object. What this button displays depends on the type of object. For some objects a properties dialog is displayed. For other objects, a menu of options is displayed. See "Properties Buttons for Objects."

- **Delete** — Use this button to delete the object from the dashboard page.

- **Vertical Layout** — This button is available for sections only. Use this button to arrange the objects in the section so that they are stacked one on top of another.

- **Horizontal Layout** — This button is available for sections only. Use this button to arrange the objects in the section so that they are positioned side-by-side.

Properties Buttons for Objects

Each object that is represented on the "Page Layout area" has a toolbar that contains a **Properties** button. What the button displays depends on the type of object. The following sections describe, for each type of object, what the **Properties** button displays.

Column Properties

This button displays the following options:

- **Break** — This option is available only if the page has multiple columns and only for columns after the first column. Use this option to display the "Break dialog," where you add page and column breaks to the page layout.

- **Column Properties** — Use this option to display the "Column Properties dialog," where you specify the properties for the column, such as cell alignment, border color and so on.

- **Freeze Column** — This option is available only when a column is alone at an outer edge of the page layout. If two columns are on adjacent edges and overlap at the corner, then both columns can be frozen. Use this option to freeze a column at an edge (top or left) of the page layout. When a column is frozen, it remains anchored at the edge of the page layout and will not scroll off the page as you scroll the content in other columns.

  When you freeze a column, you may need to set a specific size for the column (in the "Column Properties dialog") to ensure that any remaining content on the page will be visible. You might want to do this, for example, if the content of the column that you freeze is very large and you want to reduce the size of the column.

Section Properties

This button displays the following options:

- **Condition** — Use this option to display the "Section Condition dialog," where you specify the condition to be used to determine whether the section is to be displayed. See "Using Conditions to Determine Whether Sections Are Displayed in Dashboard Pages."

- **Permissions** — Use this option to display the "Section Permissions dialog," where you specify which accounts are granted or denied access to the section.

- **Format Section** — Use this option to display the "Section Properties dialog," where you specify the properties for the section, such as cell alignment, border color and so on.

- **Rename** — Use this option to display the "Rename dialog," where you rename the section.

- **Drill in Place** — Use this option to specify how the results are displayed when a user drills in an analysis.

  To:

  – Show the new results directly in the dashboard, replacing the original analysis, click this option until a check mark is displayed next to the option. This is the default behavior. The area occupied by the original analysis resizes automatically to hold the new results.

  – Replace the entire dashboard with the new results, click this option until the check mark is removed.

This option applies to all drillable analyses within the section. The user can click the browser's **Back** button to return to the original analysis or the dashboard.

Use this option for prompts that are created for hierarchical columns.

For more information, see "Drilling in Views."

- **Collapsible** — Use this option to specify whether the user can expand and collapse this section on a dashboard page or whether the section is always expanded.

- **Show Section Header** — Use this option to specify whether to display the header for the section, which initially includes the title of the section. You can hide the title using the **Show Section Title** option.

- **Show Section Title** — Use this option to specify whether to display the title of the section.

  To format the title, use the **Rename** option to display the "Rename dialog."

Alert Section Properties

This button displays the following option:

- **Format Section** — Use this option to display the "Section Properties dialog," where you specify the properties for the alert section, such as cell alignment, border color and so on.

Action Link Properties

Use this button to display the "Action Link Properties dialog," where you set the properties of an action link.

Action Link Menu Properties

Use this button to display the "Action Link Menu Properties dialog," where you set the properties of an action link menu.

Link or Image Properties

Use this button to display the "Link or Image Properties dialog," where you specify properties for a text link or image link that you are adding to a dashboard page.

Embedded Content Properties

Use this button to display the "Embedded Content Properties dialog," where you specify the URL and other information about content to embed on a dashboard page.

Text Properties

Use this button to display the "Text Properties dialog," where you specify properties for a text object, including the text and formatting tags.

Folder Properties

Use this button to display the "Folder Properties dialog," where you add a view of a Catalog folder and its contents.

BI Publisher Report Properties

Use this button to display the "BI Publisher Report Properties dialog," where you specify the information for adding an Oracle BI Publisher report.

Analysis Properties

This button displays the following options:

- **Display Results** — Displays the following options to specify how to display the results of the analysis:

  – **Embedded in Section** — Use this option to execute the analysis automatically and display the results directly in the dashboard page

  – **Link - Within the Dashboard** — Use this option display a link that users must click to execute the request and see the results within the dashboard

  – **Link - In a Separate Window** — Use this option display a link that users must click to execute the request and see the results in a new window

- **Report Links** — Use this option to display the "Report Links dialog," where you select which links are displayed with the analysis on the dashboard page.

- **Show View** — Use this option to specify how to display the analysis, either as a default compound view or as one of the available views. (Note that the icon representing the object changes to indicate the type of view.) For more information on views, see. "Adding Views for Display in Dashboards."

- **Rename** — Use this option to display "Rename dialog," where you rename the analysis.

- **Edit Analysis** — Use this option to edit the analysis in the "Analysis editor."

Prompt Properties

This button displays the following options:

- **Edit** — Displays the "Prompt editor," where you create prompts.

- **Scope** — Displays the following options to specify the scope of the prompt:

  – **Dashboard** — Use this option to specify that the prompt applies to the entire dashboard.

  – **Page** — Use this option to specify that the prompt applies to the dashboard page.

- **Prompt Links...** — Use this option to display the "Prompt Links dialog," where you specify whether to display the **Edit** and **Copy** links in the dashboard's prompts region. These links, which display at runtime, allow users (with the proper privileges) to edit the prompt or copy the prompt's link.

Scorecard Object Properties

This button displays the following options:

- **Edit Pinnings** — Displays the "Dimension Pinnings dialog," where you pin (or set) the value or values of one or more KPI dimensions. For more information about pinning, see "What Are Dimensions and Pinned Dimension Values?"

- **Edit View** — Displays the scorecard object in the "Scorecard editor."

- **Format View** — Displays the "Scorecard Content Properties dialog," where you specify how the scorecard object is to be formatted.

Dashboard Filters and Variables dialog

Use this dialog to add hidden named prompts to a dashboard or a dashboard page.

For more information, see:

- "Adding a Hidden Dashboard Prompt to a Dashboard or Dashboard Page"
- "Changing the Properties of a Dashboard and its Pages"
- "Dashboard Properties dialog"

This dialog is also displayed as:

Filters and Variables - *page* dialog

Components

Embed New Hidden Dashboard Prompt

Use this button to access the "Open dialog," which enables you to browse and select the named prompt to add to the dashboard. After you select a prompt, its path displays in the Prompts Path table.

Edit

Use this button to access the "Open dialog," which enables you to browse and replace the currently selected prompt with another prompt. After you select another prompt, its path is displayed in the Prompts Path table.

Remove

Use this button to delete the selected prompt.

Prompt Path

Displays the paths of the hidden prompts that you added to the dashboard. You can select a prompt and then click the **Edit** or **Remove** button to replace or delete the prompt.

Dashboard Objects pane

Use this pane to select the dashboard objects to include on a dashboard page and drag and drop them to the "Page Layout area."

For more information, see "Adding Content to Dashboards."

This pane is part of the "Dashboard builder."

Components

List of Objects

Use the list of dashboard objects to decide what to include on a dashboard page. Drag and drop an object from the list to an appropriate location in the page layout area on the right side of the Dashboard builder.

For more information on dragging and dropping, see "Dragging and Dropping Objects to the Page Layout Area in the Dashboard Builder."

Table D–2 lists and describes the dashboard objects that you can include on a dashboard page.

Table D–2   List of Dashboard Objects

Dashboard Object	Description
Column	Used to align content on a dashboard. (Sections within columns hold the actual content.) You can create as many columns on a dashboard page as you need, and you can place columns on a dashboard horizontally or vertically. Note that the columns used in the Dashboard builder are not related to the columns used in the Analysis editor.
Section	Used within columns to hold the content, such as action links, analyses, and so on. You can drag and drop as many sections as you require for a column.
Alert Section	Used to add a section in which to display Alerts from agents, if any.
	On users' My Dashboard, an Alert section is added automatically to the first page, if you do not manually place one there. You cannot disable the appearance of an Alert section on the first page of users' My Dashboard. You can add an Alert section to an additional dashboard page so that section is then displayed on both dashboard pages.
Action Link	Used to add an action link. An action link is a link that you embed in an analysis, dashboard page, or KPI that, when clicked, runs an associated action.
	For more information, see Chapter 11, "Working with Actions."
Action Link Menu	Used to add an action link menu. An action link menu let users choose, from a list of action links, the right action to be executed.
	For more information, see Chapter 11, "Working with Actions."
	Tip: If you add an action link to an action link menu and later decide that you do not want the link to be displayed in the menu, you can simply drag and drop it elsewhere on the page.

Table D–2   (Cont.) List of Dashboard Objects

Dashboard Object	Description
Link or Image	Used to add text links and image links and specify what should happen when a user clicks them. For example, you can direct users to another web site or dashboard, open documents, launch applications, or perform any other action that the browser supports. You can also add an image or text only, without any links.
Embedded Content	Used to add embedded content. Embedded content is any content that is displayed within a window (called a frame) inside the dashboard, as opposed to content that is accessed by clicking a link. Content that you might want to embed includes analyses, Excel charts, documents, web sites, tickers from web sites, and so on. When you embed content into a dashboard, the required HTML is automatically added to the target content. Analyses are embedded by default. Embedding an analysis in a dashboard causes it to execute automatically and to display the results within the dashboard. This provides access to current results. **Note:** Some third-party web sites, because of the way they have been created, cannot be embedded within another web page. If you see unexpected results when viewing an embedded web site, then you might need to click the browser's Back button until an Oracle Business Intelligence screen reappears, or close and then reopen the browser. Then, remove the embedded web site from the dashboard.
Text	Used to add plain text or, if allowed at your organization, HTML. See the administrator to find out if adding HTML is allowed at your organization. To add embedded content, which is content that is displayed in a window within the browser, then use the Embedded Content object instead. Then, using the Embedded Content feature, specify the name and location of the target, and the required HTML is wrapped around the target for you.
Folder	Used to add a view of a Catalog folder and its contents. For example, you might add a folder that contains a collection of saved analyses that you run frequently. Then from the dashboard, you can open the folder, navigate to a saved request, and click it to run it.

Dashboard page

Use a dashboard page to view and navigate a dashboard.

> **Note:** Content designers can specify that the execution of dashboard pages be delayed. For those pages, the actual content of analyses is not loaded initially. Instead a message and static information about the objects that were not loaded are displayed.
>
> The message indicates that the page is not fully loaded and instructs you to select prompt values and click the **Continue** button. Clicking **Continue** reloads the content on the page using the prompt values you specify. If you do not specify prompt values, then default prompt values are used.
>
> See "Delaying the Execution of Dashboard Pages."

For more information, see:

- "What Are Dashboards?"
- "Opening and Using Dashboards"

Components

Page Tabs

Use the tabs across the top of the viewer to select the dashboard page to view and navigate.

Toolbar

The toolbar contains the **Page Options** button, which displays the following options:

- **Edit Dashboard** — Use this button to display the "Dashboard builder," where you modify the dashboard, if you have the appropriate permissions.

  Permissions to modify dashboards (personal and shared) are granted by the administrator.

  For more information on the Dashboard builder, see "What Is the Dashboard Builder?"

- **Print** — Displays the print options that are available for a dashboard page. Possible options are:

  - **Printable PDF** — Use this option to print to PDF using a standard layout.

  - **Printable HTML** — Use this option to print to HTML using a standard layout.

  - One or more custom print layouts.

    Using a custom print layout allows you to produce high-quality printed dashboard content. For information on custom print layouts, see "About Creating Custom Layouts for Printing and Exporting Dashboard Pages."

  For how to print a dashboard page, see "Printing Dashboard Pages."

- **Export to Excel** — Displays the export options that are available for a dashboard page. Possible options are:

- **Export Current Page** — Use this option to export the current dashboard page to Microsoft Excel 2007+.

- **Export Entire Dashboard** — Use this option to export the entire dashboard to Microsoft Excel 2007+.

- One or more custom export layouts.

  Using a custom export layout allows you to export dashboard content customized for Excel. For information on custom export layouts, see "About Creating Custom Layouts for Printing and Exporting Dashboard Pages."

When you export to Excel, the state of the dashboard (such as prompts or drills) is maintained.

When you export the entire dashboard, each page is included on its own sheet in the Excel workbook, and each sheet is given the name of its corresponding dashboard page.

Note that the analysis and dashboard font size is in pixels while the Excel font size is in points. Therefore, when you export to Excel from an analysis or dashboard, the font size decreases to 75% of the analysis or dashboard font size.

For how to export a dashboard or dashboard page to Excel, see "About Exporting Dashboards and Dashboard Pages."

- **Refresh** — Use this option to refresh the results of analyses included in the dashboard page.

- **Add to Briefing Book** — (This option is not available on an empty dashboard page or if the **Show Add to Briefing Book** box in the "Dashboard Properties dialog" has not been selected for the page.) Use this option to display the "Save Briefing Book Content dialog," where you add the contents of a dashboard page to a briefing book.

  For more information, see "What Are Briefing Books?" and "Adding Content to New or Existing Briefing Books."

- **Create Bookmark Link** — Use this option to create a bookmark link.

  If drilling in an analysis that has been set to replace a dashboard with the new results (rather than show the new results directly in the dashboard), then the **Create Bookmark Link** is displayed as a link under the new results rather than as an option on the Page Options menu. (To specify how drilling works in an analysis, you use the **Drill in Place** option on the Properties menu for a section. For more information, see "Properties Buttons for Objects."

  This option is not available if the administrator has disabled it. For more information on controlling the display of this option, see "Enabling the Ability to Create Links to Dashboard Pages" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

  For more information, see "What Are Bookmark Links?" and "Creating Links to Dashboard Pages."

- **Create Prompted Link** — Use this option to create a prompted link.

  This option is not available if the administrator has disabled it. For more information on controlling the display of this option, see "Enabling the Ability to Create Links to Dashboard Pages" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

  For more information, see "What Are Prompted Links?" and "Creating Links to Dashboard Pages."

- **Apply Saved Customization** — Use this option to apply a saved customization — either a personal saved customization or a shared saved customization.

  For more information, see "Applying Saved Customizations."

- **Save Current Customization** — Use this option to save your current customization.

  > **Note:** Values that you pin for KPI dimensions referenced in scorecards are not saved with this option. For more information on pinning values, see "What Are Dimensions and Pinned Dimension Values?"

  For more information, see "Saving Customizations."

- **Edit Saved Customizations** — Displays the "Edit Saved Customizations dialog," in which you edit details of your saved customizations.

  For more information, see "Editing Saved Customizations."

- **Clear My Customization** — Use this option to clear your current customization.

  For more information, see "Clearing Your Current Customization."

Dashboard Properties dialog

Use this dialog to change the properties of a dashboard and its pages.

For more information, see "Changing the Properties of a Dashboard and its Pages."

Components

Style

Use this option to select a style for the dashboard. Styles control how dashboards and results are formatted for display, such as the color of text and links, the font and size of text, the borders in tables, the colors and attributes of charts, and so on.

The styles that are available for you to select include styles provided by Oracle as well as any custom styles provided by the administrator.

Description

Use this field to enter a description for the dashboard. Descriptions are displayed when administrators use the Catalog Manager. The description is not displayed on the dashboard.

Page Size

Use these options to specify how a dashboard page is to be sized:

- **Fit Content** — This option sizes the container to the content with no wrapping. If the browser window is smaller than needed to fit the content, a scroll bar is displayed. Specifically, it:
  - Sizes dashboard columns to the largest section in each column.
  - Adds any additional space in the browser window to the right of the content.
  - Aligns content within columns and sections to the left, by default.
  - Sizes all rows to the widest row on the page and flush to the right, if multiple columns are placed in a row

  This option is the default for new dashboards.

- **Fill Browser Window** — This option:
  - Sizes dashboard columns to the largest section in each column.
  - Expands columns (except columns for which a specific absolute size has been specified) and sections proportionally to fill the browser window, if there is any additional horizontal space in the browser window.

    If all columns have a specific absolute size specified, then the additional space is distributed equally between and around the columns.

    If some columns have a specific absolute size specified and some do not, then the columns that do not are expanded proportionally to fill the browser window.
  - Aligns content within columns and sections in the center, by default.

You can also specify how a container (that is, a column or section) in a dashboard page is to be sized. For more information, see the "Column Properties dialog" or the "Section Properties dialog."

Filters and Variables: Edit

Click this button adjacent to the Filters and Variables heading to display the "Dashboard Filters and Variables dialog," where you add hidden named prompts to the whole dashboard. See "Adding a Hidden Dashboard Prompt to a Dashboard or Dashboard Page."

Dashboard Report Links: Edit

Use this button to display the "Report Links dialog," where you select which links are to be displayed with all analyses on the dashboard, unless customized settings have been specified for an individual dashboard page or analysis.

Prompts Apply Buttons

Use this list to specify if you want to include or exclude the prompt's **Apply** buttons on the dashboard at runtime. This setting applies to the entire dashboard, but you can use the "Dashboard builder" to override this setting on individual dashboard pages. Note the following options:

- **Use page setting** — Select this option to use the **Apply** buttons as defined by the dashboard page settings. You specify the dashboard page settings in the "Dashboard builder" toolbar.

- **Show All Apply buttons** — Select this option to override the dashboard page setting's **Apply** button preferences and show the **Apply** buttons for the prompts included on the dashboard and embedded analyses.

- **Hide All Apply buttons** — Select this option to override the dashboard page setting's **Apply** button preferences and hide the **Apply** buttons for the prompts included on the dashboard and embedded analyses.

Prompts Reset Buttons

Use this list to specify whether you want to include or exclude the prompt's **Reset** buttons on the dashboard at runtime. The Reset button provides the user with three reset options: Reset to last applied values, Reset to default values, and Clear All. The **Prompts Reset Buttons** setting applies to the entire dashboard, but you can override this setting on individual dashboard pages.

Note the following options:

- **Use page setting** — Select this option to use the **Reset** buttons as defined on the dashboard page settings. You specify these page settings in the "Edit Page Settings dialog," displayed by clicking the **Edit** button in the Display pane of the "Prompt editor."

- **Show All Reset buttons** — Select this option to override the dashboard page setting's **Reset** button preferences and show the **Reset** buttons for the prompts included on the dashboard and embedded analyses.

- **Hide All Reset buttons** — Select this option to override the dashboard page setting's **Reset** button preferences and hide the **Reset** buttons for the prompts included on the dashboard and embedded analyses.

Prompts Auto-Complete

Use this option to enable or disable the auto-complete functionality for the dashboard. When enabled, Oracle BI EE suggests and highlights matching prompt values as the user types in the dashboard's prompt selection field, and highlights matching prompt values in the "Select Values dialog." See "What Is Auto-Complete?".

Dashboard Pages

Displays the pages in the dashboard. Use this area to perform operations (such as hide or rename) on dashboard pages using the dashboard pages toolbar buttons.

Dashboard Pages Toolbar

This toolbar contains the following buttons:

- **Rename** — Use this button to display the "Rename dialog," where you specify a new name for the page in the dashboard.

- **Select a prompt to capture default filters and variables** — Use this button to display the "Filters and Variables - page dialog," which enables you to add hidden named prompts to the dashboard page. See "Adding a Hidden Dashboard Prompt to a Dashboard or Dashboard Page."

- **Permissions** — Use this button to display the "Permissions dialog," where you specify which accounts have which levels of access to the contents of the dashboard page.

  The **Permissions** button is displayed for shared dashboards only, and only if your user ID is authorized to access the security features.

- **Delete** — Use this button to delete the page from the dashboard. After you click the button, you see a page that prompts you to confirm the deletion.

- **Specify Who Can Save Shared Customizations** — Use this button to display the Permission dialog, where you specify which accounts can save shared customizations for the page.

- **Specify Who Can Assign Default Customizations** — Use this button to display the Permission dialog, where you specify which accounts can assign default customizations for the page.

  For more information on setting these permissions, see "Controlling Access to Saved Customization Options in Dashboards" in *Security Guide for Oracle Business Intelligence Enterprise Edition*.

  > **Note:** These operations are not reversed when you click **Cancel** in this dialog.

Hide Page

Use this box to specify whether the page is to be displayed when the dashboard is shown. This option is helpful when you are working with a dashboard page and want to hide it from users until your changes are complete. When you select this option, the page remains visible to any users who are currently viewing it.

Show Add to Briefing Book

Use this box to specify whether the **Page Options** menu for the page contains the **Add to Briefing Book** option. For more information on the **Add to Briefing Book** option, see "Dashboard page."

Prompt before Opening

Use this box to specify whether the execution of the page is to be delayed. For more information, see "Delaying the Execution of Dashboard Pages."

Reorder

Use these buttons to specify the order of the pages on the dashboard.

- To move a dashboard page up in the list, click the **Move Up** button.

  On the dashboard, this moves the tab for the page to the left.

- To move a page down in the list, click the **Move Down** button.

  On the dashboard page, this moves the tab for the page to the right.

Definition pane

Use this pane to add, organize, and manage the prompt's columns. You can use column prompts, image maps, currency prompts, and variable prompts.

For more information, see:

- "Creating a Column Prompt"
- "Creating a Currency Prompt"
- "Creating an Image Prompt"
- "Creating a Variable Prompt"

This pane is part of the "Prompt editor."

Components

Definition Table

Use this table to view high-level information about the prompt's columns. You can also use this table to select columns for editing or deleting, arrange the order in which the prompts are displayed to the user, or insert row or column breaks between prompt items.

Note the following Definition Table components.

- **Label** — This column displays the prompt label that you specified when creating the item. This field is read-only. To edit this field, select the table row and click the Edit button.

- **Type** — This column displays the prompt type that corresponds to the item. The prompt types are: column, image, currency, or variable. This field is read-only.

- **Prompt For** — This column displays the data column that corresponds to the item. This field is read-only.

- **Description** — This column displays the items description that you entered in the Edit Prompt or New Prompt page. You can edit this column by placing your cursor in the field and typing.

- **Required**— When this column contains a green check mark, it indicates that the user must select or enter a value for this prompt item. The content designer designates a prompt as required by selecting the **Require user input** box in the "New Prompt dialog." When no check mark is displayed in this column, the user does not have to select or enter a value and can select to skip the prompt item. This field is read-only.

- **New Row** or **New Column** — This column indicates how the items in the prompt are organized on the page. Click either the **Row-based Layout** button or the **Column-based Layout** button on the toolbar to specify which layout option you want. A row-based layout saves space because it organizes prompts horizontally. A column-based layout aligns prompts into neat columns. After you select how you want the prompts laid out, then in the New Row or New Column column in the Definition Table, click the box corresponding to where you want to add a new column or row to the prompts page.

Toolbar

The toolbar contains the following buttons:

- **Preview** — Use this button to view the prompt layout. This preview version displays in a new browser window and is static.

- **New** — Click this button to add a column to the prompt. After you click this button, you then choose which prompt type you want to add (for example, Column Prompt or Image Prompt).

  The page that displays after you click the **New** button depends upon the prompt item type that you select. Note the following:

  - Select **Column Prompt**, **Variable Prompt**, or **Currency Prompt** to display the "New Prompt dialog."

    The **Currency Prompt** option is available only if the administrator has configured the userpref_currencies.xml file as described in "Configuring Currency Options" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

  - Select **Image Prompt** to display the "Image Map Prompt Properties dialog."

- **Open** — Click this button to display the "Open dialog," where you can open a saved Catalog object.

- **Row-based Layout** — Click this button to specify a row-based layout for the prompts page. A row-based layout saves space because it organizes prompts horizontally. Clicking this button displays the New Row column in the Definition Table, along with check boxes in the column's cells. Use the check boxes to specify at which prompt items new rows are to be added on the prompts page.

- **Column-based Layout** — Click this button to specify a column-based layout for the prompts page. A column-based layout aligns prompts into neat columns. Clicking this button displays the New Column column in the Definition Table, along with check boxes in the column's cells. Use the check boxes to specify at which prompt items new columns are to be added on the prompts page.

- **Insert Page Break** — Click this button to insert a new prompts page after the selected prompt item. This functionality, along with the New Column and New Row options in the Definition table, enables you to arrange a complex prompt into an intuitive, easy-to-use interface.

  After you insert a new prompts page, you can highlight the page's row in the table and click the Edit button to display the "Edit Page Settings dialog." Use this dialog to modify the page title, instructions, and page formatting.

- **Edit** — Click this button to display the "New Prompt dialog," where you can modify the prompts preferences. For example, click this button to change a column's display option from Radio Button to Check Box.

- **Delete** — Click this button to delete the prompt item that you selected in the Definition Table.

Dimension Pinnings dialog

Use this dialog to pin (or set) the value or values of one or more KPI dimensions. You set values of KPI dimensions, for example, when you add a strategy map or KPI contribution wheel diagram that contains one or more KPIs that are dimensioned to a dashboard.

Pinning is optional. Typically, it is best not to pin most of the dimensions so that the data is controlled by the point of view settings.

For more information, see:

- "What Are KPIs?"

- "What Are Dimensions and Pinned Dimension Values?"

Components

List of Dimensions

Displays a list of the dimensions to be pinned.

To pin a dimension, click the down arrow to the right of the dimension and select one of the following options:

- A specific value or multiple values.

- **Use Variable** — Use this option to display the "Select Variable dialog," where you specify a variable to use to set the value. For more information on variables, see "Using Variables."

- **Not Pinned** — Use this option to specify that, initially, all dimension values are to be used. However, if, on a dashboard page, Scorecard, or KPI Watchlist, a control is provided, then a user can dynamically change the value to explore the data.

- **Search** — Use this option to display the "Search Members dialog," where you select one or more values with which to pin the KPI dimension.

> **Note:** If the Dimension Pinnings dialog is invoked from a KPI contribution wheel, a label may display indicating that the pinnings are from either the focus trail or the KPI definition.

Display pane

Use this pane to view the prompt's layout and design. The Display pane is updated as you use the "Definition pane" to arrange the prompt items and the "Prompt editor" to add and modify prompt items. The items displayed in the Display pane do not access the prompt's data source and, therefore, do not include the columns' data selection options. To test the prompt with data selection options and view the resulting dashboard or analysis, click **Preview**.

For more information about creating and adding prompts, see:

- "Creating a Column Prompt"

- "Creating a Currency Prompt"

- "Creating an Image Prompt"

- "Creating a Variable Prompt"

This pane is part of the "Prompt editor."

Components

Edit

Use this button to access the"Edit Page Settings dialog" to specify the prompt page's title and instructional text, and the text and tables formats (for example, font size, cell color, and border width).

Edit dialog

Use this dialog to work with values as part of the "Select Values dialog."

Components

Edit

Use this area to work with values in the following ways:

- Enter values into the list of selected values.

- Copy values from a previously saved list (for example a list of values in Excel) into the list of selected values.

- Copy values from the selected list of values.

Separate values that you enter with carriage returns (Enter key) or pipe (|) characters. Values that you copy in can be separated by carriage returns (the Enter key), | (pipe) characters, or tabs.

Press the Tab key to move the focus to the **OK** button.

Edit Background Map dialog

Use this dialog to edit a map from the Background Maps tab of the "Administration: Manage Map Data page." Before editing a background map, add layers using the Layers tab. A background map is a non-interactive map that serves as a base for the map view. It might display a satellite image or a map with roads. (A background map is referred to as a "tile" in MapViewer.)

For more information, see "Administering Maps" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

Components

Name
Use this field to enter the name of the map.

Location
Displays the location of the background map in the data source from MapViewer. Click the **Location** button to display the "Import Background Maps dialog" for importing a different map. If you select a background map that includes a different number of zoom levels, then the zoom levels are automatically adjusted for the layers that are associated with the map by scaling their ranges.

Description
Use this field to enter a description of the map, which is displayed in the following locations:

- On the Background Maps tab of the Administration: Manage Map Data page.

- As a tooltip for the map when selecting a map from the list, when editing the map view.

Interactive BI Layers and Feature Layers area
Use this area to specify the available map layers from either an Oracle Database or other non-BI associated content (known as a **Feature** layer) and their zoom level. The first time that you display this dialog after adding a map, this area lists any appropriate layers that are specified on the Layers tab, with their default zoom level settings.

A Feature layer is used to overlay predefined styles on maps and is indicated by an icon with a small yellow and black diamond.

The layers are listed from bottom to top, in terms of how they are applied to the map. A sample order is Countries, States, Cities. The lower level layers generally have the lower zoom levels. For example, if you have a States layer and a Cities layer, then include lower zoom levels for State than City.

This area contains the following components:

- Click the **Add Layers** button to display a list of the layers that have been imported on the Layers tab, then select the layers to add to the map. When you add a layer that is part of the map definition from MapViewer, the layer displays at its default zoom levels. If the layer is not part of the map definition, then specify the zoom levels yourself.

■ Click the **Sort Layers By Zoom Level** button to list the layers in ascending or descending order based on visibility on the map. The sort order that is specified here does not affect the order in which layers are applied on the map. Instead, the sorting order affects the zoom levels. For example, the States layer might have zoom levels 1 through 3 and the Cities layer has zoom levels 4 through 9. The lower layers have the lower zoom level numbers. The zoom levels that you specify correspond to the tick marks on the zoom slider on the map.

You can include both layers that have been associated with a BI column by using the "Edit Layer dialog" and layers that have not been associated. Ensure that BI layers are ordered higher than non-BI layers. If a non-BI layer is ordered higher than any BI layers, then the non-BI layer is displayed on top of the lower BI layers on the map, which prevents the BI layers from being interactive.

■ Click the **Turn On Layer Visibility** or **Turn Off Layer Visibility** button to control the visibility of layers on the map. Use the buttons to indicate whether the layer is visible in the Preview map in this dialog only. The layer is still visible on a map view. You can modify the zoom levels for a layer with a visibility turned off.

■ Click a cell under a zoom level for a layer to see one of the following:

– If you click a blue cell that is between other blue cells, then you see a popup menu with **Clear Left** and **Clear Right** buttons, which allow you to change the zoom level in either direction. For example, if you click the cell for zoom level 4 and click the eraser on the right, all cells to the right are cleared for that zoom level.

– If you click a blue cell that at the end of a line of blue cells, then the cell turns white to indicate that it is no longer part of that zoom level.

– If you click a white cell, then you increase the zoom level on either side of the existing blue cells. For example, suppose cells 4 through 6 are colored blue to reflect the zoom level. If you click in cell 2, then the zoom level becomes 2 through 6.

If you do not set any zoom levels for a layer, then that layer does not display on the map.

■ Hover over the layer name to display a More menu from which you can make the following selections:

– **Delete** — Deletes the layer from the Interactive BI Layers area. The layer continues to be available on the Layers tab and can be added to this area again.

– **Move Up** or **Move Down** — Moves the layer up or down so you can specify the order in which layers are applied to the map.

– **Reset to Default Visibility** — Resets the current visibility range for this layer as defined in the underlying map definition. If this layer is not natively associated with the map, then this option is disabled for that layer.

■ Use the yellow border that surrounds the column of boxes for a zoom level to determine which zoom level is currently displayed in the map area.

Map area

Use this area to specify how the map is displayed to users. Use the panning and zooming controls to affect the display of the map. If you hover over the zoom slider, then you see tooltips that specify the names of the layers that are currently associated with that zoom level.

Edit Briefing Book dialog

Use this dialog to edit a briefing book. You can reorder content, delete content, and change the content type, the number of navigation links to follow, and the content description.

For more information, see:

- "What Are Briefing Books?"

- "Editing Briefing Books"

Components

Content

Displays the contents of the briefing book. To edit or delete content, select the content and then use the toolbar buttons. To reorder content, select the content and drag and drop it to the desired location.

Toolbar

This toolbar contains the following buttons:

- **Edit Page** — Use this button to display the "Page Properties dialog," where you can change the content type, the number of navigation links to follow, and the content description of the currently selected content.

- **Delete Page** — Use this button to delete the currently selected content.

Related Topics

"Adding Content to New or Existing Briefing Books"
"Downloading Briefing Books"
"Adding a List of Briefing Books to a Dashboard Page"
"Using Agents to Deliver Briefing Books"

Edit Column Formula dialog

Use this dialog to:

- Specify custom text for headings for a column's folder and for a column.

- Specify the aggregation rule for the column totals for an attribute or measure column.

- Edit the formula for an attribute or measure column. A column formula specifies what the column values represent. By editing this formula, you can present analysis results in a variety of ways.

- Create formulas that calculate KPI actual values, target values, and thresholds.

- Create calculated measures.

You cannot customize headings, specify the aggregation rule, or edit the formula for a hierarchical column or for a hierarchy level; however, you can specify a hierarchical column within a formula for an attribute or measure column.

For more information, see:

- "Editing the Formula for a Column"

- "What Are KPIs?"

- "Working with Calculated Measures"

Components

Formula

Use the "Edit Column Formula dialog: Column Formula tab" to customize headings, specify the aggregation rule, and edit the formula for a column.

Bins

Use the "Edit Column Formula dialog: Bins tab" to combine values for the column into sets.

Edit Column Formula dialog: Bins tab

Use this tab of the "Edit Column Formula dialog" to perform "binning," which enables you to combine values for the column into sets. For example, suppose that the Region column has a value EASTERN. You can specify "My Home Region" instead as the text that displays for that value in the view that displays that column's data.

Binning differs from groups in that groups allow the view to display each member that is part of the group. For information, see "What are Groups?"

For more information, see "Editing the Formula for a Column."

Components

Add Bin

Use this button to display the "New Filter dialog," where you can create a filter expression to display as a CASE statement in the Formula area of the "Edit Column Formula dialog: Column Formula tab."

You can combine multiple values or ranges of values from a given column into bins. When you add and name the bins, all instances of the various values that comprise the bin in the result set are replaced by the bin name. Aggregations are performed accordingly as well. For example, you can specify that all values over $10M are displayed as "My10M."

Bins List

Displays the list of bins that you have created for this column using the **Add Bin** button. Use the following buttons within this list:

- **Edit Bin Filter** — Displays the "Edit Filter dialog," where you can edit the filter for the bin.

- **Edit Bin Name** — Displays a dialog in which you can edit the name for the bin.

- **Delete** — Removes the bin from the list.

- **Move Up** or **Move Down** — Moves the bin up or down one place within the list. The order of bins in the list is significant. You can include a certain value within multiple bins. However, the value is used only by the first bin that encounters it.

Create a bin for all other values

Use this box to create an entry in the Bins list called "All other values" and to display the dialog in which you can enter a name for this bin. This bin includes all values that have not yet been included in another bin in the list. You cannot edit the filter for this bin nor can you reorder it. It must be the last bin in the list.

Treat result as a numeric value or expression

Use this box to indicate that binned numeric values that you specify are treated as numbers, rather than as the default of text. For example, suppose that you specify 35 as the bin name. If you do not select this box, then the name is treated as text, rather than as the number 35 when it is displayed in views. If you select this box, then the value 35 is treated as a number, which affects operations that are specific to data types such as sorting.

Clear All

Use this button to remove the bins that you have created. When you click this button, a message prompts you to decide whether to keep the CASE statement in the formula on the Formula tab:

- If you select **Yes**, then you clear all bins from the Bins tab and the formula with the CASE statement is available for you to edit on the Formula tab.

- If you select **No**, then you clear all bins and the formula on the Formula tab returns to its default value.

Notes

- The Bins tab is not affected by the button bar in the Formula area in the Formula tab. However, if you create a CASE statement using the Bins tab, the button bar is hidden when you click the Column Formula tab. The button bar is displayed only if you clear all bins.

Edit Column Formula dialog: Column Formula tab

Use this tab of the "Edit Column Formula dialog" to:

- Specify custom text for headings for the column's folder and for the column.

- Specify the aggregation rule for the column totals for an attribute or measure column.

- Edit the formula for an attribute or measure column. A column formula specifies what the column values represent, for example, "Sales Measures"."Dollars". By editing this formula, you can present analysis results in a variety of ways.

- Create formulas that calculate KPI actual values, target values, and thresholds.

- Create calculated measures.

For more information, see:

- "Editing the Formula for a Column"

- "How Are KPIs Evaluated?"

- "Working with Calculated Measures"

- "Using Variables"

This dialog is also displayed as:

Edit Formula dialog
New Calculated Measure dialog

Components

Folder Heading

Not available for KPIs.

Use this field to enter the text for the heading for the column's folder. To enable this field, select the **Custom Headings** box.

Column Heading

Not available for KPIs or new calculated measures.

Use this field to customize the heading to reflect the data in the column. To enable this field, select the **Custom Headings** box. For example, to change the column heading to "Dollars Increased by 10%", select the **Custom Headings** box and then, in the **Column Heading** field enter Dollars Increased by 10%.

Custom Headings

Not available for KPIs.

Use this box to enable the **Folder Heading** and **Column Heading** fields so that you can customize the headings to suit your needs. For example, if you change the formula of a column, you might want to change the column heading to something that is more representative of the column.

Contains HTML Markup

If you are customizing the headings, use this option to work with HTML codes, as described in "Working with HTML Markup."

Aggregation Rule (Totals Row)

Not available for KPIs.

Use this box to select the aggregation rule for the column totals for attribute or measure columns. For example, if you want column totals to show the minimum value of the rows in the result set, then select **Min**. If you want them to show the sum of all the values in the result set, then select **Sum**, which is the default.

For a list of the valid values, see "Aggregation Rules and Functions."

Available

Displays the primary subject area and any related subject areas that have been added to the "Subject Areas pane." Use this area to select columns to use in formulas. To insert a column in a formula, select the column and click the **Add Column** button (the arrow button between the **Available** and **Column Formula** areas). Note that when you insert a column, if you have something highlighted in the **Column Formula** area, it is replaced.

> **Note:** Only measure columns will display in the "Subject Areas pane" for a calculated measure.

Column Formula

Use this area to perform these tasks:

- Create or edit the formula for an attribute or measure column.

- Create the formula to calculate a KPI actual value, target value, or range.

When you have text selected in the Column Formula box, it is replaced by values that you select elsewhere, such as in the **Available** list or by inserting functions or filters. The selected text is also displayed in the Insert Function and Insert Filter dialogs when you invoke them.

You can enter the formula manually or use these components:

- *f(. . .)* — Use this button to display the "Insert Function dialog," where you select a function from a tree of function groups. For example, you can build a formula based on a SQL function, such as RANK("Sales Measures"."Dollars").

  For information about SQL functions, see Appendix C, "Logical SQL Reference."

- **Filter. . .** — Use this button to display the "Insert Filter dialog," where you can add a SQL filter. For example, you can build a formula that uses the SQL FILTER function to filter the data, such as FILTER("Sales Measures"."Dollars" USING ("Markets"."Region" = 'EASTERN REGION').

- **Column >** — Use this button to select a column from a list of the available attribute and measure columns that are included in the analysis criteria to use in the formula. This is helpful for example, if you have cleared the formula area and want to get back to where you started.

- **Variable >** — Use this button to select the type of variable (**Session**, **Repository**, **Presentation**, or **Global**) to add. The "Insert Variable dialog" is displayed for Session, Repository, and Presentation variables (where you specify the name of the variable). The "New Global Variable dialog" is displayed for Global variables (where you add the name, value, and data type).

For example, you can build a formula using a presentation variable, such as "Sales Measures".Dollars + @{PercentIncrease}{1.50}, where PercentIncrease is the name of the presentation variable and 1.50 is its default value.

- **+** — Use this button to insert the addition operator to add values.

- **-** — Use this button to insert the subtraction operator to subtract values.

- **x** — Use this button to insert the multiplication operator to multiply values.

- **/** — Use this button to insert the division operator to divide values.

- **%** — Use this button to insert the percent sign to divide values by 100.

- **(** — Use this button to insert the left parenthesis to enclose data in brackets.

- **)** — Use this button to insert the right parenthesis to enclose data in brackets.

- **||** — Use this button to insert the concatenation operator.

Notes

To manually enter a variable in an expression in the Formula area, follow the guidelines for referencing variables in expressions that are described in Table 2–2.

Related Topics

"Edit Column Formula dialog: Bins tab"

Edit Dimension Settings dialog

Use this dialog to set up the control for a dimension in the point of view area of a scorecard. Specifically, you can specify:

- A default value for the dimension
- Whether a control for the dimension is to be displayed in the point of view area
- The label to be displayed in the point of view area for the dimension

For more information, see:

- "About the Point of View Area"
- "Setting Up the Point of View Controls"
- "Settings dialog: Dimension Settings tab"

Components

Dimension

Displays the name of the dimension in the database, for example, "A - Sample Sales"."Products"."P1 Products".

Label

Use this field to enter a user-friendly label for the dimension's point of view control when no specific value has been set for the dimension. For example, you might enter Products for the dimension "A - Sample Sales"."Products"."P1 Products". Note that you do not need to specify a label for:

- A dimension that is pinned to one or more values (the value or values are displayed instead). You can pin the dimension to one or more values using the **Default Value** box.
- A dimension for which you prevent the display of a control in the point of view area. (You use the **Prompted** field to prevent the display of a point of view control.)

Default Value

Use this box to select one of the following options:

- One or more values for the dimension. If you specify one or more values, the value or values are the dimension label.
- **Search** — Use this option to display the "Search Members dialog," where you search for one or more values to pin the dimension.
- **Not Pinned** — Use this option to specify that, initially, all dimension values are to be used. However, if you select the **Prompted** box, you later can change the value or values using the point of view control.

If you select one or more values and:

- Prevent the display of a control for this dimension in the point of view area by deselecting the **Prompted** box, then you are pinning the dimension to one or more constant values for this scorecard, which users cannot change.

- Display a control for this dimension in the point of view area by selecting the **Prompted** box, then you are pinning the dimension to one or more initial values for this scorecard, and users can change the values.

Prompted

Use this box to specify whether a control for this dimension is to be displayed in the point of view area of the scorecard:

- Select this box to specify that a control for this dimension is to be displayed in the point of view area.

- Deselect this box to prevent the display of a control for this dimension in the point of view area. You should prevent the display of a control in the following cases:

  - If you have pinned the dimension to one or more values or to all dimension values and you do not want users to change this setting.

  - If a dimension that is equivalent to this dimension is used in another KPI in the scorecard and this dimension should share a point of view control with the other dimension.

    In this case, you must also complete the **Prompted By** box.

    For example, suppose two KPIs used in the scorecard both have a Quarter dimension. The Quarter dimensions have the same values but come from different databases. In this case, for one of the Quarter dimensions, you should deselect the **Prompted** box for one of the Quarter dimensions, and in the **Prompted By** box select the other Quarter dimension so that both dimensions share one control.

Note: Before you set up dimensions to share a point of view control, ensure that their values match exactly. After you have set up the shared control, test the control to ensure that it sets the value or values of each dimension that it controls.

Prompted By

This box is available only if you have deselected the **Prompted** box. Use this box to select the dimension whose control in the point of view area this dimension is to share.

Edit Footer or Header dialog

Use this dialog to specify the information for adding a footer or header to an analysis or dashboard page. Each header and footer can contain as many as three lines.

For more information, see:

"Print & Export Options dialog"
"Changing the Properties of a Dashboard and its Pages"

Components

Bold, Italic, Underline

Use these buttons to apply Bold, Italic, or Underline to characters in the footer or header.

Line Break

Use this button to insert a line break between characters in the footer or header.

Contains HTML Markup

Use this option to work with HTML codes, as described in "Working with HTML Markup."

Insert Field

Use this menu to select a field to include in the header or footer, such as the author name, date, or page number.

Text

Use these fields to enter the text for the header or footer.

You can reference variables in these fields. For the syntax to use, see "What Is the Syntax for Referencing Variables?" For more information on variables, see "Using Variables."

Edit Format

Click this button to display the "Edit Format dialog," in which you specify formatting for the text in the footer or header.

Display in browser when applicable

Use this option, at the analysis level or at the dashboard page level, to specify whether the header and footer are visible when the analysis or dashboard page is rendered in the browser in interactive mode (for example, at runtime).

This option does not affect the analysis or dashboard page when it is rendered in non-interactive mode, such as printing or exporting. In non-interactive mode, the header and footer are always shown, if they are enabled.

When the analysis is rendered as part of a dashboard page, the setting made at the dashboard page level takes effect rather than the setting made at the analysis level. However, if an action on the dashboard page (such as navigation) redirects the dashboard page to a standalone analysis, the setting at the dashboard page level no longer applies, and the setting made at the analysis level takes effect.

Edit Layer dialog

Use this dialog to edit a layer from the Layers tab of the "Administration: Manage Map Data page." One important task is to associate the layer of spatial data with data for Oracle BI EE.

Spatial data is managed in MapViewer and stored in an Oracle Database. To display data for Oracle BI EE on a map, you must associate a spatial layer with the appropriate columns of data from the Oracle BI Server. The combinations of BI data columns are referred to as "BI Keys." When you associate the layer of spatial data with data for Oracle BI EE, that layer becomes available for use with the specified columns in the specified subject areas.

For more information, see "Administering Maps" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

Components

Name
Use this field to enter the name of the layer.

Location
Displays the location of the layer in the data source from MapViewer. Click the **Location** button to display the "Import Layers dialog" for importing a different layer.

Description
Use this field to enter the description of the layer, which is displayed in the following locations:

■ On the Layers tab of the Administration page.

■ When you hover over the layer name in the Map Formats area when editing the map.

Layer Key
Use this box to select the column of spatial data from MapViewer to associate with data for Oracle BI EE. Each column value corresponds to a shape that is stored in the Oracle database. For example, a MY_CITIES layer might have a layer key called CITY. By default, the selected value is a "best guess" at the appropriate column. Use the list to select the appropriate column.

Click the **Sample Data** link to display an actual value for that column that you can use as an example.

If the box is empty, then the administrator must define the key column for the shapes in the spatial table for that layer in MapViewer. The map is drawn only where common values exist between the spatial data column and the associated column of Oracle BI EE data. Otherwise, the map might show a white area to indicate a missing value. To verify that common values exist for the two columns, display the column of Oracle BI EE data in the Oracle BI Administration Tool and review its values. In MapViewer, verify that the associated layer contains all the appropriate geometry definitions for the values in the corresponding column of Oracle BI EE data.

The following list provides the reasons why a white area might be drawn, using the country of Mexico as an example:

- The column has a null value for the country of Mexico, but a shape exists for Mexico in the spatial column.

- The column has a value for the country of Mexico, but no shape exists for Mexico in the spatial column.

- The column has a value for the country of Mexico and the shape exists for Mexico in the spatial column, but the names are mismatched. The BI column might have the value MEX and the spatial column might have MXC.

BI Key Delimiter

Available only when multiple columns are specified for one key. Use this field to enter a single ASCII character (such as a comma or underscore) to function as a delimiter for combining the BI data columns that form a key.

Geometry Type

Use this box to specify whether the layer is a polygon, point, or line geometry layer. The specification for a layer affects the formatting that can be applied to that layer.

BI Key Columns Area

Use this area to select the columns of data from the Oracle BI Server to associate with the layer. You can have multiple columns associated with a single layer. You can select multiple columns from one subject area or from multiple subject areas. The columns and delimiter that you select must exactly match the name of the **Layer Key** value. Suppose the Layer Key value is STATE_CITY. You must select the STATE and CITY BI data columns and specify the underscore character as the delimiter for use in creating the BI Key to associate with the layer.

Click the following options:

- **Add New BI Key** — Displays the list of available subject areas. When you select one, the "Select BI Key Columns dialog" is displayed in which you select one or more columns of BI data to associate with the layer.

- **Delete BI Key** — Deletes the selected key from the Key area.

- **Edit BI Key** — Displays the "Select BI Key Columns dialog" where you edit the BI data columns for the selected key.

- **Sample Data** — Displays an actual value for that column that you can use as an example. Ensure that the values for the data column match those from the spatial data column.

When a content designer creates a map view, a default main map is selected as the basis for that map view. If at least one data column from the analysis is associated with a layer that is associated with a main map, then that main map is selected by default.

Show Qualified Names

Use this box to specify whether to display the fully qualified name of the column in the BI Key Columns Area or simply the column name.

Edit Page Settings dialog

Use this dialog to modify the prompt page's title, instructions, and page formatting. For more information, see "Definition pane."

Components

Title
Use this field to enter the title to display on the prompt page. You can format this title by clicking the **Format** button.

Instruction
Use this field to enter instructions for the prompt page. For example, "Use this page to specify sales measure prompt values."

Format
Click this button to display the "Edit Format dialog," in which you specify the formatting options that you can apply to the prompt page. For example, you can specify a font size and style for the title and a background color for the cell.

Prompt Display
Use this field to specify if you want the prompt label to display beside the prompt field or above the prompt field.

Wrap label to fit
Use this field to specify if you want to wrap the prompt labels. Selecting this option moves long prompt labels to multiple rows, if necessary. Note that if the total row length is longer than the user interface, Oracle BI EE adds a horizontal scroll bar to the prompts page.

The default maximum label size is 250 pixels. Note that this value differs if the Administrator modified the default pixel value in the Oracle BI EE configuration file.

Set width of all prompts to
Use this field to specify if and how you want Oracle BI EE to adjust the field width for all prompts on the prompts page. When selected, this field overrides any prompt width settings that you added to individual prompts. The field width is where the prompt values display, and does not include the field's label. If you selected the **is between** operator, each field ("from" and "to") is sized to the pixel size that you specify.

Select this field to apply the specified width to all prompts on the prompts page. Deselect this field to set each prompt width individually in the "New Prompt dialog."

After you select this field, you can specify the one of the following options:

- Select **Dynamic** if you want Oracle BI EE to size the field width up to 500 pixels. For most prompt types, a user can mouse-over a truncated member value and Oracle BI EE displays the member's full value.

- Select **Pixels** and specify a pixel value, if necessary. Oracle BI EE defaults a value of 250 pixels into this field. Note that this value differs if the Administrator modified the default pixel value in the Oracle BI EE configuration file. Enter a pixel value to override the default pixel value. Note that if the member values are longer than the pixel value that you specify, Oracle BI EE truncates the member

name. For most prompt types, a user can mouse-over a truncated member value and Oracle BI EE displays the member's full value.

Note the following items:

– If you select **Pixels** and specify a value, Oracle BI EE writes this value to the *User Input* **Width** field on the "New Prompt dialog."

– If you change this field from **Pixels** to **Dynamic**, Oracle BI EE sets the *User Input* **Width** field to **Dynamic** on the "New Prompt dialog."

– If you modify an individual prompt width value on the "New Prompt dialog," Oracle BI EE clears the prompts page setting's **Set width of all prompts to** field.

Show Apply Button

Use this box to include or exclude the **Apply** button at runtime. If you deselect this box, the **Apply** button will be excluded and Oracle BI EE immediately applies the specified prompt value to the dashboard or analysis. If you select this box, the **Apply** button is included, which the user must click to apply the specified prompt value to the dashboard or analysis. Note that this setting can be overridden in the "Dashboard builder."

Show Reset Button

Use this field to include or exclude the **Reset** button at runtime. If you deselect this box, the **Reset** button is excluded from the prompt. If you select this box, the **Reset** button is included and the user can click it to reset or clear the specified prompt values from the analysis or dashboard. The **Reset** button provides the user with three reset options: Reset to last applied values, Reset to default values, and Clear All. Note that this setting can be overridden in the "Dashboard builder."

Place buttons on side of prompts

If you select to include either the **Apply** or **Reset** button or both the **Apply** and **Reset** buttons, use this list to specify where you want the buttons to display in relation to the prompt fields. You can place the buttons to the side of or below the prompt fields.

Apply display properties to all prompt pages

Use this field to apply the page display properties that you specified to all of the prompts pages. Deselect this field to apply the properties to the prompts page upon which you are working, only.

Edit Parameter Filter dialog

Use this dialog to edit a prompted filter that is associated with an analysis on which a condition is based.

For more information, see:

"Customize Condition dialog"
"New Condition dialog"

Components

Filter

Displays the name of the column on which the filter is built.

Operator

Use this box to select the operator to apply to the value specified in the **Value** field. For guidelines on operators, see "Operators."

Value

Use this field to specify the value to use when applying the filter. You can type a value or click the **Show list of values** button to search for one or more specific values.

To specify a session or repository variable as the value, click the **Value** label and select **Session Variable** or **Repository Variable**. The **Value** field label changes to either **Session Variable** or **Repository Variable**. Then, enter the name of the session or repository variable.

For more information on session and repository variables, see "Using Variables."

Show list of values

Use this button to display the "Select Values dialog," where you can select one or more values from a list of available values.

Add another filter value

Use this button to add another **Value** field.

Delete Filter Value

Use this button to delete the corresponding value and field.

Edit Parameter Mapping dialog

Use this dialog to edit the action parameters associated with an action.

For more information, see:

- "New Action Link dialog"
- "Action Link Properties dialog"
- "What Are Action Parameters?"

This dialog is also displayed as:

Add Existing Action dialog

Components

Define Parameters

Use this area to define the action parameters. It includes the following components:

- **Name** — Use this column to view or enter the name of the parameter.

  For Navigate to a Web Page or Invoke an HTTP Request actions, to embed a parameter value anywhere within the URL, enter the token @{Name} where 'Name' is the value specified in the Name column below. There is no limit to the number of parameters that can be embedded.

- **Prompt** — Use this column to enter the prompt to be displayed to users, if the user is to provide the parameter value.

- **Value** — Use this column to enter the parameter value. Click the **Change type of value** button to select one of the following types of value and then specify the value:

  - **Value** — Select this option to specify a value and then enter the value in the field.

  - **Session Variable** — Select this option to use the value of a session variable, and then enter the name of the session variable in the field, or click the **Show popular Session variables** button (to the right of this field) and select a session variable from a list of commonly-used variables.

  - **Repository Variable** — Select this option to use the value of a repository variable and then enter the name of the repository value in the field.

  - **Request Column** — Select this option to display the "Choose Request Column dialog," where you select the column in an analysis whose value is to be used as the value of an action parameter.

    This option is available only when you are editing the parameters for an inline action added to an agent that is conditionally executed based on an analysis.

  - **Column Value** — Select this option to use a column value in your analysis criteria and then click the **Column Value** button and select the column.

    For example, suppose you have the Region and District columns in your analysis criteria and define an action link on the District column that maps a parameter to the Region column. When you execute that action link (by clicking on a district), the region value for that district is used. Note that in a

pivot table, the mapped values depend on the current layout or state of the table.

This option is available only when you are adding an inline action to an analysis.

For more information on session and repository variables, see "Using Variables."

- **Fixed** — Use this column to specify whether to allow users to see but not set the parameter. Select this box to allow users to see but not set the parameter. Deselect this box to allow users to see and set the value.

- **Hidden** — Use this column to specify whether to hide the parameter from users. Select this box to hide the parameter from users. Deselect this box to show the parameter to users.

- **Optional** — Use this column to specify whether the parameter requires a value before the action can be executed. Select this box to make the value optional. Deselect this box to make the value required.

- **Add Parameter** — Use this button to add a parameter. (Whether you can add a parameter for an action, depends on the action type.)

- **Delete Parameter** — Use this button to delete a parameter.

Edit Saved Customizations dialog

Use this page to edit the customizations saved for a dashboard page. You can:

- Rename customizations

- Change which customization to use as your default

- Change permissions for those customizations that have been shared with others

- Delete customizations

For more information, see:

- "What Are Saved Customizations for Dashboard Pages?"

- "Editing Saved Customizations"

Components

Saved Customizations

This area displays the customizations, both personal and shared, that have been saved for the dashboard page.

To rename a customization, overwrite the old name with the new name.

To set a customization as your default, select the button in the My Default column for the customization. To have no personal customizations as your default, select the button in the My Default column for the **No Personal Customizations** entry.

Permissions

Use this button to display the "Saved Customization Permissions and Defaults dialog," where you specify the accounts that have permission to use the customization and whether the customization is to be the default customization for the accounts.

Delete

Use this button to delete the selected customization.

Embedded Content Properties dialog

Use this dialog to specify the URL and other information about content to embed on a dashboard page.

For more information, see "Adding Content to Dashboards."

Components

URL

Use this field to enter the location and name of the content to embed.

These are examples:

```
http://www.oracle.com
/dashboardfiles/piegraph.xls
```

The URL that you specify should begin with http:// unless you plan to use an item that is saved on the Web server. If you use a network path to indicate the location of the item, then ensure that you use the exact path. Items that are embedded on a shared dashboard must be located on a network drive that is accessible to all users.

If the content you embed is an external application (for example, a PDF file or a video), then also select the **This URL Embeds an Application** box.

This URL Embeds an Application

Select this box if you embed an external application (such as a PDF file or a video) on the dashboard page. This will prevent Oracle BI EE menus and dialogs (such as the Page Options menu) from being hidden by the external application when they are displayed (by temporarily hiding the embedded application).

If you do not select this box, then Oracle BI EE menus and dialogs may be hidden by the external application.

Width

Use this field to specify the width of the embedded content in the dashboard. Note the following about width and height specifications:

- If you do not specify a value, then the system uses the default settings (300 by 150 pixels). If you have only specified one value, then the system uses the default value for the non-specified value.

- You can specify the value in either pixels (px) or percent (%). Because browsers cannot fully interpret percent values, only the width percentage is rendered. If you specify the height in percentage, then 150 pixels is substituted for the height value.

- If you do not specify either pixels or percent, then the value is interpreted in pixels.

- You can enter spaces within the value. For example, you can enter either 130px or 130 px.

Height

Use this field to specify the height of the embedded content in the dashboard. Adjust the height setting for the best display results.

Hide Scroll Bars

Select this box to indicate that the scroll bars for the embedded content are not displayed. If you do not select this box, then scroll bars are automatically added to the window if they are needed.

Enter Email Address dialog

Use this dialog to add email recipients who are to receive the delivery content of an agent.

For more information, see:

- "Agent editor: Recipients tab"

Components

Email address for content delivery (separate multiple addresses with commas)
Use this field to enter the email address of each email recipient who is to receive the delivery content of the agent. Use commas to separate multiple addresses.

Enter Expression dialog

Use this dialog to enter a variable expression or SQL query to use to set a gauge threshold.

For more information, see:

- "Settings pane"

This dialog is also displayed as:

Enter SQL Query dialog

Components

Expression

Use this box to enter the expression or SQL query.

You can reference one or more presentation variables in the expression. For guidelines on referencing a variable in an expression, see Table 2–2. For more information on variables, see "Using Variables."

Filter editor

Use this editor to create or edit a named filter.

For more information, see:

- "What are Filters and Selection Steps?"
- "Where Do I Store and Manage Oracle BI EE Objects?"
- "What Are Subject Areas and Columns?"

Components

Subject Areas

Use the "Subject Areas pane" to select the attribute column or measure column to be included in the filter. If your repository is configured for double columns, typically, you choose a display column on which to filter. However, you can choose a code column on which to filter but only if the code column is exposed in the Presentation layer in the Oracle BI EE repository. For more information on the Presentation layer, see *Metadata Repository Builder's Guide for Oracle Business Intelligence Enterprise Edition*.

After you select a column, the "New Filter dialog" displays where you specify the new filter's criteria.

Catalog

Use the "Catalog pane" to search for and drag and drop named filters from the catalog to the Filter editor. When you add a named filter to the Filter Editor, you are given the choice of either copying a catalog reference to the named filter or copying the named filter's contents to the analysis. When you include a reference to the named filter, you cannot modify the filter. When you include a copy of the named filter, you can modify the filter's contents and either save the filter as an inline or named filter.

Saved Filter

Use this area to work with a filter just as you would in the "Filters pane."

Filters pane

Use this dialog to create or edit a named filter or inline filter.

For more information, see:

- "What are Filters and Selection Steps?"
- "Creating Column Filters"
- "Combining and Grouping Column Filters"

This pane is part of the "Analysis editor: Criteria tab."

This pane also displays as the Saved Filter pane on the "Filter editor."

Components

Filters Pane Toolbar

The toolbar contains the following buttons:

- **Create a filter for the current subject area** — Use this button to choose an attribute column or measure column from a list of the columns that are currently selected for the analysis. You can also select the **More columns** option to display the "Select Column dialog," where you can select an attribute column or a measure column from the current subject area. If your repository is configured for double columns, typically, you choose a display column on which to filter. However, you can choose a code column on which to filter but only if the code column is exposed in the Presentation layer in the Oracle BI EE repository. For more information on the Presentation layer, see *Metadata Repository Builder's Guide for Oracle Business Intelligence Enterprise Edition*.

  After you select a column, the "New Filter dialog" displays where you specify the new filter's criteria.

- **Remove All Filters** — Use this button to delete all of the filter items in the Filters pane. To delete a selected filter item, you must go to the listing of filter items in the Filters pane and click the Delete button for the item to remove.

- **More Options** — Click this button to access the following options:

  - **Save Filters** — Use this option to save the filter and all of its contents to the catalog. Filters saved to the catalog are called named filters and can be added to other analyses and dashboards. If you save the filter as a named filter and then continue to work on the filter within the Filters pane, any changes that you make are not automatically saved to the catalog. To re-save the named filter, you must again click the **Save Filters** option. Note that selecting the **Save Filters** option does not save the analysis and inline filter upon which you are working. To save the inline filter with the analysis, go to the Analysis Editor's toolbar and click the **Save** button.

  - **Add EVALUATE_PREDICATE Function** — (Available only if you have been granted the Add EVALUATE_PREDICATE Function privilege.) Use this option to display the "New EVALUATE_PREDICATE Function dialog," where you create a function.

Filter Item Toolbar

The filter item toolbar is the collection of buttons that displays when you hover over a filter item within the list of filter items. It includes the following buttons:

- **Edit Filter** — Use this button to display the "Edit Filter dialog," where you edit the filter item's criteria.

- **Copy Filter** — Use this button to copy the filter item. You can use this functionality to save time by copying an existing filter item upon which to base a new filter item rather than creating a new filter item from scratch.

- **Paste Filter** — Use this button to paste the filter item that you copied with the **Copy Filter** button. When you click this button, a copy of the filter item displays below the original filter item.

- **Delete** — Use this button to delete the filter item.

Operator

Click the operator to toggle between AND and OR. When you add a filter item, the default operator is AND. The AND operator means that the criteria specified in each filter must be met. This is the default method for combining column filters. The OR operator means that the criteria that is specified in at least one of the column filters must be met.

If you have specified three or more filters and click AND, then Oracle BI EE automatically groups the filter item with the filter item above it. Grouped filters are indented in the filters list. You can click the operator to group the filters in several layers. Grouped filters are always processed before ungrouped filters.

Edit Filter Group

This button displays when you hover over a collection of grouped filters. Use this button to specify what you want to do with the corresponding group. If you are working with a multi-level group, then ensure that you are clicking on the correct **Edit Filter Group** button. Note the following options:

- **Ungroup** — Use this option to ungroup the highlighted filters group. If you are working with a group that has several layers of groupings, then clicking this option ungroups only the highlighted group.

- **Delete Group** — Use this option to delete the highlighted filter group from the filter.

- **Duplicate Group** — Use this option to copy and paste the highlighted filter group. When you click this option, Oracle BI EE pastes the copy below the copied filter group. The copied filter group is also nested within the filter group from which it was copied.

Folder Properties dialog

Use this dialog to add a view of a catalog folder and its contents, such as saved analyses, or a list of briefing books to a dashboard page. For example, if you have a collection of saved analyses that you run frequently, you can open the folder in the dashboard, navigate to a saved analysis, and click it to run it.

For more information, see:

- "Adding Content to Dashboards"
- "Adding a List of Briefing Books to a Dashboard Page"

Components

Folder
Displays the path to the folder whose view you want to add to the dashboard page, for example, /Shared Folders/Briefing Books. Click the **Browse** button to display the "Open dialog," where you select the folder.

Expand
Use this option to specify whether to show an expanded view of the folder.

Show RSS Link
Use this option to specify whether to add an RSS feed option to the folder.

The RSS feed option enables a user to access the dashboard's catalog folder from an RSS 2.0 compatible reader that supports HTTP basic authentication. If Oracle BI Presentation Services uses HTTPS protocol, then the RSS Reader that you use must also support the HTTPS protocol. An RSS reader is a third-party program that enables the user to aggregate information from different web-based locations into one browser window (for example, news feeds or events listing).

When the RSS link is added to the dashboard's catalog folder, an XML button that provides the catalog's URL is displayed for that folder. When a user accesses a catalog folder from an RSS reader, the reader prompts the user to log in to the Oracle BI Server.

You can include an RSS feed option to a catalog folder that is displayed on a dashboard page. Users must have the proper privilege to add the RSS feed option to a dashboard page's catalog. The RSS Feeds privilege is granted by the administrator.

Folders pane

Use this pane to display and navigate the content of personal (My Folders) and shared folders that all users can access. Administrators can display the catalog root folder that contains all system, object, and user data and settings. You can also use this pane to move objects by dragging and dropping them to different areas within the Catalog. You can drag and drop objects within the Folders pane or from the Folders pane to the "Catalog area."

For more information, see:

- "What is the Oracle BI Presentation Catalog?"

- "Who Uses the Catalog?"

This pane is part of the "Catalog page."

Components

Show Folder Tree

Use this button to display all folders in hierarchical directories.

Show Quick Access Folders

Use this button to list, excluding their hierarchy, these folders:

- **My folders** — Contains all the objects that you have created.

- **Shared folders** — Contains folders for agents, common objects such as reports, and the contents of the subject area.

- **My *<object>* folder** — Depending on the object, contains all the analyses, reports, agents, and scorecards that you have created or modified, or the agents to which you are currently subscribed. (Note that agents that you have been designated a recipient of are not included in the My Agent Subscriptions folder.)

My Folders

Contains all of your personal folders.

Shared Folders

Contains folders to which you have the permissions to access.

Font Format: *Item* dialog

Use this dialog to set formatting properties for a gauge, graph, heat matrix, or trellis, such as the font family for text.

For more information, see:

- "Gauge Properties dialog: Titles and Labels tab"

- "Graph Properties dialog: Titles and Labels tab"

- "Heat Matrix Properties dialog: Titles and Labels tab"

- "Trellis Properties dialog: Titles and Labels tab"

This dialog is also displayed as:

Format: *Item* dialog

> **Note:**   Depending on what you are formatting, this dialog might be displayed without tabs. If so, then it contains only the components in the "Font Format: Item dialog: Font Format tab."

Components

Display Options

Use "Font Format: Item dialog: Display Options tab" to set properties for the display of titles, axis labels, and data labels.

Font Format

Use the "Font Format: Item dialog: Font Format tab" to set properties for displaying text.

Number Format

This tab is not always available in this dialog.

Use the "Font Format dialog: Number Format tab" to override the default numeric format in which data labels are currently displayed.

Font Format: *Item* dialog: Display Options tab

Use this tab of the "Font Format: Item dialog" to set properties for the display of titles, axis labels, and data labels in a graph, gauge, or trellis.

For more information, see:

- "Graph Properties dialog: Titles and Labels tab"
- "Gauge Properties dialog: Titles and Labels tab"
- "Trellis Properties dialog: Titles and Labels tab"

This dialog is also displayed as:

Format: *Item* dialog: Display Options tab

Components

Truncate

This box is available only for titles.

Use this box to specify whether items are to be automatically truncated or truncated by a specified number of characters. If you select **Specify**, then enter the number of characters in the **characters** field.

Axis Labels

This box is not available for data labels.

Use this box to specify whether to show or hide axis labels.

Label Orientation

This box is not available for data labels.

Use this box to select the number of degrees axis labels are to be rotated.

Skip Labels

This box is not available for all graph types.

Use this box to display an alternate set of axis labels.

Abbreviate

This box is available only for axis and data labels. It is not available for all graph types.

Use this box to select the abbreviation to use for scale and data labels. For example, if you select **Million (m)** for a axis label of 120,000,000, then the label is abbreviated to 120M.

Show Data Labels

This box is available only for data labels.

Use this box to specify whether to hide or show data labels. The labels are rendered in the graph plot area, adjacent to the data element.

If the **Show Data Labels** box is set to **Always** and the graph type is either a Stacked Vertical Bar or Stacked Horizontal Bar, then the data marker label displays as center aligned.

If the **Show Data Labels** box is set to **On rollover**, the data marker label displays when you hover the mouse over the data element in the graph plot area.

Value

This list is only available for waterfall graphs.

Use this list to display the actual or cumulative value of the measure. The options are:

- **Actual** — Use this box to display the actual value of the measure.

- **Subtotal** — Use this box to display the cumulative value beginning with the first measure inclusive of the current measure.

> **Note:** If the **Show Data Labels** box is set to *Always*, the data marker label displays above a positive bar and below a negative bar when you hover the mouse. The **Show Data Labels** box controls which values (Actual versus Subtotal) are displayed. Note that both values are displayed for the tooltip when hovering the mouse.

Font Format: *Item* dialog: Font Format tab

Use this tab of the "Font Format: Item dialog" to set properties for displaying text.

For more information, see:

- "Graph Properties dialog: Titles and Labels tab"
- "Gauge Properties dialog: Titles and Labels tab"
- "Trellis Properties dialog: Titles and Labels tab"

This dialog is also displayed as:

Format: *Item* dialog: Font Format tab
Font Format: *Item* dialog

Components

Toolbar

The toolbar contains the following buttons:

- **Clear Cell Format (restore defaults)** — Use this button to remove the specifications that you have made and to return the settings to the values that they had when defaults were last saved.

  The **Clear Cell Format (restore defaults)** and the **Copy Cell Format** buttons affect the settings in the following ways:

  - If the dialog has no tabs, then the button affects all the settings in the dialog.
  - If the dialog has multiple tabs, then the button affects only those settings in the tab in which the button is displayed.

- **Copy Cell Format** — Use this button to copy the formatting specifications from the dialog, so that you can apply them elsewhere.

- **Paste Cell Format** — Use this button to paste the formatting that you have copied into the appropriate location.

Family

Use this box to select the font family.

Size

Use this field to enter the font size.

Color

Use this box to select the font color.

Style

Use this box to select the font style, such as bold or italic.

Effects

Use this box to select the font effects, such as underline or strike through.

Font Format dialog: Number Format tab

Use this tab of the "Font Format: Item dialog" to override the default numeric format in which data labels are currently displayed.

> **Note:**   The numeric format is inherited from the representative column in the Criteria tab. If two or more columns are selected for the same axis, then numeric formatting is not inherited.

For more information, see:

- "Graph Properties dialog: Titles and Labels tab"
- "Gauge Properties dialog: Titles and Labels tab"
- "Trellis Properties dialog: Titles and Labels tab"

This dialog is also displayed as:

Format: *Item* dialog: Number Format tab

Components

Override Default Data Format

Use this box to specify that you want override the default numeric format in which data labels are currently displayed.

Treat Numbers As

Use this box to specify whether data labels are numbers, percentages, or currency.

Currency Symbol

This box is available only if you select **Currency** in the **Treat Numbers As** box.

Use this box to select the currency symbol to show in data labels.

Negative Format

Use this option to specify whether to display negative data labels using a minus sign (for example, -123) or parentheses (for example, (123).

Decimal Places

Use this box to select the number of decimal places (to a maximum of 6) in which to display numbers (for example, 120,000,000.000).

Use 1000's Separator

Use this box to specify whether to separate each magnitude of a thousand by a comma. (for example, 1,000,000,000.00).

Scale for % (x 100)

This box is displayed if you selected the **Percentage** option in the **Treat Numbers As** list.

Select this box to multiple the data by 100 to display it as a percentage.

For example, suppose that you had a column that contained the ratio 0.0326 (meaning 3.26 percent). Selecting this box multiples the ratio 0.0326 by 100 to display 3.26% (rather than 0.0326%).

Gauge Properties dialog

Use this dialog to edit the properties of gauge.

For more information, see:

- "Editing Gauge Views"

Components

Canvas

Use the "Gauge Properties dialog: General tab" to set properties related to the gauge canvas, such as, legend location.

Style

Use the "Gauge Properties dialog: Style tab" to set properties that control the appearance of the gauge, such as width and height of the gauge.

Scale

Use the "Gauge Properties dialog: Scale tab" to set properties for gauge limits and tick marks.

Titles and Labels

Use the "Gauge Properties dialog: Titles and Labels tab" to set properties that control the display of titles, footers, and labels for the gauge or gauges in a gauge set.

Gauge Properties dialog: General tab

Use this tab of the "Gauge Properties dialog" to set properties related to the gauge canvas, such as legend location.

For more information, see:

- "Editing Gauge Views"

Components

Gauges Per Row

Use this field to enter the number of gauges that are displayed per row in a gauge set.

Legend Location

Use this box to specify whether a legend is to be displayed and its location. Select one of the following options:

- **Default** — Use this option to display the legend in the default location, that is, to the right of the gauge canvas.

- **None** — Use this option to specify that no legend is to be displayed.

- **Top** — Use this option to display the legend at the top of the gauge canvas.

- **Right** — Use this option to display the legend to the right of the gauge canvas.

- **Bottom** — Use this option to display the legend at the bottom of the gauge canvas.

- **Left** — Use this option to display the legend to the left of the gauge canvas.

Listen to Master-Detail Events

Use this box to specify whether the gauge is to act as a detail view in a master-detail relationship and listen for master-detail events. If you select this box, then complete the **Event Channels** field.

For more information on master-detail relationships, see "What Is Master-Detail Linking of Views?"

Event Channels

This field is enabled only if you select the **Listen to Master-Detail Events** box.

Use this field to enter the name of one or more channels on which the gauge is to listen for master-detail events raised by one or more master views. The channel name is case sensitive and must match exactly the channel name specified in the master view. Separate channels with commas, for example, channel a, channel b.

Include Null Values

Use this check box to override null suppression set at the analysis level. When selected for the gauge view, null values will not be suppressed for the gauge rows that contain all nulls. See "Understanding Null Suppression" for additional information.

Gauge Properties dialog: Scale tab

Use this tab of the "Gauge Properties dialog" to set properties for the following parts of a gauge:

- **Gauge limits** — The minimum and maximum points on the gauge value axis.

- **Tick marks** — The markings along the value axis of the gauge. They can identify regular intervals, from the minimum value to the maximum value, and can also indicate threshold values. (You set threshold values in the "Settings pane.")

For more information, see:

- "Editing Gauge Views"

Components

Gauge Limits

Use this area to specify the gauge limits as follows:

- Select the **Default** box to use the default gauge limits.

- Select the **Specify** box to specify custom gauge limits. Then, in the **Minimum** field enter the lowest point and in the **Maximum** field enter the highest point.

  Click the **Customize Gauge Limit** button to the right of the **Minimum** or **Maximum** field to display the "Customize Gauge Limit dialog," where you specify the custom gauge limit. You can specify the limits as an actual value or a percentage.

  By default and in percentage scale, gauge scale is always shown as 0% to 100%. (It never shows more than 100%.)

  To show the values to which 0% and 100% are mapped, in the Gauge Properties dialog: Titles and Labels tab, click the **Axis Labels: Format Label** button and select the **Actual Value** option in the **Axis Labels** box.

  The gauge's actual minimum and maximum values are mapped 0% and 100% based on the gauge's internal minimum and maximum algorithm and depend on the data set. Normally, the 0% and 100% might not match the exact minimum and maximum of the data set.

  However, if you set the scale minimum and maximum on the Gauge Properties dialog: Scale tab, the 0% and 100% exactly correspond to the scale minimum and maximum values.

Tick Type

Displays the following options to specify the number of tick marks to display:

- **Dynamic** — Select this box to let the system automatically calculate (based on the data) the number of tick marks to display.

- **Specify** — Select this option to specify the number of tick marks to display.

Show Major Ticks

This box is not available for bulb gauges.

Use this box to specify whether major tick marks are to be shown.

To show major ticks, select this box and then specify the number of major tick marks to show.

Show Minor Ticks

This box is not available for bulb gauges.

Use this box to specify whether to show minor tick marks.

Minor tick marks show only in dial gauges that show one measure.

To show minor ticks, select this box and then specify the number of minor tick marks to show.

Gauge Properties dialog: Style tab

Use this tab of the "Gauge Properties dialog" to set properties that control the appearance of the gauge, such as width and height of the gauge.

For more information, see:

- "Editing Gauge Views"

Components

Dial Arch Length

This box is available only for dial gauges.

Use this field to enter length of the dial arc in degrees. The maximum value is 360 degrees.

Gauge Size

Use this box to specify the size of the gauge — **Fit to Canvas**, **Small**, **Medium**, **Large** or **Custom**.

If you select **Custom**, then you must complete the **Width** and **Height** fields, where you specify the width and height in pixels.

Width

This field is enabled only when you select **Custom** in the **Gauge Size** box.

Use this field to enter the width of the gauge in pixels.

Height

This field is enabled only when you select **Custom** in the **Gauge Size** box.

Use this field to enter the height of the gauge in pixels.

Marker Type

This area is available only for dial gauges.

Use this area to specify, for each measure in the gauge, the type and color of the indicator. The indicator is the part of the gauge that points to the value that is plotted.

In the first box, select the type of indicator and then, in the second box, select the color. The types of indicators are:

- **Needle** — Use this option to use a needle to point to the value that is plotted.

- **Line** — Use this option to use a line to point to the value that is plotted.

- **Fill** — Use this option to fill the area inside the dial gauge to the value that is plotted. This option is ignored if the gauge has thresholds or if the gauge shows multiple measure columns.

Gauge Colors and Border: Background

This box is available only for dial gauges.

Displays the Color Selector dialog, where you select the color for the gauge background.

Gauge Colors and Border: Border

This box is available only for dial gauges.

Displays the Color Selector dialog, where you select the color for the border around the gauge.

Canvas Colors and Border: Background

Displays the Color Selector dialog, where you select the color for the canvas background.

Canvas Colors and Border: Border

Displays the Color Selector dialog, where you select the color for the border around the canvas.

Gauge Properties dialog: Titles and Labels tab

Use this tab of the "Gauge Properties dialog" to set properties that control the display of titles, footers, and labels for a gauge or gauges in a gauge set.

If the canvas consists of a gauge set, then titles and footers are displayed for each gauge. Titles and footers are optional.

For more information, see:

- "Editing Gauge Views"

Components

Gauge Set Title: Title

Use this field to enter the title for the gauge or gauge set. The title is displayed at the top of the canvas.

Use measure name as graph title

Use this check box to use the name of the measure column or columns (for example, Dollars) for the title of the gauge or gauge set.

Gauge Titles: Title

Use this field to enter a title to be displayed above each gauge.

You can use a token (@*n*) to include the results from the designated column in the gauge title. For example, @1 inserts the results from the first column, and @3 inserts the results from the third column.

Gauge Titles: Footer

Use this field to enter a footer to be displayed beneath each gauge.

You can use a token (@*n*) to include the results from the designated column in the gauge footer. For example, @1 inserts the results from the first column, and @3 inserts the results from the third column.

Format Title

Use this button (which is displayed next to each **Title** field and the **Footer** field) to display the "Font Format: Item dialog," where you can format the title or footer.

Legend: Format Label

Use this button to display the "Font Format: Item dialog," where you can format the legend.

Axis Labels or Data Labels: Format Label

Use this button to display the "Format: Item dialog" where you can format the axis labels or data labels.

> **Tip:** If a data label does not display (because it does not fit in the space), then try reducing the font size of the label.

The **Format Label** button for axis labels is not available for bulb gauges.

Getting Started pane

Use this pane to learn how to use Oracle Scorecard and Strategy Management to drive and assess corporate performance, to link to the Oracle Business Intelligence glossary, and to link to information about how to create scorecards.

For more information, see "Viewing Overview Information."

This pane is part of the "Scorecard editor: Overview tab."

Components

Overview
Use this link display overview information about scorecarding.

Glossary of Terms
Use this link to display a glossary of Oracle Business Intelligence terms.

How do I?
Use link to display information on how to create scorecard components, such as objectives, initiatives, perspectives, and views.

Graph Properties dialog

Use this dialog to edit the properties of a graph.

For more information, see:

■ "Editing Graph Views"

Components

General
Use the "Graph Properties dialog: General tab" to set properties related to the graph canvas, such as legend location.

Style
Use the "Graph Properties dialog: Style tab" to set properties that control the appearance of the graph, such as the style.

Scale
Use the "Graph Properties dialog: Scale tab" to set properties for axis limits and tick marks.

Titles and Labels
Use the "Graph Properties dialog: Titles and Labels tab" to set properties that control the display of titles and labels for the graph.

Graph Properties dialog: General tab

Use this tab of the "Graph Properties dialog" to set properties related to the graph canvas, such as legend location.

For more information, see:

- "Editing Graph Views"

Components

Canvas Width

Use this field to enter the width of the graph canvas in pixels.

Canvas Height

Use this field to enter the height of the graph canvas in pixels.

Legend Location

Use this box to specify whether a legend is to be displayed and its location. Select one of the following options:

- **Default** — Use this option to display the legend in the default location, that is, to the right of the graph canvas.

- **None** — Use this option to specify that no legend is to be displayed.

- **Top** — Use this option to display the legend at the top of the graph canvas.

- **Right** — Use this option to display the legend to the right of the graph canvas.

- **Bottom** — Use this option to display the legend at the bottom of the graph canvas.

- **Left** — Use this option to display the legend to the left of the graph canvas.

To help maintain the readability of legends, the following items will be omitted from the legend label:

- All items that are repeat across outer layers in all legend labels

- A measure column that repeats in all legend labels, if the measure layer is the last layer or innermost layer in the row edge

Zoom and Scroll

This component is not supported for radar, funnel, and pie graphs.

Use this area to specify whether to enable zooming and scrolling on the horizontal and vertical axes:

- **Enable for Horizontal Axis** — Use this option to enable zooming and scrolling on the X axis.

- **Enable for Vertical Axis** — Use this option to enable zooming and scrolling on the vertical axis.

When you enable zooming and scrolling for an axis, the **Zoom** button (from which you can zoom and scroll) is displayed in the graph area when you hover the mouse over the graph.

For more information on how to zoom and scroll, see "Zooming and Scrolling in Graphs."

Listen to Master-Detail Events

Use this box to specify whether the graph is to act as a detail view in a master-detail relationship and listen for master-detail events. If you select this box, then complete the **Event Channels** field.

For more information on master-detail relationships, see "What Is Master-Detail Linking of Views?"

Event Channels

This field is enabled only if you select the **Listen to Master-Detail Events** box.

Use this field to enter one or more channels on which the graph is to listen for master-detail events raised by one or more master views. The channel name is case sensitive and must match exactly the channel name specified in the master view. Separate channels with commas, for example, channel a, channel b.

Include Null Values

Use this check box to override null suppression set at the analysis level. (See "Understanding Null Suppression" for additional information.) When selected for the graph view, null values will not be suppressed for the graph rows that contain all nulls. The graph must have a **Group By** drop target or must be a funnel or pie graph. See "Understanding Drop Targets" for additional information.

Animate graph on Display

This box is not supported for funnel graphs.

Use this box to specify whether to show an initial rendering effect. The rendering effect varies from graph to graph. In a horizontal graph, for example, the bars start at the horizontal axis and move up to the current measurement level.

If this box is selected for a graph, and you add a section slider, then this box is deselected automatically because animation across pages is not supported for a section slider.

Graph Properties dialog: Scale tab

Use this tab of the "Graph Properties dialog" or of the "Trellis Properties dialog" to set properties for the following parts of a graph:

- **Axis limits** — The minimum and maximum points on the vertical and horizontal axes.

- **Tick marks** — The markings along the value axes of the graph. They can identify regular intervals, from the minimum value to the maximum value.

This tab is not available for pie graphs or funnel graphs.

For more information, see:

- "Editing Graph Views"

This dialog also displays as:

Trellis Properties dialog: Scale tab

Components

> **Note:** For a trellis, the components available in this tab depend on the type of trellis (simple or advanced) and the type of visualization (that is, graph) with which you are working.
>
> If a graph has both vertical and horizontal axes (for example in a scatter graph) or two vertical axes (for example in a line-bar graph), this tab contains sub-tabs so that you can set the scale properties for both axes.
>
> In a graph of the subtype 100% Stacked, the only component available in this tab is the "Scale Markers dialog," where the value you set for position or range of a scale marker is a percentage. In 100% stacked graphs, you do not set axis limits, you do not display tickmarks, and you do not use a logarithmic scale.

Axis Limits or Scale and Limits

This area is disabled for a pareto graph and for a 100% stacked graph.

Use this box to specify the limits of the vertical or horizontal axis. Select one of the following options:

- **Default (Dynamic)** — Use this option to let the system determine the scale and set the axis to zero for positive numbers.

- **Specify** — Use this option to specify the minimum and maximum axis limits. Then in the **Minimum** field, enter the minimum axis limit and in the **Maximum** field, enter the maximum axis limit.

- **Zoom to data range** — Use this option to let the system determine the scale. The system evaluates the range of values on the axis, and chooses appropriate minimum and maximum values for the scale. This is useful when graphing a set of large values that are all within a small percentage of each other. The graph zooms in on the values so differences are more easily distinguished.

> **Note:** The zoom to data range option is not supported for waterfall graphs.

> **Note:** If your data range is expansive, dynamic scaling should be used for plotting your data points. To have the system dynamically scale your data range, select the **Zoom to data range** option for axis limit scaling.

Axis Scale or Scale Type and Tick Marks

This area is disabled for a 100% stacked graph.

Displays the following options to specify the number of tick marks to display:

- **Dynamic** — Select this box to let the system automatically calculate (based on the data) the number of tick marks to display.
- **Specify** — Select this option to specify the number of tick marks to display.

Note that the color you select color for the horizontal and vertical gridlines on the "Graph Properties dialog: Style tab"also is applied to the major and minor tick marks.

Show Major Ticks

Use this box to specify whether to show major tick marks. If you select this box, then specify the number of major tick marks to show.

Show Minor Ticks

This box is disabled for vertical axis 2 of a pareto graph.

Use this box to specify whether to show minor tick marks. If you select this box, then specify the number of minor tick marks to show.

Use logarithmic scale

This box is not available for a pareto graph, a waterfall graph, or a 100% stacked graph.

Use this box to specify whether to use a logarithmic scale.

Visualization: Measure Tabs

Displays tabs that correspond to the measures (for example, Revenue and Billed Quantity) used in an advanced trellis. Click the tab of the measure for which you want to set visualization properties.

Click to edit Scale Markers

Displays the "Scale Markers dialog," where you define the scale markers for the graph.

Notes

- For a time series line graph, you cannot set scale properties (that is, axis limits or major and minor ticks) for the horizontal axis.
- For a Pareto graph, you cannot specify:
  - Axis limits for either vertical axis 1 or vertical axis 2
  - Whether to show minor tick marks for vertical axis 2

–   Whether to use a logarithmic scale

By definition, vertical axis 2 of the pareto graph ranges from 0% to 100%. In addition, vertical axis 1 is synchronized with vertical axis 2, so it cannot be changed.

Graph Properties dialog: Style tab

Use this tab of the "Graph Properties dialog" to set properties that control the appearance of the graph, such as the style.

For more information, see:

- "Editing Graph Views"

Components

Format

This list is only available for waterfall graphs. Use this list to define the color of the bars and which bars display for the graph. The options are:

- **Increase, Decrease and Total**

- **First, Increase, Decrease, and Total**

- **Single Color**

- **Dual Color**

- **Custom** — Once you customize the waterfall bar value by selecting a different color, **Custom** displays in the **Format** list.

See "What Types of Waterfall Graph Formats Are Available?" for additional information.

Style

This box is not enabled for bubble and radar graphs.

Use this box to select the graph style. The options are:

- For bar, line-bar, or pareto graphs: **Default**, **Rectangle**, **Triangle**, **Cylinder**, **Diamond**, **Gradient** or **Pattern Fill**

- For a line or time-series line graph: **Default**, **Standard Line**, **Stepped Line**, or **Curved Line**

- For an area or pie graph: **Default**, **Solid Fill**, **Gradient Fill**, or **Pattern Fill**

- For a scatter graph: **Default**, **Standard Scatter**, or **Scatter-with-Lines**

Style and Conditional Formatting

Displays the "Style and Conditional Formatting dialog," where you specify formatting.

3D

Use this box to specify whether the graph is to be three-dimensional.

Plot Area: Background

Displays the Color Selector dialog, where you select the color for the plot area background.

Gridlines

Use these boxes to specify whether to display the default gridlines or gridlines that you specify.

If you select the **Specify** option, then, for the major grid and for the minor grid, specify the gridlines that you want and their color using the following boxes:

- **Horizontal Line** — Use this box to display a horizontal gridline.

- **Vertical Line** — Use this box to display a vertical gridline.

- **Color** — Displays the Color Selector dialog, where you select the color for the horizontal and vertical gridlines. This color also is applied to the major and minor tick marks, which you specify on the "Graph Properties dialog: Scale tab."

If you select the **Specify** option only and do not select any check boxes for the major and minor grid, no gridlines (not even the ones shown by default) are displayed.

Note that, for a pareto graph, enabling the horizontal major or minor gridlines shows only the gridlines corresponding to vertical axis 1.

Legend: Background

Displays the Color Selector dialog, where you select the color for the legend background.

Legend: Transparent

Use this box to specify whether the legend is transparent (that is, has no background color).

Legend: Border

Displays the Color Selector dialog, where you select the color for the border around the legend.

Canvas Colors and Borders: Background

Displays the Color Selector dialog, where you select the color for the canvas background.

Canvas Colors and Borders: Gradient

Use this box to specify whether the canvas background color is to gradually fade from the specified color at the top to white at the bottom.

Canvas Colors and Borders: Border

Displays the Color Selector dialog, where you select the color for the border around the canvas.

Graph Properties dialog: Titles and Labels tab

Use this tab of the "Graph Properties dialog" to set properties that control the display of titles and labels for the graph.

For more information, see:

■   "Editing Graph Views"

Components

Title

Use this field to enter a title for the graph.

Use measure name as graph title

Use this check box to specify whether to use the measure name or names as the graph title.

Vertical Axis 1 Title

Use this field to enter a title for the vertical axis 1.

Use measure name as axis title

Use this check box to specify whether to use the measure name or names as the vertical axis 1 title.

Vertical Axis 2 Title

Use this field to enter a title for the vertical axis 2.

Use measure name as axis title

Use this check box to specify whether to use the measure name or names as the vertical axis 2 title.

Horizontal Axis Title

Use this field to enter a title for the horizontal axis.

Use column name as axis title

Use this button to specify whether to use the column name or names as the horizontal axis title.

Format Title

Use this button (which is displayed next to each Title field) to display the "Font Format: Item dialog," where you can format the title.

Legend: Format Label

Use this button to display the "Font Format: Item dialog," where you can format the legend.

Format Label (for Vertical Axis Labels, Horizontal Axis Labels or Data Markers)

Use this button to display the "Font Format: Item dialog" where you can format the vertical axis labels, horizontal axis labels, or data labels.

Totals

This area is only available for waterfall graphs. Use these two boxes to customize the text that displays on the waterfall graph. The options are:

- **Subtotal** — The subtotal text displays along the horizontal axis.

- **Total** — The total displays in the graph legend and along the horizontal axis for the last total bar.

Notes

For time series line graphs, no data formatting options are available for the time axis labels or data labels. You can modify font characteristics, but any other formatting selections are ignored.

For a time series line graph, labels that display on the time axis are locale-sensitive. For example, month and day names use the appropriate locale-sensitive short names.

Graphics dialog

Use this dialog to select images to display for the following:

- Individual KPI performance thresholds
- A column cell

You can select a standard image or manually enter a path to a custom image.

Components

No Image

Use this box to indicate that no image is included in the column's layout. If you are creating a KPI threshold, select this option to display only KPI values and omit symbols that reflect performance levels or states.

Custom Image

Use this field to specify a custom image to include in the column's layout or with the KPI threshold. To do so, enter one of the following:

- The URL to a custom image.
- The fmap syntax to reference a custom image that is stored locally in the Oracle Business Intelligence environment. For more information on the fmap syntax, see "Storing Custom Files Locally and Using the fmap Function to Reference Them."

> **Note:** If you are trying to save an object that uses the fmap syntax, then you must have the Save Content with HTML Markup privilege. See "Managing Presentation Services Privileges" in *Security Guide for Oracle Business Intelligence Enterprise Edition* for information on privileges.

The custom image should be one that is accessible to all users who view or edit the scorecard.

Custom images can be used for both conditional and unconditional column results.

Select Standard Image

Use this pane to select an image distributed with Oracle Business Intelligence. To select an image, click the option next to the image to include in the column. These images are useful in conditional formatting, such as meters and trend arrows. The left pane shows the categories of images. When you click an image category, the right pane shows the images in that category.

Image Placement

Use this field to specify where you want the image to be displayed relative to the column's data or heading.

Select **Choose Image Only** if you want the column to contain the image without the text. Choose Default to use the image's default position, which is usually to the left of the column's data or heading.

Heat Matrix Properties dialog

Use this dialog to edit the properties of a heat matrix.

For more information, see "Editing Heat Matrix Views."

Components

General

Use the "Heat Matrix Properties dialog: General tab" to specify attributes related to the cell width, content paging, master-detail linking, and null values, or to show or hide the legend for the heat matrix, and to control the appearance of sections, such as the background and border colors, or printing and exporting for the heat matrix.

Titles and Labels

Use the "Heat Matrix Properties dialog: Titles and Labels tab" to set properties that control the display of titles and labels for the heat matrix.

Heat Matrix Properties dialog: General tab

Use this tab of the "Heat Matrix Properties dialog" to specify attributes related to the cell width, content paging, master-detail linking, and null values, or to show or hide the legend for the heat matrix, and to control the appearance of sections, such as the background and border colors, or PDF printing for the heat matrix.

For more information, see:

- "Editing Heat Matrix Views"

- "Additional Components Common to Heat Matrix Views"

Components

Data Cell Width

Use this text field to enter a fixed width for the cells in a heat matrix view in pixels. Default is 50 pixels.

Max Row Header Width

Use this text field to specify the maximum width of the name of the row label. If the label name is too long, it is truncated with an ellipsis (. . .). Increase the number of pixels to avoid truncation. Default is 150 pixels.

Show Legend

Use this check box to specify whether a legend is to be displayed to show the continuous color variations or binning for the heat matrix view. See "Additional Components Common to Heat Matrix Views" for detailed information on binning properties.

Data Viewing

Use this area to specify the method to use to browse data:

- **Fixed headers with scrolling content** — Use this option to use scrolling as the method to browse data.

  When you select this option, the **Maximum Width** and **Maximum Height** fields are displayed in this dialog.

  A heat matrix that uses this method:

  – Keeps headers of rows and columns visible at all times.

  – Includes horizontal and vertical scroll bars.

  – May include **Get more rows** and **Get more columns** links to fetch more rows and columns of data, when the heat matrix has a large amount of data and the user scrolls to the bottom of the heat matrix.

  > **Note:** The scrolling method is not supported on Microsoft's Internet Explorer browser version 7 and 8, if this version is detected, the heat matrix is rendered using paging controls.

- **Content paging** — Use this option to use paging controls as the method to browse data.

When you select this option, the **Paging Controls** box and the **Rows per Page** field are displayed in this dialog.

Maximum Width

This field is available only if **Fixed headers with scrolling content** is selected.

Use this field to specify the maximum width of the heat matrix in pixels. The default is 600 pixels.

Maximum Height

This field is available only if **Fixed headers with scrolling content** is selected.

Use this field to specify the maximum height of the heat matrix in pixels. The default is 700 pixels.

Paging Controls

This box is available only if **Content paging** is selected.

Use this box to specify where the paging controls are displayed for the view. The paging controls include **First 25 Rows** and **Next 25 Rows**. You can select either the top or bottom of the view or you can select to hide the controls. For information on the paging control buttons, see "Results tab: Data View editor."

Rows per Page

This field is available only if **Content paging** is selected.

Use this field to enter the number of rows to display per page for the view. This setting affects the number of rows that are displayed with the **First**, **Next**, and **Previous** paging control buttons.

Null Values

Use these check boxes to override null suppression set at the analysis level.

Include rows with only Null Values — Use this check box to include null values in a heat matrix view when the entire row contains all null values. When selected, null values are not suppressed for rows for the heat matrix.

Include columns with only Null Values — Use this check box to include null values in a heat matrix view when the entire column contains all null values. When selected, null values are not suppressed for columns in the heat matrix.

See "Understanding Null Suppression" for additional information.

Listen to Master-Detail Events

Use this check box to specify whether the heat matrix is to act as a detail view in a master-detail relationship and listen for master-detail events. If you select this check box, then complete the **Event Channels** field.

Event Channels

This field is enabled only if you select the **Listen to Master-Detail Events** check box.

Use this field to enter one or more channels on which the heat matrix is to listen for master-detail events raised by one or more master views. The channel name is case-sensitive and must match exactly the channel name specified in the master view. Separate channels with commas, for example, channel a, channel b.

Sections Formatting

Use this button to display the "Sections Formatting dialog," where you specify how to break pages for printing and exporting and how to format sections in a heat matrix.

Heat Matrix Properties dialog: Titles and Labels tab

Use this tab of the "Heat Matrix Properties dialog" to set properties that control the display of titles and labels for the heat matrix.

Components

Show Measure Value

Use this box to specify whether the measure value is displayed on the cell. The options are:

- **On** — Use this option to show the measure value.

- **Off**— Use this option to hide the measure value.

- **On Rollover** — Use this option to show the measure value, but only when the mouse pointer is rolled over the cell. This is the default value.

Show Measure Value: Format Label

Use this button to display the "Format: Item dialog," where you can format the measure values.

Display Folder & Column Headings

Use this box to specify whether a title is displayed. The options are:

- **Only column headings** — Use this option to display the column name to the left of the column as the column title.

- **As separate rows** — Use this option to display the column name above the row as the row title.

- **As Folder.Column** — When row or column Labels are turned on, use this option to display the fully qualified folder name from the Subject Area and column name as the row or column title. (For example: Offices.D1 Offices).

Prompt Labels, Row Labels, Column Labels, or Section Labels

Use this box to specify whether the label is displayed. The options are:

- **On** — Use this option to show the label.

- **Off** — Use this option to hide the label.

- **On Rollover** — Use this option to show the label, but only when the mouse pointer is rolled over the prompt, row, column, or section.

Home page

Use this page to:

- Navigate to the area of the application where you can complete a specific task (for example, create a dashboard).

- Access your objects or the objects to which you have been given permission to view or edit.

- View your alerts.

- Access Oracle Business Intelligence documentation and other Oracle product information.

For more information, see:

- "Accessing and Managing Your Alerts"

- "What Is the Oracle BI EE Home Page?"

- "Where Do I Store and Manage Oracle BI EE Objects?"

Components

Create...

Provides links to initiate the most popular creation tasks by category (for example, Published Reporting or Actionable Intelligence). Click the **More** link to access a list of the category's other creation tasks. Oracle BI EE populates this list of categories based on what is installed on your company's system and the pieces to which you have been given the rights to access.

Alerts

(This section is available only when one or more alerts are delivered to the Oracle BI EE Home page.)

Displays your alerts (up to a maximum of five), including the priority (**High**, **Normal**, or **Low**) and last delivery date and time for each alert.

To view the latest occurrence of an alert, click its name. The "Alert dialog" is displayed, where you can view information about the alert and the content of the alert. You can also edit and run the agent that generated the alert, if you have the appropriate permissions.

Each alert has the following links:

- **View** — Use this link to display the Alert dialog, where you can view information about the alert and the content of the alert. You can also edit and run the agent that generated the alert, if you have the appropriate permissions.

- **Clear** — Use this button to delete the alert.

- **More** — Displays the following options:

  - **Edit Agent** — (This option is available only if you have permission to modify the agent.) Use this option to display the agent in the "Agent editor," where you can edit the agent.

  - **Run Agent** — (This option is available only if you have permission to execute the agent.) Use this option to run the agent that generated the alert.

        – **Subscribe to this feed** — Use this option to display the browser's page that lets you subscribe to an RSS feed. Using this page, you can subscribe to an Oracle BI Alerts feed (that is, the channel that contains the delivered agents). For more information, see "Subscribing to an RSS Feed for Alerts."

        – **View all alerts** — Use this option to display the "Alerts dialog," where you can view and manage all your alerts.

If more than five alerts have been delivered, the **View All Alerts** link is displayed. Click this link to display the "Alerts dialog," where you can view and manage all your alerts.

To configure an agent to deliver an alert to the Home page, you must select the **Home Page and Dashboard** option on the "Agent editor: Destinations tab." For more information about creating agents, see "Creating Agents."

Recent

Contains two sections:

- **Dashboards** — Contains a list of dashboards that you have recently viewed, created, or updated. Note that these dashboards display in the first row of this section. Click the **More Dashboards** link to access additional dashboards.

- **Others** — Contains a list of objects (other than dashboards) that you have recently viewed, created, or updated. For example, this list can include: KPIs, scorecards, and BI Publisher data models.

The links that are included with an individual object (for example, Edit and Properties) are displayed based on the object's type and your permissions for that object. For example, if you can view but not edit a dashboard, only the **Open** link is displayed with the dashboard. If a dashboard that you created displays in this section, then the **Open** and **Edit** links display with the dashboard. Click the **More** link to access a list of additional dashboard options, such as Properties.

Most Popular

Contains a list of recommended objects that other users with your same role viewed. You have not accessed these objects yet but may find them useful. Oracle BI EE compiles this list of recommendations by determining which objects similar users have accessed and compares those objects to your list of recently accessed object. Oracle BI EE includes only items to which you have the view permission. Only items saved to the Shared Folder display in this list.

The links that are included with an individual object are displayed based on the object type and your permissions for that object. For more information about how Oracle BI EE determines the object's links, see the **Recent** component in this topic.

Image Map Prompt Properties dialog

Use this dialog to specify information for the map column. For more information, see "Creating an Image Prompt" and "Other Prompt Types."

Components

Caption
Use this field to enter a caption for the image map prompt. The caption is displayed as the prompt's field label. For example, "Click a region to see sales data." You can include HTML markup tags in the caption, such as <b>, <font>, and <table>.

Description
Use this field to enter a description that is saved with the prompt. Descriptions are displayed when an administrator uses the Catalog Manager.

Image URL
Use this field to specify the location of the image file.

The image file must reside on a Web server. Oracle recommends that you put the image files in the directory that contains all Web resource files (for example, `app\res\region3.jpg`). Placing the image files with the Web resource files prevents a security warning message from displaying when the user accesses the image from the dashboard or analysis.

However, if you are using a Web server, such as WebServices, where the resource files are located in the deploy directory, then you must put the image file in the deploy directory and the directory that contains all Web resource files.

You can reference variables in this field. For the syntax to use, see "What Is the Syntax for Referencing Variables?" For more information on variables, see "Using Variables."

HTML
Use this field to specify the HTML <map> tags. In the map tags, you indicate the map region's shape, X and Y coordinates, and region name.

Extract Image Map from HTML
Use this link to extract the values that you specified in the HTML <map> tags and put them in a table where you can link the regions to data columns and values.

Import Background Maps dialog

Use this dialog to import maps to the Background Maps tab of the "Administration: Manage Map Data page." For information, see "Administering Maps" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

This dialog is also displayed as:

Add Layers dialog
Import Images dialog
Import Layers dialog

Components

Look in

Not available for the Add Layers dialog. Use this box to select the connection to a data source in MapViewer that contains the predefined background maps, layers, or images from which you want to select. Each data source can contain a set of background maps, layers, and images. The sets are not related to each other. (In MapViewer, background maps are referred to as "tiles.")

The list of connections includes all those that have been defined during the configuration of MapViewer.

Available *Items*

Use this list to select one or more background maps, layers, or images, depending on which dialog is displayed.

Previewing Area

Displays a preview of the selected background map, layer, or image. If multiple items are selected, then the last selected item is displayed. The name of the item is displayed at the top of the Previewing Area.

Preview Map

Available only in the Import Layers dialog. Use this list to select the background map to display for previewing the layer. If no background map is available, then a static image of the layer is shown in the Previewing Area. The default background map displayed is the map that covers the largest spatial area, because that map has the highest probability of displaying the points that comprise the layer.

Initiative Linkage dialog

Use this dialog to specify how strongly an initiative drives an objective or how strongly an objective is driven by an initiative.

For more information, see:

■   "Related Items pane"

This dialog also displays as:

Objective Linkage dialog

Components

Initiative

Displays the name of the initiative that drives the objective.

Objective

Displays the name of the objective that is driven by the initiative.

Strength

Use this box to specify whether the strength of the relationship between the objective and initiative is **Strong**, **Moderate**, or **Weak**.

For example, an initiative called "Upgrade Out Of Date Software" might moderately drive an objective called "Improved Employee Productivity".

Proportionality

Use this box to specify whether changes in performance or value in one object are directly proportional (**Direct**) or inversely proportional (**Inverse**) to changes in performance or value in the other object.

For example, in a relationship between an objective named Reduce Customer Complaints to 4% and an initiative named Improve Quality Control, the proportionality would be inverse because improvements in quality control should result in lower numbers of customer complaints.

Initiatives pane

Use this pane to create, modify, and delete initiatives.

For more information, see:

- "What Are Initiatives?"
- "Creating Initiatives"

This pane is part of the "Scorecard editor."

Components

Initiative Tree

Displays the initiatives that have been defined for the scorecard and the KPIs that measure their progress hierarchically. It also shows the statuses of initiatives and KPIs using the appropriate colors and symbols that you specified for assessment mappings. For more information on assessment mappings, see "Defining Assessment Mappings for Scorecards."

Toolbar

This toolbar contains the following buttons:

- **Create Initiative** — Use this button to display the "Scorecard editor: Initiative Details tab," where you create an initiative as a child of the selected initiative.
- **Open** — Use this button to open the selected object for editing or viewing, depending on the current mode.
- **Delete** — Use this button to delete the selected object and all of its descendants (if any), if you have the appropriate permission.

Right-Click Menu for an Object

Displays options for working with an object. See "Right-Click Menu for Objects in the Initiatives Pane and Strategy Pane."

Right-Click Menu for Objects in the Initiatives Pane and Strategy Pane

The right-click menu for objects in the "Initiatives pane" or the "Strategy pane" provides a number of options that allow you to work with the objects in the pane. For example, you can open objects, delete objects, or reorder objects using cut and paste operations.

The options vary depending on the type of object, whether the object is in the Initiatives pane or Strategy pane, and whether the Scorecard editor is in edit or read-only mode:

- **Open** — Use this option to display the object for editing or viewing, depending on the current mode.

- **Delete** — Use this option to delete the selected object and all of its descendants (if any), if you have the appropriate permission.

- **Cut** — Use this option to remove the selected object and all of its descendants (if any) for pasting to another position within the tree.

  To cancel a cut, perform another action inside the Initiatives pane or Strategy pane in which you have initiated the cut action, press the Esc key, or paste back to the same location.

- **Create Objective** — Use this option to display the "Scorecard editor: Objective Details tab," where you create an objective as a child of the selected objective.

- **View Strategy Tree** — Use this option to display the strategy tree for the selected object.

- **View Cause & Effect Map** — Use this option to display the cause & effect map for the selected object.

- **Create Initiative** — Use this option to display the "Scorecard editor: Initiative Details tab," where you create an initiative as a child of the selected initiative.

- **Analyze** — This option is available only when you select a KPI. Use this option to create an analysis based on the KPI. The analysis is automatically saved in the catalog in the My Folders/Drills folder.

  > **Note:** Because the My Folders/Drills folder is used for temporary storage, the analysis might not persist after the Oracle Business Intelligence session ends. To preserve the analysis, copy it to another directory. For example, to preserve an analysis that you plan to use in a shared dashboard, copy it to a folder in /Shared Folders.

- **Create Agent** — This option is available only when you select a KPI. Use this option to display the "Create New Agent dialog," where you create an agent from the KPI.

- **Contact Owner** — Use this option to display the "Contact Owner dialog," where you can contact the business owner of the object.

- **Permissions** — Use this option to display the "Permissions dialog," where you can set permissions for an object.

- **Paste Before** — Use this option to move the object that you have cut before the selected object at a sibling level.

- **Paste After** — Use this option to move the object that you have cut after the selected object at a sibling level.

- **Paste As Child** — Use this option to move the object that you have cut to be a child of the selected object.

  The cut object will be pasted after the last existing child of the selected object if there are any, otherwise it will become the only child. You can use **Paste Before** or **Paste After** instead if you want to position the cut object relative to an existing child.

Notes

The guidelines for reordering objects in the Initiatives pane and Strategy pane are as follows:

- You cannot paste an object to itself or one of its descendants.

- You cannot paste an object as a child of a KPI. (KPIs cannot have children.)

- To paste an object, you must have the correct permissions for modifying the object that is to become its parent.

- You can cut and paste only one object (and its descendants, if any) at a time.

- You cannot cut and paste an object from the Initiatives pane to the Strategy pane or from the Strategy pane to the Initiatives pane.

- Because cutting and pasting an object may have an effect on weight assignments and permissions, after the paste you may need to manually adjust:

  - Weight allocations, if weighted assessment rules are being used

  - Permissions of the moved object or its new ancestor objects (if different).

Insert Filter dialog

Use this dialog to add a SQL FILTER function to a column formula in the "Edit Column Formula dialog: Column Formula tab."

For more information, see:

- "Editing the Formula for a Column"

Components

Filter Function Area

Displays the SQL function in the form:

FILTER(*expr* USING **filter_expressions**)

Where:

- *expr* is an expression that contains at least one measure column. For example, the expression "sales + 1" is allowed if "sales" is a measure column. The expression "productid" is not allowed if "productid" is a scalar attribute.

- **filter_expressions** is a Boolean expression (evaluates to TRUE or FALSE) and does not contain any measure columns. Also, this expression cannot contain any nested queries.

  Note: If you selected some text in the **Formula** area before clicking **Filter**, then it is incorporated in the inserted SQL function, replacing the expression token (**expr**). For example, if you had selected "Sales Measures".Dollars before clicking **Filter**, then the SQL function would look like this: FILTER("Sales Measures"."Dollars" USING filter_expressions).

  A complex filter statement might replace the filter_expressions token as follows:

  ```
  FILTER("Sales Measures".Dollars USING ((Periods."Year" =
  '1999') AND ((Markets.District = 'CINCINNATI DISTRICT") OR
  (Markets.District = 'DENVER DISTRICT'))))
  ```

Use this area to define **filter_expressions** by adding a single filter expression or building a complex filter statement using multiple filter expressions.

For each filter expression to add, select a column from the Subject Areas pane. The "New Filter dialog" is displayed where you create the filter to add to the filter expression.

As you define the **filter_expressions**, you can use the following:

- Operator to toggle between **AND** and **OR** to specify the relationship between multiple filter expressions.

- Filter item toolbar to manage a filter expression. The filter item toolbar is the collection of buttons that displays when you mouse over a filter expression. It includes the following buttons:

  - **Edit Filter** — Use this button to display the "Edit Filter dialog," where you edit the filter expression's criteria.

- **Copy Filter** — Use this button to copy the filter expression.

- **Paste Filter** — Use this button to paste the filter item that you copied with the **Copy Filter** button. When you click this button, a copy of the filter item displays below the original filter item.

- **Delete**— Use this button to delete the filter expression.

Subject Areas

Use the "Subject Areas pane" to select columns to add to the filter expression.

Catalog

Use the "Catalog pane" to select filters from the catalog to add to the filter expression.

Insert Function dialog

Use this dialog to select a function to add to a formula in the "Edit Column Formula dialog: Column Formula tab."

For more information, see:

- "Editing the Formula for a Column"
- "How Are KPIs Evaluated?"
- Appendix C, "Logical SQL Reference"

Components

Functions
Use this tree to select a function to add to a formula. Expand a function group to show a list of functions within that group.

Selected
Displays the name of the function that is currently selected in the Functions tree.

Syntax
Displays the syntax of the function that is currently selected in the Functions tree.

Where
Displays descriptions of the arguments for the syntax.

Example
Displays an example of the function.

Description
Displays a description of the function that is currently selected in the Functions tree.

Notes

- When you click the *f(...)* button in the Edit Column Formula: Column Formula dialog (or the Edit Formula dialog), if:
  - Some text is selected in the **Formula** area, then the selected text is incorporated into the inserted function formula when you click **OK**.
  - If no text is selected in the **Formula** area, then the function's expression is inserted and the first argument (denoted by tokens expr or expr1) is automatically selected when you click **OK**.

Insert Global Variable dialog

Use this dialog to add (or modify) a global variable in the "Edit Column Formula dialog: Column Formula tab," and to delete a global variable from the catalog.

For more information, see:

- "Using Variables"
- "What Are Global Variables?"
- "New Global Variable dialog"

Components

Name
Displays the name of the global variable.

Value
Displays the value of the global variable.

Toolbar
This toolbar contains the following buttons:

- **Add Global Variable** — Use this button to add a new global variable to the catalog.
- **Edit Global Variable** — Use this button to modify a global variable in the catalog.
- **Remove Global Variable** — Use this button to remove a global variable from the catalog.

Insert Variable dialog

Use this dialog to add a variable (either session, repository, or presentation) to a formula in the "Edit Column Formula dialog: Column Formula tab" or in the "New EVALUATE_PREDICATE Function dialog."

For more information, see:

- "Editing the Formula for a Column"
- "How Are KPIs Evaluated?"
- "How Can I Use the EVALUATE_PREDICATE Function with a Filter?"
- "Adding the EVALUATE_PREDICATE Function to an Inline Filter"

Components

Variable Name

This field is available only if you have selected **Session** and **Repository** as the variable type to add.

Use this field to enter the name of the session or repository variable, for example USER.

Variable Expression

This field is available only if you have selected **Presentation** as the variable type to add.

Use this field to enter the name of the presentation variable, for example MyFavoriteRegion.

To type-cast (that is, convert) the variable to a string, enclose the name in single quotes, for example:

```
'user.displayName'
```

Default Value (Optional)

This field is available only if you have selected **Presentation** as the variable type to add.

Use this field to enter a default value for the presentation variable, for example EASTERN REGION.

Notes

- When you click **OK** in this dialog, the appropriate expression for the variable is created and inserted in the Formula area. For example:

```
@{MyFavoriteRegion}{EASTERN REGION}
```

Related Topics

"Using Variables"

Invoke Action dialog

Use this dialog to provide values for action parameters and to run an action.

For more information, see:

- "What Are Actions?"
- "About Running Actions Using Action Links and Action Link Menus in Analyses and Dashboards"
- "About Running Actions Associated with Action Links in Analyses and Dashboards"

Key Resource dialog

Use this dialog to identify a user who is a key resource on an initiative.

For more information, see:

- "Collaboration pane"
- "What Are Initiatives?"
- "Creating Initiatives"

Components

User

Displays the name of a user who is a key resource on the initiative. Click the **Set User** button to display the "Select Key Resource User dialog," where you search for and select the user.

Capacity

Use this field to enter the percentage of full time hours the user devotes to this initiative, for example, 80%.

KPI Contribution Wheel editor

Use this editor to create, modify, or view a KPI contribution wheel.

For more information, see:

- "About KPI Contribution Wheel Diagrams"
- "Understanding KPI Contribution Wheel Diagrams"
- "Creating KPI Contribution Wheels"

Components

Catalog

Use the "Catalog pane for KPI Contribution Wheel" to locate and drag and drop a KPI from the catalog to the KPI contribution wheel content pane to create a KPI contribution wheel.

Diagram

Use the "KPI Contribution Wheel editor: Diagram tab" to create a KPI contribution wheel diagram and to analyze the performance of a KPI for a single dimension. Note that in edit mode, you can create or view a different KPI contribution wheel by dragging and dropping a KPI from the Catalog pane to the KPI contribution wheel diagram.

Details

Use the "KPI Contribution Wheel editor: Details tab" tab to provide a description of the KPI contribution wheel, specify a business owner, and attach any necessary related documents.

Toolbar

This toolbar contains the following buttons:

- **Contact Owner** — Use this button to display the "Contact Owner dialog" to contact the KPI contribution wheel's business owner.
- **Edit Mode Toggle** — Use this button to toggle between read-only mode and edit mode.
- **Dimension Pinnings** — Use this button to display the "Dimension Pinnings dialog" to change the KPI dimension pinnings for the KPI contribution wheel.
- **Properties** — Use this button to display the "KPI Contribution Wheel Properties dialog" to change the visual appearance of the KPI contribution wheel (for example, background color).
- **Refresh KPI Values** — Use this button to refresh the KPI values displayed in the KPI contribution wheel.
- **Save** — Use this button to save the KPI contribution wheel in the default location.
- **Save As** — Use this button to name and save the KPI contribution wheel to another location.

Right-Click Menu

Displays options for working with a KPI contribution wheel. The right-click menu varies depending on whether you right-click the KPI contribution wheel diagram or the KPI contribution wheel background. These options include:

- **Action Links** — Displays the action links that are available for the KPI contribution wheel. Click a link to execute the action.

- **Contact Owner** — Use this option to display the "Contact Owner dialog," where you can contact the business owner of the KPI contribution wheel or the KPI contribution wheel node.

- **Explore** — Use this option to change the explore dimension.

- **Focus on** *Node* — Use this option to change the focus (that is, the center node) of the KPI contribution wheel to the node identified in the option.

- **Pin to** *Value* **and Explore** *Dimension* — Use this option to change the focus of the KPI contribution wheel to a different dimension's node identified in the option (that is, a different dimension than that of the current node). For example, if the selected node represents the Sales Revenue, right-clicking a node and selecting **Pin to Central Region Total and Explore "Periods"."Year"** changes the center node to the Year member of the Periods dimension. When you switch dimensions, the center node in the previous dimension (that is, the dimension before switching) will be added to the dimension pinnings.

- **Open** — Use this option on a dashboard to open the KPI contribution wheel in the editor.

- **Revert** — Use this option to return your pinnings and focus node of the KPI contribution wheel to those previously saved in the diagram. Revert only affects the pinnings and focus node. It does not affect all properties.

KPI Contribution Wheel editor: Details tab

Use this tab of the KPI Contribution Wheel editor to specify supporting information for a KPI contribution wheel.

For more information, see "About KPI Contribution Wheel Diagrams."

Components

Name
Displays the KPI contribution wheel name.

Description
Use this field to enter a description of the KPI contribution wheel.

Business Owner
Displays the user ID of the person responsible for managing the KPI contribution wheel. To specify the business owner, click the **Set User** button to display the "Business Owner dialog," where you can search for and select the business owner.

Related Documents
Use the "Related Documents area" to view and manage documents that provide supporting information to the KPI contribution wheel.

KPI Contribution Wheel editor: Diagram tab

Use this tab of the KPI Contribution Wheel editor to view a KPI as a KPI contribution wheel diagram.

For more information, see "About KPI Contribution Wheel Diagrams."

Components

Information Pane

Displays information about the current node (that is, the node over which the mouse pointer is hovered or, if the mouse pointer is not hovering over a node, the selected node, which has a dark outline).

To change the location of the Information Pane, drag it to the desired location. This location is only temporary and will not be saved.

Diagram

Displays a KPI contribution wheel diagram for the KPI.

To:

- Display information specific to a node (such as the contribution percent of its parent value), hover the mouse pointer over the node.

- Display options that allow you to work with a node, right-click the node to display the "Node Options Menu." For example, you can change the focus of the wheel using the **Focus on** *Node* and **Pin to** *Value* **and Explore** *Dimension* options.

- Change the focus of the wheel down to a descendant, double-click the descendant node.

- Drill to the next level or collapse a level, on the desktop, hover the mouse pointer over the concentric rings on the outer border of the wheel and click the **Drill to next level** or **Collapse Level** triangle. On a mobile device, pinch in or pinch out.

- Expand or collapse a node or group of nodes that appear as slivers (that is, appear very thin) in the diagram, click the **Expand Section** triangle or the **Collapse Section** triangle that displays when you hover over it.

Focus trail

Displays a group of small circles that represent the node in the center of the KPI contribution wheel and any of its ancestors that are included in the diagram.

Use the focus trail to change the focus of the KPI contribution wheel up to an ancestor by double clicking the circle that represents the desired ancestor.

KPI Contribution Wheel Properties dialog

Use this dialog to set properties that control the appearance of the KPI contribution wheel.

For more information, see:

- "KPI Contribution Wheel editor"
- "Creating KPI Contribution Wheels"

Components

Explore
Use this list to choose a dimension on which to focus. The current explore dimension is the default.

Number of Levels
Use this box to specify the number of levels that are available for drilling. The default number of levels is three and the maximum number is ten.

> **Note:** Setting this to a high number can adversely affect performance or invoke very slow queries.

Display Info Pane
Use this box to specify whether the "Information Pane." in a KPI contribution wheel diagram is to be displayed.

Fill Sectors with Status Color
Use this box to specify whether sectors in a KPI contribution wheel diagram are to be filled with the status color or whether only the outer ring edge is to be filled with the status color.

Use Drop Shadows on Node Labels
Use this box to specify whether to use drop shadows on node labels. Drop shadows are dark shadows around the label text that help to distinguish the text from its background.

Background Gradient
Use this box to specify whether the background color is to gradually change (starting at the top of the diagram) to the specified gradient color.

Background Color
Use this box to specify the background color of the diagram.

Gradient Color
This box is available only if **Use Gradient for Background Color** is selected.

Use this box to specify the color to which the specified background color is to gradually transitions.

Behind the Wheel Color

Use this box to specify the color for the area of the KPI contribution wheel behind the sectors, but still within the KPI contribution wheel circle.

Node Label Color

Use this box to specify the color to be used for the node labels.

Show Focus Trail

Use this box to specify when the focus trail is to be displayed in a KPI contribution wheel diagram. The options are:

- **Always** — Select this option to always show the focus trail.

- **If Focus Down** — Select this option to specify that the focus trail is to be shown only when the focus of the KPI contribution wheel is moved down to a descendant.

- **Never** — Select this option to never show the focus trail.

KPI editor

Use this editor to create and modify KPIs that monitor your company's performance and goals. The KPIs that you create define performance targets and evaluate the performance of objectives and initiatives.

For more information, see:

- "What Are KPIs?"
- "How Can I Use KPIs?"
- "Creating KPIs"

This editor is also displayed as:

Scorecard editor: KPI tab

Components

General Properties

Use the "KPI editor: General Properties page" to enter the business owner, the actual value, the target value, and to turn on trending to compare KPI values with those from a previous period.

Dimensionality

Use the "KPI editor: Dimensionality page" to specify dimensions that determine how Oracle BI EE aggregates data in the KPI.

States

Use the "KPI editor: States page" to specify the performance thresholds and range of values that determine how KPI performance is evaluated and represented. Also use this page to create action links for the KPI.

Related documents

Use the "KPI editor: Related Documents page" to attach any relevant document or business intelligence object stored in the Oracle BI Presentation Catalog.

Custom Attributes

Use the "KPI editor: Custom Attributes page" to create custom columns for the KPI.

Related Topics

"Scorecard editor"

KPI editor: Custom Attributes page

Use this page of the "KPI editor" to create custom columns for the KPI. You can add a maximum of five custom columns.

For more information, see:

- "What Are KPIs?"
- "How Can I Use KPIs?"
- "Creating KPIs"

This page is also displayed as:

Scorecard editor: KPI tab

Components

Custom Columns

Displays the custom columns for the KPI.

Use this table to create custom columns. To add a custom column row to the table, click the **Add** button.

Label

Use this field to enter a name for the custom column.

Formula

Use this field to specify a value to compare to the target value. Consider the following options:

- Click the down-arrow button to access the subject area list and select a measure. For example, "Sales Measures"."Dollars".
- Place the cursor in the field and enter the formula that calculates the column values.

Add

Use this button to add a custom column row to the **Custom Columns** table.

Remove

Use this button to remove the row that is currently highlighted in the **Custom Columns** table.

Related Topics

"KPI editor: General Properties page"
"KPI editor: Dimensionality page"
"KPI editor: States page"
"KPI editor: Related Documents page"
"Scorecard editor"

KPI editor: Dimensionality page

Use this page of the "KPI editor" to add or remove KPI dimensions. This page also enables you to pin one or more values to a dimension.

Dimensions are based on attribute columns and hierarchical columns and determine how Oracle BI EE aggregates data in the KPI. For example, if you are creating a KPI for product sales, you could add dimensions that allow the user to view sales by both a specific region and a specific year.

Note that almost all KPIs should include a Time dimension (see "Creating KPIs" for additional information), except constants or metrics defined only to be current snapshots like "Inventory On Hand" or "Current Phone Support Wait Time." It is not necessary to pin the time dimension to a specific value. It is a best practice to leave Time unpinned within the KPI definition. For more information, see the below description for the Value field. An unpinned Time dimension enables a dashboard or scorecard user to select the time period to display and enables the creation of trend and historical charts or tables.

For more information, see:

- "What Are KPIs?"

- "How Can I Use KPIs?"

- "Creating KPIs"

- "What Are Dimensions and Pinned Dimension Values?"

This page is also displayed as:

Scorecard editor: KPI tab

Components

Dimension
Displays the column name that you chose for the dimension. To add a dimension to the KPI, click the **Add** button.

Value
Use the down arrow to browse or search for and choose one or more values to filter the dimension. When a user views the KPI, the filtered or "pinned" value or values aggregate the KPI.

Select **is prompted** to do one of the following:

- Allow the watchlist or scorecard designer to pin the dimension values when adding the KPI to a watchlist or scorecard.

- Provide the user with a field to select the dimension's value or values from the point of view area in the watchlist, scorecard, or dashboard.

Select **Search** to display the "Search Members dialog," where you search for one or more values to pin the dimension.

Note that when the designer pins a dimension value, that value cannot be changed when a user adds the KPI to a watchlist or scorecard. Only the designer or user with the appropriate permissions can access the KPI editor to modify a dimension's pinned value.

Oracle suggests that you create KPIs that are not pinned in their initial definition.

Add

Use to access the KPI's subject area where you can select another attribute or hierarchical column as a dimension.

Remove

Use to delete the highlighted dimension from the KPI.

Related Topics

"KPI editor: General Properties page"
"KPI editor: States page"
"KPI editor: Related Documents page"
"KPI editor: Custom Attributes page"
"Scorecard editor"

KPI editor: General Properties page

Use this page of the "KPI editor" to specify the actual value (collected or calculated value) and the target value (desired value) of the KPI. You can enter, insert, or calculate these values.

Also use this tab to assign the business owner responsible for the KPI and specify if the KPI should support trending. Trending enables you to compare previous values to current values. For example, you can compare your December 2009 sales to the current year's sales.

To analyze KPIs by multiple dimensions (for example, Product, Geography, and Time), ensure that the data you use to calculate actual and target values is also dimensioned by Product, Geography, and Time.

For more information, see:

- "What Are KPIs?"
- "How Can I Use KPIs?"
- "Creating KPIs"
- "How Are KPIs Evaluated?"

This page is also displayed as:

Scorecard editor: KPI tab

Components

Description
Use this field to enter a description of the KPI.

Business Owner
Use this field to view and select the user ID of the person responsible for the business performance of the KPI. Business owners have the ability to override the KPI's statuses. If you do not set a business owner, then you cannot override the status.

Click the **Set User** button to search for and select a business owner.

Set User
Use this button to open the "Select Business Owner dialog," where you can search for the person whom you want to assign as the KPI's business owner.

Actual Value
Use this field to specify a value to compare to the target value. Consider the following options:

- Click the down-arrow button to access the subject area list and select a measure. For example, "Sales Measures"."Dollars".

  If you are working with a writeable Essbase data source, you must specify the filter. For example, FILTER("Basic2"."Basic - measure" USING "Scenario"."Gen2,Scenario" = 'Actual' AND "Measures"."Gen4,Measures" = 'Marketing').

- Place the cursor in the field and enter the actual value.

- Click **Edit Actual Value Formula** to access the "Edit Column Formula dialog: Column Formula tab" to create a formula that calculates the actual value. For example, ((Sales - Cost)/Sales) * 100.

  If you are working with a writeable Essbase data source, you must modify the filter. For example, FILTER("Basic2"."Basic - measure" USING "Scenario"."Gen2,Scenario" = 'Actual' AND "Measures"."Gen4,Measures" = 'Marketing').

Target Value

Use this field to specify the value that you want the KPI to achieve. The target value is a quantifiable goal for each measure. Consider the following options:

- Click the down-arrow button to access the subject area list and select a measure. For example, "Sales Measures"."Dollars".

  If you are working with a writeable Essbase data source, you must specify the filter. For example, FILTER("Basic2"."Basic - measure" USING "Scenario"."Gen2,Scenario" = 'Budget' AND "Measures"."Gen4,Measures" = 'Marketing').

- Place the cursor in the field and enter the actual value.

- Click **Edit Target Value Formula** to access the "Edit Column Formula dialog: Column Formula tab" to create a formula that calculates the actual value. For example, ((Sales - Cost)/Sales) * 100.

  If you are working with a writeable Essbase data source, you must modify the filter. For example, FILTER("Basic2"."Basic - measure" USING "Scenario"."Gen2,Scenario" = 'Budget' AND "Measures"."Gen4,Measures" = 'Marketing').

Writeable

Use this option to specify whether, if you are working with an Essbase data source, the corresponding **Actual Value** or **Target Value** field is writeable. At runtime, the changes that the user makes to these fields are saved to the repository. If you select this option:

- You must also use the **Post-update Business Rule** list to specify how you want the system to recalculate the data.

Post-Update Business Rule

Use this list if you have selected the **Writeable** option for either the actual value or target value. This list displays the calculation scripts that the administrator created in Oracle Essbase. The calculation script that you select determines how the system recalculates the data after the user modifies the actual value or target value.

For more information about creating KPIs with writeable actual and target values, see "Overview of Setting Up Target Settings in KPIs."

Down Arrow

Use this button to access the subject area list for **Actual Value**, **Target Value**, and **Compare to Prior**. From this list you can browse for and select a column for the value.

Edit Value Formula

Use this button to access the "Edit Column Formula dialog: Column Formula tab" to create a formula that calculates the **Actual Value** or **Target Value**.

Enable Trending

Use this option to indicate the direction in which change occurs (up or down), the extent of the change (as a value and percentage), and if the change indicates an increase or decrease in performance. If trending is enabled, then users see a trend icon (see "Trend" for additional information on trend icons) on nodes in Scorecard diagrams, in KPI watchlists, and in other tables within Scorecard that reference this KPI. Users also see a history chart on the KPI Details and KPI Overview tabs in Scorecard. See "Creating KPIs" for additional information.

To use trending, ensure that a time dimension is defined in the subject area.

Data Format

Displays an example of how the numeric data displays in the KPI. Click **Edit** to access the dialog where you specify the data format settings for the KPI.

Compare to Prior

Use this option to select the period of time to use for trend analysis. The period that you select determines the time periods displayed in history charts on the KPI Details tab and KPI Overview tab in Scorecard. See "Creating KPIs" for additional information.

For example, to compare Units Shipped quarterly, select "Fiscal Time"."Quarterly". In this example, the KPI trends upward, downward, or unchanged based on the KPI values from one quarter to the next. Any KPI change values are computed using "Quarterly" as the period of analysis.

Tolerance

Use this field to enter the tolerance value for the trend. This field enables you to prevent reporting non-significant trends, such as expenses being over-budget by $100.

The tolerance value that you enter must be a literal and can be expressed either as a percentage or absolute value (for example, 5,000 or 5%). The tolerance level must be met before the KPI displays the performance as improving or worsening.

Tolerance Down Arrow

Use this field to specify how to measure tolerance value that you entered in the **Tolerance** field. Choose **% Change** to measure it by percent or **Change** to measure tolerance by the actual value.

Related Topics

"KPI editor: Dimensionality page"
"KPI editor: States page"
"KPI editor: Related Documents page"
"KPI editor: Custom Attributes page"
"Scorecard editor"

KPI editor: Related Documents page

Use this page of the "KPI editor" to view and add links to business intelligence objects or web pages that provide additional information about or can be used with the KPI. After you add related documents to a KPI, the related documents display in the "KPI editor: Related Documents page" and on the "Scorecard editor: KPI Details tab."

For more information, see:

- "What Are KPIs?"
- "How Can I Use KPIs?"
- "Creating KPIs"

This page is also displayed as:

Scorecard editor: KPI tab

Components

Name
Displays the link to the related item. Click this link to access the related document, or click Edit to modify the link.

Location
Displays the location of the related item. The location is either a location within the catalog or a URL to a location outside of the catalog.

Type
Displays the type of item. "Catalog" displays if the item is located in the catalog, or "Web" displays if the item is located outside of the catalog.

Add
Use to access the "Add a Related Document dialog" to add an item to the Related Documents table.

Edit
Use to access the "Add a Related Document dialog" to edit an item that has been added to the Related Documents table.

Remove
Use to remove the highlighted row from the Related Documents table.

Related Topics

"KPI editor: General Properties page"
"KPI editor: Dimensionality page"
"KPI editor: States page"
"KPI editor: Custom Attributes page"
"Scorecard editor"

KPI editor: States page

Use this page of the "KPI editor" to:

- Indicate if high, low, or target KPI values are desirable

- Specify the statuses and thresholds to be used to measure the performance of the KPI.

  KPI status is determined by comparing the actual value against the target value and then placing the result in a corresponding range that defines levels of performance status (for example, Good, Warning, or Critical).

- Specify the scores to which KPI statuses are to be mapped.

  In a scorecard, the scores of KPIs that are used to measure the progress of initiatives and objectives are mapped to Scorecard scores so that they can be used to measure the performance of the objectives or initiatives. For more on scoring in Scorecard, see "Understanding Initiative or Objective Performance Assessment."

- Create or assign action links that the user can click to initiate a predefined process based on KPI status.

For more information, see:

- "What Are KPIs?"

- "How Can I Use KPIs?"

- "Creating KPIs"

This page is also displayed as:

Scorecard editor: KPI tab

Components

Goal

Use this list to specify if high, low, or closer to target values indicate the KPI's performance goal.

For example, select **High values are desirable** for a Customer References KPI or **Low values are desirable** for an Unresolved Support Calls KPI.

Status label

Use this field to enter the label for the status, for example, Critical.

Color

Use this button to access the "Color Selector dialog" where you can select a text color to represent the corresponding status, for example, red for Critical.

Icon

Use this button to access the "Graphics dialog" where you can select an icon to represent the corresponding status, for example, a red X for Critical.

Actions

Use this button to display the "Action Links dialog" wherever the KPI displays, such as on objectives, initiatives, KPI Watchlist, or on the scorecard views on dashboards. This

dialog specifies the processes or operations to be performed or invoked if the status of a KPI corresponds to a specific performance state. Action links display from the right-mouse click wherever the KPI displays, such as on an initiative or a KPI Watchlist.

For example, if a KPI for quarterly revenue is less than a particular amount, then an action is triggered that automatically schedules a mandatory meeting of sales directors and managers.

define as % of target value

Use this box to specify whether you want to define thresholds as discrete values or as percentages of the target value. Select this box to define thresholds as percentages of the target value. Deselect this box to define discrete values for thresholds.

> **Note:** To set a threshold value higher than 100, you must clear this checkbox.

Thresholds

Use these fields to enter the numeric values that set the boundaries for the status ranges.

Depending on whether you selected the **define as % of target value** box, you can specify either of the following:

- Percentages of the target value, for example 80%.
- Discrete values.

  For example, to indicate that sales 120 and below indicate critical performance but that sales above 120 reflect acceptable performance, enter 120 in the field that corresponds to the critical status.

  You can use the following as thresholds:

  - The Actual Value or Target Value that you specified for the KPI.
  - Values that you enter.
  - Values calculated by a formula that you define in the "Edit Column Formula dialog: Column Formula tab." To do so, click the **Thresholds** button.
  - Variables that you define in the "Edit Column Formula dialog: Column Formula tab." To do so, click the **Thresholds** button. See "Using Variables" for additional information on variables.
  - Measures representing other business metrics from the subject area.

Remove

This button is displayed only if the **Show Advanced Properties** options is selected.

Use this button to remove the threshold.

Add

This area is displayed only if the **Show Advanced Properties** options is selected.

Use this button to add another threshold above or below the threshold.

Show Advanced Properties

Use this option to specify whether to display the scores to which KPI statuses are mapped.

Score

This area is displayed only if the **Show Advanced Properties** options is selected.

Uses this area to specify the scores to which KPI statuses are mapped. Use the Score button to display these options:

- **Enter value** — Use this option to specify a numerical value for each score.

- **Use percent of target** — Use this option to specify that the score is the percent the KPI's actual value is of the target value. For example, if the KPI's actual value is 85% of the target value, the score is 85.

- **Use percent of variance** — Use this option to specify that the score is the percent by which the KPI's actual value differs from the target value. For example, if the percent by which the KPIs actual value differs from the target value is 50%, the score is 50.

- **Use a custom expression** — Use this option to display the "Edit Formula dialog," where you create a custom expression to determine the score, for example Revenue * 5%.

If KPI returns no data

Use this box to specify the status to assign to a KPI that returns no data. The options are **No status** or one of the defined statuses, for example, **Critical**.

Related Topics

"KPI editor: General Properties page"
"KPI editor: Dimensionality page"
"KPI editor: Related Documents page"
"KPI editor: Custom Attributes page"
"Scorecard editor"

KPI Watchlist editor

Use this editor to create a KPI watchlist.

This editor is also displayed as:

Scorecard editor: KPI Watchlist tab

For more information, see:

- "Scorecard editor"
- "What Are KPI Watchlists?"
- "Creating KPI Watchlists"

Components

Catalog

Use the "Catalog pane for Scorecard" to locate and drag and drop KPIs from the catalog to build a KPI watchlist.

Performance

Use the "KPI Watchlist editor: Performance tab" to build the watchlist by dragging and dropping KPIs from the catalog pane to the KPI Watchlist. The KPI watchlist displays the KPIs' performance levels and other KPI data.

Details

Use the "KPI Watchlist editor: Details tab" tab to supply a description of the KPI watchlist, specify a business owner, and attach any necessary related documents.

Toolbar

This toolbar contains the following buttons:

- **Back** — Use this button to go backward through your point of view history to select a previous point of view. The **(Default Value)** option returns to the point of view with which you started.

- **Forward** — Use this button to go forward through your point of view history to select a previous point of view.

- **Save** — Use this button to save the watchlist in the default location.

- **Save As** — Use this button to name and save the watchlist to another location.

- **Contact Owner** — Use this button to display the "Contact Owner dialog," which you can use to contact the watchlist's business owner.

- **Refresh KPI Values** — Use this button to refresh the KPI values displayed in the KPI Watchlist table.

KPI Watchlist editor: Details tab

Use this tab of the "KPI Watchlist editor" to specify supporting information for the KPI watchlist.

For more information, see:

- "What Are KPI Watchlists?"
- "Creating KPI Watchlists"

Components

KPI Watchlist Name
Displays the name of the KPI watchlist.

Description
Use this field to enter a description of the KPI watchlist.

Business Owner
Displays the user ID of the person responsible for managing the KPI watchlist. To specify the business owner, click the **Set User** button to display the "Business Owner dialog," where you can search for and select the business owner.

Related Documents
Use the "Related Documents area" to view and manage documents that provide supporting information to the KPI watchlist.

Name
This field displays a name as a link to the related document.

Location
This field displays the location of the related document as either BI content (for example, an analysis or a dashboard page) or a web address.

KPI Watchlist editor: Performance tab

Use this tab of the "KPI Watchlist editor" to create a KPI watchlist. When you add a KPI to the watchlist, you add an instance of the KPI. You can then assign default dimension values to the KPI's instance. From this tab you can also modify the KPI stored in the catalog, view a KPI contribution wheel, or view the KPI instance as an analysis.

For more information, see:

- "What Are KPI Watchlists?"

- "Creating KPI Watchlists"

- "KPI Overview"

- "About KPI Contribution Wheel Diagrams"

Components

KPI Watchlist

Lists the KPIs whose performance you want to monitor.

Use this watchlist to manage these KPIs. For more information about watchlists, see "Watchlists."

To add a KPI to the watchlist:

- If you are creating the watchlist within a scorecard, drag the KPI from the "Catalog pane for Scorecard," "Strategy pane," "Initiatives pane," or the "Scorecard Documents pane" and drop it on the watchlist.

- If you are creating the watchlist outside a scorecard, select any KPI from the "Catalog pane" and drag it to the watchlist.

The "Add KPI dialog" is displayed, where you pin dimension values or assign a label for this usage of the KPI.

To view a KPI contribution wheel for a KPI in the KPI watchlist, select the KPI, right-click to display the context menu, and then select **View KPI Contribution Wheel**.

> **Note:** Within a scorecard, the dimension settings you make in the "Settings dialog: Dimension Settings tab" do not affect the dimension values for the KPIs in the watchlist. (For more information on dimension settings, see "Setting Up the Point of View Controls.")

Related Topics

"KPI Watchlist editor: Details tab"

Layout pane

Use this pane to specify the layout of data in data views (funnel graphs, gauges, graphs, heat matrices, performance tiles, pivot tables, tables, treemaps, and trellises).

For more information, see:

- "Modifying the Layout of Data in Views"

This pane is part of the following editors:

- "Results tab: Funnel editor"

- "Results tab: Gauge editor"

- "Results tab: Graph editor"

- "Results tab: Heat Matrix editor"

- "Results tab: Performance Tile editor"

- "Results tab: Pivot Table editor"

- "Results tab: Table editor"

- "Results tab: Treemap editor"

- "Results tab: Trellis editor"

Components Common to All Data Views

> **Note:** This section describes the components that are common to all data views. Additional components are available in the:
>
> - Graph, Funnel, and Gauges editors (see "Additional Components Common to the Graph, Funnel, and Gauge Editors")
>
> - Heat Matrix editor (see "Additional Components Common to Heat Matrix Views")
>
> - Table and Pivot Table editors (see "Additional Components Common to the Table and Pivot Table Editors")
>
> - Treemap editor (see "Additional Components Common to Treemap Views")
>
> - Trellis editor (see "Additional Components Common to the Trellis Editor")

Drop Targets

Use drop targets to modify the way that data is arranged in a view. By dragging columns from one drop target and dropping them in another, you can rearrange the data to suit your needs.

The drop targets that are displayed in this pane depend on the type of view. For more information, see "Understanding Drop Targets."

Properties

Use this button to display the Properties dialog for a drop target. For example, if you click the button beside the Sections drop target, then the "Section Properties dialog" is

displayed. If you click the button beside the view type name for tables and pivot tables, then the Properties dialog for that type of view is displayed.

Additional Components Common to the Graph, Funnel, and Gauge Editors

This topic is not applicable for waterfall graphs.

Display as Slider

Use this box to specify whether the members of the columns dropped in the Sections drop target are to be displayed as a section slider rather than as unique views. Select this box to display the members as a section slider.

Deselect this box to display each member as a unique view.

Deselect this box to hide sliders in graph views that listen to master-detail events, if you want to simplify the appearance of an analysis or dashboard.

For more information on section sliders, see "Defining Section Sliders in Graphs, Gauges, and Funnels."

Use unified scale

This box is available only for line-bar graphs.

Use this box to specify whether to display the lines and bars using the same scale or two separate scales, one for the lines and one for the bars.

Select this box to use one scale for both the lines and bars. The measure column that has the higher values is used for the scale.

Deselect this box to use two scales.

Show In Legend

Use this box to specify whether a legend is to be displayed to show the color variation of the columns dropped in the **Vary Color By (Horizontal Axis)** drop target.

Additional Components Common to Waterfall Graphs

Show Legend

Use this check box to display the legend. This check box is automatically selected and borders are turned off by default. If the format of the graph is set to Single Color, the legend does not display. See "What Types of Waterfall Graph Formats Are Available?" for additional information.

Totals

Use this button to add a subtotal or total for the view and to display the following options:

- **Total** — By default, the last bar is a total bar. Deselect the measure to remove the total.
  - The total is annotated with a **Summation** icon by default.
  - You can insert subtotals for the second and second-to-last columns. The data layout must include at least three measures to include a subtotal bar.
- **After** — Use this option to include subtotals after the data items.
- **Before** — Use this option to include subtotals before the data items.

Group By (Horizontal Axis) — Use this button to perform groupings. Dimensions are dropped into this drop target. Select a single grouping column on which to subtotal, click the **Totals** button to the right of Group By, and then select one of the grouping columns from the list. The **Summation** icon displays on the grouping to which the subtotal was applied. The selection is reflected in the results pane, in the tooltip subtotals, and along the horizontal axis.

Additional Components Common to the Table and Pivot Table Editors

Totals

Use this button to add a grand total for that drop target for the entire view for attribute columns and hierarchical columns and to display the following options:

- **None** — Use this option to exclude totals.

- **Before** — Use this option to include totals before the data items. For example, if you add a total on a row that contains regions and select **Before**, the total is shown before individual districts in the region are listed. (For pivot tables only.)

- **After** — Use this option to include totals after the data items. (For pivot tables only.)

- **At the Beginning** — Use this option to stack all the totals at the top of the view. (For pivot tables only.)

- **At the End** — Use this option to stack all the totals at the bottom of the view (For pivot tables only.)

- **Labels Only (no totals)** — Use this option to display labels for totals, but not the total values. (For pivot tables only.)

- **Format Labels** — Use this option to display the "Edit Format dialog" where you specify the custom text to insert into a totals heading using the **Caption** field and where you format the labels.

- **Format Values** — Use this option to display the "Edit Format dialog" where you specify the formatting of the totals values.

More Options

Use this button to display the following options:

- **Column Properties** — Use this option to display the "Column Properties dialog," where you edit the properties for a column or hierarchy level to control the appearance of the layout, specify formatting based on a condition, specify interactions, and specify properties that affect write back. Changes made using this option impact all views.

  For more information about the cosmetic formatting that you can apply to headings, see "What is Cosmetic Formatting?"

- **Format Headings** — Use this option to display the "Edit Format dialog," where you apply cosmetic formatting to the headings.

  For more information about the cosmetic formatting that you can apply to headings, see "What is Cosmetic Formatting?"

- **Format Values** — Use this option to display the "Edit Format dialog," where you apply cosmetic formatting to the values.

■ **Hidden** — Use this option to hide the column from the output, or, for the Measure Labels element in a pivot table, to hide the measure labels. For more information on the Measure Labels element, see "Understanding Drop Targets."

Hidden columns do not affect the aggregation of the values.

■ **Show Data As** — Use this option to display a measure as either an actual or a relative value. You can display the relative value of the measure, compared to the total, without the need to explicitly create a calculated item for it.

For more information, see "Displaying Relative Values for Measure Columns in Pivot Tables."

Note: The **Show Data As** options is available only for items that are stored or calculated measures.

Select one of the following options:

– **Values** — Use this option to display the actual values of the measure column.

– **Percent of** — Use this option to convert a stored or calculated measure into a percent of one of the following:

* **Column** — Shows the percentage of the column that the value constitutes.

* **Row** — Shows the percentage of the row that the value constitutes.

* **Section** — Shows the percentage of the section that the value constitutes.

* **Page** — Shows the percentage of the page that the value constitutes.

* **Column Parent** — Shows the percentage of the column parent that the value constitutes.

* **Row Parent** — Shows the percentage of the row parent that the value constitutes.

* **Layer** — Displays a menu from which you select the column in the view from which you obtain the percentage that the value constitutes.

Note: The number of decimal places depends on the type of measure.

– **Index of** — Use this option to convert a stored or calculated measure into an index value of one of the same options that are available for **Percent of**. For example, **Column** shows the index value of the column that this value constitutes.

■ **Aggregation Rule** — Use this option to override the default aggregation rule for a measure in tables and pivot tables by selecting the aggregation rule to apply, as described in "Aggregation Rules and Functions." For attribute columns, ensure that **Report-Based Total** is selected. This option is not available for the Prompts or Sections drop targets.

Note: If the **Report-Based Total** option is not selected, then the Oracle BI Server calculates the total based on the entire result set, before applying any filters to the measure columns.

- **Display as Running Sum** — Use this option to display numeric measures as running sums, where each consecutive cell for the measure displays the total of all previous cells for that measure. This option is a display feature only that has no effect on actual pivot table results.

  For more information, see "Displaying Running Sums for Measure Columns in Pivot Tables."

- **New Calculated Item** — Displays the "New Calculated Item dialog," where you create a calculated item for the column. It also automatically creates a selection step that contains the calculated item. See "Creating Groups and Calculated Items" for additional information.

- **Calculated Item** — Displays the "Edit Calculated Item dialog," where you can edit the calculated item.

- **Hide Details** — Use this option to suppress all column members except calculated items in the view. For example, suppose that you have a pivot table that is displaying Region on the row edge, and it is currently showing the values Eastern, Western, and Central. Suppose that you create a new calculated item called "Other Regions" that is the sum of Western + Central. If you select **Hide Details**, then Eastern, Western, and Central will be suppressed and only the "Other Regions" calculated item will show in the view.

  For a view in which columns have been combined from one or more subject areas using Set operations, **Hide Details** displays these options:

  - **None** — Use this option to not suppress any column members in the view.

  - **Current View** — Use this option to suppress all column members except calculated items in the current view.

  - **All Views** — Not available if the calculated item was applied to a specific view. Use this option to suppress all columns members except calculated items in all views.

- **Duplicate Layer** — Use this option to duplicate a column. You create a duplicate that applies only to this view. The duplicate does not retain filters, selection steps, or formatting that were applied to the original.

- **Remove Column or Remove Duplicate** — Use this option to remove the item on which you have clicked, such as a column or duplicated item. The column is removed from this view and all other views for the analysis. The duplicate is removed from this view only.

- **Place Value in New Row** — Use this option to display section values on different rows. Where section values are displayed together in a row, you can specify that a section value is displayed on a new row.

- **Hide Repeated Values** —Use this option to display column values for a section once and hide repeated values until the values change. When the section column value changes, it is displayed indented to the right to show the hierarchical structure.

- **Format Measure Label** — This option is available only for the Measure Labels element in a pivot table. Use this option to display the "Edit Format dialog," where you apply cosmetic formatting to measure labels. For more information on the Measure Labels element, see "Understanding Drop Targets."

Additional Components Common to the Trellis Editor

Visualization

Use this area to:

- Select the type of graph or graphs in which to display the data. To do so:
  - For a simple trellis, in the **View As** box, select one of the following options:
    * **Vertical Bar** — Use this option to specify a vertical bar graph.
    * **Horizontal Bar** — Use this option to specify a horizontal bar graph.
    * **Line** — Use this option to specify a line graph.
    * **Area** — Use this option to specify an area graph.
    * **Line-Bar** — Use this option to specify a line-bar graph.
    * **Scatter** — Use this option to specify a scatter graph.
    * **Pie** — Use this option to specify a pie graph.
    * **Bubble** — Use this option to specify a bubble graph.
  - For an advanced trellis, first select the measure for which you want to specify a graph type by using the **Previous** and **Next** buttons (above the **View As** box) and then, in the **View As** box, select one of the following options:
    * **Numbers** — Use this option to specify a numbers graph.
    * **Spark Line** — Use this option to specify a spark line graph.
    * **Spark Bar** — Use this option to specify a spark bar graph.
    * **Spark Area** — Use this option to specify a spark area graph.

- Modify the way that data is arranged in the view. By dragging columns from one drop target and dropping them in another, you can rearrange the data to suit your needs.

  The drop targets that are displayed in this pane depend on the type of graph. For more information, see "Understanding Drop Targets."

More Options

Use this button to display the following options:

- **Column Properties** — Use this option to display the "Column Properties dialog," where you edit the properties for a column or hierarchy level to control the appearance of the layout, specify formatting based on a condition, specify interactions, and specify properties that affect write back. Changes made using this option impact all views.

  For more information about the cosmetic formatting that you can apply to headings, see "What is Cosmetic Formatting?"

- **Format Headings** — Use this option to display the "Edit Format dialog" where you apply cosmetic formatting to the headings.

  For more information about the cosmetic formatting that you can apply to headings, see "What is Cosmetic Formatting?"

- **Format Values** — Use this option to display the "Edit Format dialog," where you apply cosmetic formatting to the values.

- **Hidden** — Use this option to hide the column from the output, or, for the Measure Labels element in a pivot table, to hide the measure labels. For more information on the Measure Labels element, see "Understanding Drop Targets."

  Hidden columns do not affect the aggregation of the values.

- **New Calculated Item** — Displays the "New Calculated Item dialog," where you create a calculated item for the column. It also automatically creates a selection step that contains the calculated item. See "Creating Groups and Calculated Items" for additional information.

- **Calculated Item** — Displays the "Edit Calculated Item dialog," where you can edit the calculated item.

- **Hide Details** — Use this option to suppress all column members except calculated items in the view. For example, suppose that you have a pivot table that is displaying Region on the row edge, and it is currently showing the values Eastern, Western, and Central. Suppose that you create a new calculated item called "Other Regions" that is the sum of Western + Central. If you select **Hide Details**, then Eastern, Western, and Central will be suppressed and only the "Other Regions" calculated item will show in the view.

  For a view in which columns have been combined from one or more subject areas using Set operations, **Hide Details** displays these options:

  - **None** — Use this option to not suppress any column members in the view.

  - **Current View** — Use this option to suppress all column members except calculated items in the current view.

  - **All Views** — Not available if the calculated item was applied to a specific view. Use this option to suppress all columns members except calculated items in all views.

- **Duplicate Layer** — Use this option to duplicate a column. You create a duplicate that applies only to this view. The duplicate does not retain filters, selection steps, or formatting that were applied to the original.

- **Remove Column or Remove Duplicate** — Use this option to remove the item on which you have clicked, such as a column or duplicated item. The column is removed from this view and all other views for the analysis. The duplicate is removed from this view only.

Additional Components Common to Treemap Views

Group By

Use this area to create a header or group for the measure columns that are specified in the Size By and Color By areas.

Size By

Use this list to represent the distribution of the tiles within their parent. The size of the children will always equal the size of their parent. The first measure added in the Criteria tab is displayed as the Size By measure.

Color By

Use this list to represent a distribution of values across all of the tiles at the same level. The second measure added in the Criteria tab is displayed as the Color By measure. If only one measure is added to the analysis, both Size By and Color By will contain the same measure.

Color By is divided into two options: Style and Color.

Style

Use this list to specify the style for the treemap. Style contains two options: Percentile Binning and Continuous Color Fill.

- **Percentile Binning** — Use this option of the Style list to specify that the tiles within the treemap will display based on percentages.

  - **Bins** — Not available for Continuous Color Fill. Use this list to select the number of bins to display in the treemap. You can select various integers, Quartile (4), or Decile (10). Values range from 2 to 12. The number of bins selected corresponds to the number of colors displayed in the treemap.

  - **Binning Properties** — Not available for Continuous Color Fill. This option displays the percentage for the bin based on a total of 100% and is calculated based on the total number of bins selected. For example, if four bins are selected (quartile), then the percentages would be 0, 25, 50, 75, and 100%. Each percentage is color coded and corresponds to the Color selection. This field is non-editable.

    - * **Label** — Not available for Continuous Color Fill. Use this option to enter a label for each bin. Default labels are based on the number of bins selected in the Bins list.

- **Continuous Color Fill** — Use this option of the Style list to specify that the tiles within the treemap will display as a gradient color scheme.

Color

Use this list to select a color palette for the treemap.

See "Drop Target Guidelines for Treemaps" for additional information.

Additional Components Common to Heat Matrix Views

Rows

Use this area to specify a row delineation for attribute and hierarchical columns.

Columns

Use this area to specify a column delineation for attribute and hierarchical columns.

Color By

Use this area to specify the measure value that represents the grouping and intersection of the row and column. The first measure added in the Criteria tab is displayed as the Color By measure. The higher the value, the denser the cell color.

Color By is divided into two options: Style and Color.

Style

Use this list to specify the style for the heat matrix. Style contains the following two options:

- **Percentile Binning** — Use this option of the Style list to specify that the tiles within the heat matrix are displayed based on percentages.

  - **Bins** — Not available for **Continuous Color Fill**. Use this list to select the number of bins to display in the heat matrix. You can select various integers,

Quartile (4), or Decile (10). Values range from 2 to 12. The number of bins selected corresponds to the number of colors displayed in the heat matrix.

- **Binning Properties** — Not available for **Continuous Color Fill**. This option displays the percentage for the bin based on a total of 100% and is calculated based on the total number of bins selected. For example, if four bins are selected (quartile), then the percentages would be 0, 25, 50, 75, and 100%. Each percentage is color coded and corresponds to the Color selection. This field is non-editable.

  * **Label** — Not available for **Continuous Color Fill**. Use this option to enter a label for each bin. Default labels are based on the number of bins selected in the Bins list.

- **Continuous Color Fill** — Use this option of the Style list to specify that the tiles within the heat matrix are displayed as a gradient color scheme.

Color

Use this list to select a color palette for the heat matrix.

See "Drop Target Guidelines for Heat Matrices" for additional information.

Aggregation Rules and Functions

The following list describes the aggregation rules that are available for measure columns in the "Layout pane" and for columns in the "Edit Column Formula dialog: Column Formula tab." The list also includes functions that you can use when creating calculated items for analyses.

- **Default** — Applies the default aggregation rule as in the Oracle BI repository or by the original author of the analysis. Not available for calculated items in analyses.

- **Server Determined** — Applies the aggregation rule that is determined by the Oracle BI Server (such as the rule that is defined in the Oracle BI repository). The aggregation is performed within Presentation Services for simple rules such as Sum, Min, and Max. Not available for measure columns in the Layout pane or for calculated items in analyses.

- **Sum** — Calculates the sum obtained by adding up all values in the result set. Use this for items that have numeric values.

- **Min** — Calculates the minimum value (lowest numeric value) of the rows in the result set. Use this for items that have numeric values.

- **Max** — Calculates the maximum value (highest numeric value) of the rows in the result set. Use this for items that have numeric values.

- **Average** — Calculates the average (mean) value of an item in the result set. Use this for items that have numeric values. Averages on tables and pivot tables are rounded to the nearest whole number.

- **First** — In the result set, selects the first occurrence of the item for measures. For calculated items, selects the first member according to the display in the Selected list. Not available in the Edit Column Formula dialog.

- **Last** — In the result set, selects the last occurrence of the item. For calculated items, selects the last member according to the display in the Selected list. Not available in the Edit Column Formula dialog.

- **Count** — Calculates the number of rows in the result set that have a nonnull value for the item. The item is typically a column name, in which case the number of rows with nonnull values for that column are returned.

- **Count Distinct** — Adds distinct processing to the Count function, which means that each distinct occurrence of the item is counted only once.

- **None** — Applies no aggregation. Not available for calculated items in analyses.

- **Server Complex Aggregate** — Applies the aggregation rule that is determined by the Oracle BI Server (such as the rule that is defined in the Oracle BI repository). The aggregation is performed by the Oracle BI Server, rather than within Presentation Services. Not available for calculated items in analyses.

- **Report-Based Total (when applicable)** — If not selected, specifies that the Oracle BI Server should calculate the total based on the entire result set, before applying any filters to the measures. Not available in the Edit Column Formula dialog or for calculated items in analyses. Only available for attribute columns.

Legend pane

Use this pane to view the legend for a cause & effect map or strategy map.

For more information, see:

- "What Are Cause & Effect Maps?"
- "Creating Cause & Effect Maps"
- "What Are Strategy Maps?"
- "Creating Strategy Maps"

This pane is part of the "Cause & Effect Map tab: Diagram tab" or the "Strategy Map tab: Diagram tab."

Components

Legend

Displays and explains the symbols used on the cause and effect map or strategy map to indicate the proportionality. That is, whether changes in performance or value in the cause and effect relationship are directly proportional (direct) or inversely proportional (inverse) and strength (strong, moderate, or weak) of cause & effect relationships.

Link or Image Properties dialog

Use this dialog to specify properties for a text link or image link that you are adding to a dashboard page.

For more information, see "Adding Content to Dashboards."

Components

Caption

Use this field to enter the text to display for the text link or image link.

Entering a caption for an image link is optional. If you do enter one, then you must also specify, in the **Image Layout** box, where the caption is to be displayed relative to the image.

Destination

Use this field to specify what is to happen when the user clicks the text or image:

■ To add text or an image only, without any links, leave the field empty.

■ To specify that an analysis or dashboard should be displayed when the user clicks the link or image, specify the destination as **Analysis or Dashboard**, and click **Browse** to display the "Open dialog" where you select the analysis or dashboard.

■ To specify that another action should occur, such as opening a web site, document, or program, specify the destination as a **URL** and type the full path into the field that follows the Destination options.

A link is defined as any URL that the browser can interpret. URLs can point to web sites, documents, images, FTP sites, newsgroups, and so on. Depending on the browser, the following are examples of valid URLs:

```
http://home.netscape.com/index.html
ftp://ftp.microsoft.com
news:news.announce.newusers
```

See Table D–3 for more information about the kinds of internal or external content to which you can link.

> **Note:** Administrators should create a virtual directory on the Presentation server for shared documents called \DashboardFiles that maps to a shared network directory of the same name. This enables users with the appropriate permissions to publish files to this folder, and reference these files by their relative URL names rather than by their fully qualified network share names, for example, \DashboardFiles\AnnualReport.doc instead of \\SharedServer\CommonShare\DashboardFiles\AnnualReport.doc.

Target

Use this box to specify whether the information is to be displayed in the **Current Window** or in a **New Window** for the browser.

For every action except sending mail and executing a program, you can control how the link should be displayed. Select the current window when you want the action to

occur in the display pane of the dashboard. This leaves the dashboard active but in the background. Choose a new window when you want the action to take place in a new browser window. This opens another instance of the browser.

Image

Use this field to enter the location and name of the image to be displayed. Specify the location as a URL. These are examples:

```
http://imageserver/MyImage.gif
/DashboardFiles/image.gif
```

If the image is not on the local server, then the URL must include http://. If the image is for use in a shared environment, then ensure that the image is located on a network drive that is accessible to all users.

Image Layout

Use this box to select where to display the image, such as to the right or left of the caption or above or below the caption, if you entered a caption.

Notes

- You can reference variables in the **Caption**, **Destination** and **Image** fields. For the syntax to use, see "What Is the Syntax for Referencing Variables?" For more information on variables, see "Using Variables."

- Table D–3 provides information about the kinds of internal or external content to which you can link:

Table D–3   Link Options for Adding a Text Link or Image Using the Dashboard Editor

Link Option	Comments
Web site or document	You must locate the URL, or address, for the site or document. You can copy the destination address from the browser's address or location box, and then paste it.
	For a web site, you can omit the http:// portion of the address if the URL resides on the Web server, such as your intranet site.
	If the URL resides on your company's Web server, then you can enter the relative address of the file. For example:
	\DashboardFiles\Logo.gif
Local or shared document	If the document is for use in a shared environment, then ensure that it is located on a network drive that is accessible to all users. Examples of the kinds of documents that you can open are spreadsheets that contains recent sales reports, a slide presentation that introduces a new product, a Microsoft Word document that contains your company's annual report, a graphic file that contains a map from the airport to your corporate headquarters, and so on.
	For example, if the document is for your use only, a sample location might be:
	c:\mycomputer\reports\report.doc
	For a shared document, specify the UNC name, for example:
	\\ALLUSERS\reports\report.doc

Table D–3   (Cont.) Link Options for Adding a Text Link or Image Using the Dashboard

Link Option	Comments
Send email to a specified user	You must know the mailto URL, for example:
	mailto:support@oracle.com
	When the user selects this link, the browser launches the mail application with the To: field filled in. (The browser controls the launching of the mail program.)
Execute a program	If the program is for use in a shared environment, then ensure that it is located on a network drive that is accessible to all users. You can use this feature to download and run an application. (The operating system controls the launching of the application.)
	For example, to launch Microsoft Word for your use only, a sample location might be:
	c:\MSOFFICE\OFFICE\winword.exe
	For a multiuser-licensed program on a shared drive, specify the UNC name for the location, for example:
	\\ALLUSERS\SOFTWARE\MSOFFICE\OFFICE\WORD\winword.exe
Refresh your browser using JavaScript	Your browser must support JavaScript to use the following example.
	javascript:window.location.reload()
	In the Target area, choose the option Current Window.

Manage Favorites dialog

Use this dialog to organize and manage your favorite objects. Favorite objects are those catalog objects that you view regularly or want to view again at another time.

> **Note:** You cannot organize and manage your favorites in Oracle Business Intelligence Mobile. When working in Oracle Business Intelligence Mobile, you can only add an item to or remove an item from your favorites list. Your Oracle BI EE desktop and Oracle Business Intelligence Mobile favorites lists will synchronize when you log into either Oracle BI EE instance. For more information about favorites in *User's Guide for Oracle Business Intelligence Mobile for Apple iOS*.

For more information, see:

- "Adding Objects to Favorites"
- "Accessing Favorite Objects"
- "Organizing Favorites"
- "Removing Objects From Favorites"

Components

Category Tree

Use this area to browse for and select a favorites category. After you select a category, any favorite objects or subcategories included in the selected category display in the Selected Category area.

You can use this area to organize your categories by dragging them and nesting them into other categories or subcategories. You can use this area to create new categories and subcategories, rename categories and subcategories, rearrange the order of the categories and subcategories, and copy, paste, and remove categories and subcategories.

Selected Category

Use this area to view the favorites objects and subcategories included in the category that you selected in the Category Tree area.

You can use this area to organize your favorites by dragging and dropping them into categories or subcategories. You can use this area to create new subcategories, rename a category, rearrange the order of the objects in the category, and copy, paste, and remove objects from your favorites list.

Toolbar

The toolbar contains the following buttons:

- **New Category** — Use this button to create a category. After you create a category, you can add your favorite objects to it by dragging and dropping them into the Selected Category area. Or, you can use the Category Tree area to rearrange categories and nest them.

- **Copy** — Click this button to copy the favorite category or object and then paste it into a new location.

- **Paste** — Click this button to paste the copied object into a new location. This button is enabled only after you copy a category or object.

- **Rename** — Click this button to rename the selected category. This button is enabled only after you select a category. You cannot use this button to rename objects.

- **Remove** — Click this button to remove the selected category or object from your list. Note that this option does not remove the item from the catalog.

- **Sort** — Click this button to sort the favorites categories or objects in the selected category by either ascending or descending alphabetical order.

Map Properties dialog

Use this dialog to edit the properties of a map view, such as its size and the options that are available on the toolbar.

For more information, see "Editing Map Views."

Components

Canvas

Use the "Map Properties dialog: Canvas tab" to specify the size of the map.

Tools

Use the "Map Properties dialog: Tools tab" to specify which tools are available for display with the map.

Interaction

Use the "Map Properties dialog: Interaction tab" to specify whether to automatically create formats when drilling in a map and to specify master-detail linking.

Labels

Use the "Map Properties dialog: Labels tab" to specify whether to show the labels for certain layers on the map view.

Map Properties dialog: Canvas tab

Use this tab of the "Map Properties dialog" to specify the size of the map.

For more information, see "Editing Map Views."

Components

Canvas Size
Use this box to specify the size of the map within its container. You can select either **Default**, **Custom**, or a predefined size. If you select **Default** or a predefined size, then no other options are available and the map is sized to fit its container. The container is whatever area is holding the map, such as the area in the Map editor or the section of a dashboard page.

Width
Use this field to specify the width of the map in pixels.

Height
Use this field to specify the height of the map in pixels.

Map Wrap-Around
Use this box to specify a "wrap-around" feature when you include line formats on a map. Lines are the only format that cross map borders, such as an airplane flight from San Francisco to Tokyo. When this feature is turned on, you can pan the map so that lines are not broken.

Map Properties dialog: Interaction tab

Use the Interaction tab and the Labels tab of the "Map Properties dialog" to do the following:

- Specify whether to automatically create formats when users drill in a map. This setting applies to the entire map view, rather than to specific formats.

- Specify whether to show the labels for certain layers on the map view.

- Specify whether the map should dynamically focus on content or zoom to a saved view port when it is initialized.

- Specify an **Event Channel** on which to listen when Master-Detail linking is enabled.

The tab is also displayed as:

Map Properties dialog: Labels tab

For more information, see:

- "Editing Map Views"
- "Interactions in Views"
- "What Is Master-Detail Linking of Views?"

Components

Automatically create formats when drilling

Available on the Interaction tab. Use this box to specify whether to automatically create formats each time that you drill in a map. The formats that you create are listed in the Map Formats pane and are based on the formats that exist on the base drill layer. For example, if you have a Region color fill format and a Region pie graph format and you drill on that layer, then you automatically create a color fill format and a new pie format with the drill action.

You can also specify this option in the Map Formats area of the Map editor. The option is updated in both places when you make a change in either place.

Listen to Master-Detail Events

Use this check box to specify whether the map is to act as a detail view in a master-detail relationship and listen for master-detail events. If you select this check box, then complete the **Event Channels** field.

Event Channels

This field is enabled only if you select the **Listen to Master-Detail Events** check box.

Use this field to enter one or more channels on which the map is to listen for master-detail events raised by one or more master views. The channel name is case-sensitive and must match exactly the channel name specified in the master view. Separate channels with commas, for example, channel a, channel b.

Initial Map View

Available on the Interaction tab. Use the following options to specify the view port (the initial center of the map and zoom level) when a map view is first loaded or refreshed in a browser:

- **Dynamic** — Specifies that the map is zoomed or panned to the actual data on the map. (Default)

  This option focuses on the content that the user has added to the map view. This option is preferable for the initial displaying of the map view and for refreshing the map view, because it tries to display all BI content. The specification does not affect the printing of maps, because the coordinates and zoom level control all WYSIWYG interaction.

  This option specifies that you fit the initial display of the map to a layer. The selected layer must have visible contents and is selected based on the following order:

  1. **BI Data Layers** — The map first tries to display one of the layers that is checked in the **BI Data Layers** area of the Map editor in the Results tab. Each layer is searched based on the order that is specified in the **Interactive BI Layers** area of the "Edit Background Map dialog."

  2. **Custom Point Layers** — If no BI data layers are available, then a custom point layer is selected, if available.

  3. **Feature Layers** — If no custom point layers are available, then a layer is selected based on those that are checked in the Feature Layer area of the Map editor in the Results tab and on the order in the "Import Layers dialog."

  The map is zoomed to the maximum zoom-level that still allows the content to fit on the map. This zoom-level might exceed the minimum and maximum visible zoom-levels that are specified for this layer in the "Edit Background Map dialog." If the minimum and maximum visible zoom-levels are exceeded, then the format is hidden.

- **Saved** — Specifies that the map is displayed at the last saved map center and zoom level.

  This option focuses on the last map window that the end user viewed. The display is based on the X (longitude) and (Y) latitude center coordinates and on the zoom level. While you can select this option for the initial view port, this option is preferable and is always used for printing maps and other WYSIWYG interactions.

For more information, see "Setting the Initial View Ports for Map Views."

Show Labels for Spatial Layers

Available on the Labels tab. Use this box to specify whether to show labels for all layers or specific layers on the map view. The tab includes a box for each layer on the map view. The labels are displayed in the same order as that of the layers listed in the Map Formats area of the Map editor. Custom point layers have labels hidden by default.

Map Properties dialog: Tools tab

Use this tab of the "Map Properties dialog" to specify which tools are available for display with the map.

For more information, see "Editing Map Views."

Components

Toolbar

Use this box to specify the display of the following button on the toolbar:

- **Zoom In**, **Zoom Out**

Overlay

Use this box to specify the display of the following option on top of the map:

- **Zoom Slider**

Information

Use this box to specify the display of the following options in the Information panel of the map:

- **Distance Indicator**
- **Map Overview**

Mission tab: Details tab

Use this tab of the "Scorecard editor: Mission tab" and the "Scorecard editor: Vision tab" to specify supporting information for the mission or vision statement.

For more information, see:

- "What Are Mission Statements?"
- "Defining Mission Statements"
- "What Are Vision Statements?"
- "Defining Vision Statements"

The tab is also displayed as:

Vision tab: Details tab

Components

Name
Displays the name of the mission or vision statement.

Description
Use this field to enter a description of the mission or vision statement.

Business Owner
Displays the user ID of the person responsible for managing the mission or vision statement. To specify the business owner, click the **Set User** button to display the "Business Owner dialog," where you can search for and select the business owner.

Related Documents
Use the "Related Documents area" to view and manage documents that provide supporting information to the mission or vision statement.

Mission tab: Document tab

Use this tab of the "Scorecard editor: Mission tab" and the "Scorecard editor: Vision tab" to enter and format your mission statement or vision statement.

For more information, see:

- "What Are Mission Statements?"
- "Defining Mission Statements"
- "What Are Vision Statements?"
- "Defining Vision Statements"

The tab is also displayed as:

Vision tab: Document tab

Components

Toolbar
This toolbar contains buttons (such as **Bold**, **Increase Font Size**) for formatting your mission or vision statement.

My Account dialog

Use this dialog to specify your personal preferences, such as your locale, time zone, preferred currency, subject area sorting, and delivery options for the delivery of alerts by agents. The options that display on this dialog depend upon your privileges.

> **Note:** If the Delivery Devices and Deliver Profiles tabs contains devices and profiles, then do not make any changes to these tabs without first consulting the administrator, as any changes you make override the delivery device and profile information that was configured for you.

For more information, see:

- "Setting Preferences"
- "What Are Devices and Delivery Profiles?"
- "Configuring Your Devices and Delivery Profiles"

Components

User ID
Displays the user ID that is shown in the user interface.

Display Name
Displays the name that is shown in the user interface.

Preferences
Use the "My Account dialog: Preferences tab" to specify your account's display preferences.

BI Publisher Preferences
Use the "My Account dialog: BI Publisher Preferences tab" to specify your Oracle BI Publisher preferences.

Mobile Preferences
Use the "My Account dialog: Mobile Preferences tab" to specify your Oracle BI Mobile preferences.

Delivery Options
Use the "My Account dialog: Delivery Options tab" to configure your devices and profiles for the delivery of alerts.

Roles and Catalog Groups
Use the "My Account dialog: Roles and Catalog Groups tab" to view a list of the Application roles and Catalog groups to which you have been assigned by the administrator.

Delegated Users

Use the "My Account Dialog: Delegated Users tab" to view a list of users who have been given the privileges to access your analyses and dashboards, if the administrator has configured this functionality.

My Account dialog: BI Publisher Preferences tab

Use this tab of the "My Account dialog" to modify the Oracle Business Intelligence Publisher preferences.

For more information, see:

- "Setting Preferences"

Components

Report Locale

Use this box to select a locale for reports. This locale can be different than the locale that you specified in the "My Account dialog: Preferences tab."

The reports that you view and create use the locale that you specify here. The locale usually corresponds to the language that you specify in the **User Interface Language** field that you selected in the "My Account: Preferences tab" or the country from where you are working. For example, your specified language is English and your locale can be English - United States or English - Canada. The locale that you select determines the date and time formats, daylight saving time settings, and currency formats settings.

Report Time Zone

Use this box to select the time zone to apply when viewing or creating reports. This time zone can be different than the time zone that you specified in the "My Account: Preferences tab."

This option is useful if you do not reside in the same physical location as the default time zone that was set by the administrator, and you want to select another time zone.

My Account Dialog: Delegated Users tab

Use this tab of the "My Account dialog" to view a list of users who can use the "Act As" functionality to access your analyses and dashboards. You cannot modify this list. This tab is available only if the administrator has configured this functionality.

Depending upon the privileges, users can inherit your user privileges, which enables them to change your default dashboard and modify your content and preferences, or they are granted restricted access to only view your analyses and dashboards. When users are granted restricted access, they maintain their own user privileges when accessing your business intelligence content.

For more information, see:

- "About Acting for Other Users"
- "Acting for Other Users"

My Account dialog: Delivery Options tab

Use this tab of the "My Account dialog" to configure your delivery devices and delivery profiles. Your delivery devices, along with your delivery profiles, control how you are reached when an alert is generated by an agent.

For more information, see:

- "What Are Devices and Delivery Profiles?"
- "Configuring Your Devices and Delivery Profiles"
- "What Are Agents?"
- "What Are Alerts?"

Components

Devices

Use this area to configure your delivery devices. To do so, in the first box, select the category of the device, either **Email**, **Phone**, **Pager**, **Handheld**, or **Other**), and then to:

- Create a device, click the **Create Device** button to display the "Create Device dialog," where you create a device.

  If you want a device to be the default device for the category, select the **Default** option in the **Default** column to the right of the device name.

  > **Note:** When the destinations specified for agents are specific devices, the default devices you specify here override the devices in your active delivery profile. For example, if an agent is defined to be delivered to email devices, then default email device that you specify here is used rather than any email devices that you specify in your active delivery profile. (The destinations for agents are specified on the "Agent editor: Destinations tab.")

- Delete a device, select the device name and then click the **Delete Device** button.

- Edit a device, select the device name and then click the **Edit Device** button. The "Edit Device dialog" is displayed.

Delivery Profiles

Use this area to configure your delivery profiles. Click the **Create Delivery Profile** button to display the "Create Delivery Profile dialog," where you create a delivery profile.

If you want a delivery profile to be your active profile, click the **Active** option in the **Active** column to the right of the profile name.

To delete a delivery profile, select the profile name and then click the **Delete Profile** button.

To edit a delivery profile, select the profile name and then click the **Edit Profile** button. The "Edit Delivery Profile dialog" is displayed.

My Account dialog: Mobile Preferences tab

Use this tab of the "My Account dialog" to modify the Oracle BI Mobile preferences.

For more information, see:

- "Setting Preferences"

Components

Starting Page

Use this box to select the page to display when you sign in to Oracle BI Mobile. Note the following options:

- **Default** — Select this option to set your company's default dashboard, as specified by the administrator, as your default dashboard. In some cases, the administrator might require you to use only the company's default dashboard as the dashboard that displays when you sign into Oracle BI EE.

- **My Dashboard** — Select this option to set your My Dashboard that you have created and saved as your default dashboard.

- **Saved Dashboards** — This list contains the names of all of the dashboards that have been created and saved to the catalog's dashboards subfolders (for example, Shared Folders then Marketing subfolder then Dashboards subfolder). You can set any of the dashboards that are displayed in this list as your default dashboard.

My Account dialog: Preferences tab

Use this tab of the "My Account dialog" to specify your account's display preferences.

For more information, see:

- "Setting Preferences"
- "Changing the Sort Order of Subject Areas and Subject Area Folders"

Components

Starting Page

Use this box to select the dashboard to display when you sign in to Oracle BI Enterprise Edition. Note the following options:

- **Default** — Select this option to set your company's default dashboard, as specified by the administrator, as your default dashboard. In some cases, the administrator might require you to use only the company's default dashboard as the dashboard that displays when you sign into Oracle BI EE.

- **Home Page** — Select this option to set the Home page as your default dashboard. You might select this option if creating objects or maintaining the catalog is your primary job responsibility.

- **My Dashboard** — Select this option to set your My Dashboard that you have created and saved as your default dashboard.

- **Saved Dashboards** — This list contains the names of all of the dashboards that have been created and saved to the catalog's dashboards subfolders (for example, Shared Folders then Marketing subfolder then Dashboards subfolder). You can set any of the dashboards that are displayed in this list as your default dashboard.

Locale (location)

Use this box to select a locale. The locale usually corresponds to the language that you specify in the **User Interface Language** field or the country from where you are working. For example, your specified language is English and your locale can be English - United States or English - Canada.

The locale that you select determines the date and time formats, daylight saving time settings, and currency formats settings.

User Interface Language

Use this box to select the language in which you want the Oracle BI EE interface to display. The language that you specify here persists, unless, for example, it is overridden for the session by the language that you specify in the "Sign In page." If your language is overridden, then the cause of the override displays in a second box within this field.

Time Zone

Use this box to select the time zone to apply when viewing content. This option is useful if you do not reside in the same physical location as the default time zone that was set by the administrator, and you want to select another time zone. For example, suppose that the Oracle BI Server that sends you alerts resides in the US Pacific time zone, but your work location is in the US Central time zone. After you set the Central

time zone as your preferred time zone setting, the delivered time on your alerts is displayed in Central time.

Your account's time zone automatically applies to any items that you create, modify, run, receive, and print. The date and time columns included in analyses are displayed according to the content designer. The content designer can force a specific time zone to be displayed in the column or can allow your default time zone to be displayed in the column. A clock button is displayed in the column heading, and when you hover over this button, the name of the time zone used in the column is displayed.

For more information on how the administrator sets the Oracle BI Server time zone, see *Metadata Repository Builder's Guide for Oracle Business Intelligence Enterprise Edition*.

Currency

This box is available only if the administrator has configured the userpref_ currencies.xml file. For information, see "Configuring Currency Options" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

Use this box to select the currency in which to view currency columns in dashboards and analyses.

This selection:

- Takes effect in your current session.
- Is saved to the catalog and remains in effect for all sessions until you again modify and save it.
- Applies to all currency columns that have been converted by the Oracle BI Server and for which the currency data format has been set (by the content designer) to use the user's preferred currency.

The administrator defines the currency options that are available in this box.

Prompts Auto-Complete

Use this field to enable or disable the auto-complete functionality for your account.

If you select:

- **Default**, then the default setting specified by your system administrator is used.
- **On**, then auto- complete functionality is enabled. When enabled, Oracle BI EE suggests and highlights matching prompt values as you type in the dashboard's prompt selection field and highlights matching prompts values in the search dialog. See "What Is Auto-Complete?"
- **Off**, then auto-complete functionality is disabled for all dashboards that you access and when you search for prompt values in the "Select Values dialog."

Subject Area Sort

Use this option to specify the sort order of the subject areas and subject area folders within the Subject Areas pane.

If you select:

- **Sort A to Z**, the subject areas and corresponding subject area folders and columns within the subject area folders are sorted in ascending order.
- **Sort Z to A**, the subject areas and corresponding subject area folders and columns within the subject area folders are sorted in descending order.

- **Sort in Saved Order**, the subject areas sort order specified in an analysis is saved as the default and subsequently used as the default sort order.

- **Default - Sort in Saved Order**, the subject areas sort order for an analysis, by default, is originally defined in the repository.

Analysis Editor

Use this option to specify which editor you want to use when you work with analyses:

- **Full Editor** — (Available only if you have been granted the Access to Analysis privilege by the administrator.) This option specifies to use the "Analysis editor" as the editor when you work with analyses.

  The Analysis editor is a more complex editor that allows you to explore and interact with information by visually presenting data in tables, graphs, pivot tables, and so on. For more information, see "What Is the Analysis Editor?"

  If you select this option, then also specify whether the Analysis editor is to open by default to the Criteria tab or the Results tab by selecting either:

  – **Default - Start on Results tab when editing Analysis** (or **Default - Start on Criteria tab when editing Analysis**, depending on the default setting specified by your system administrator)

  – **Start on Criteria tab when editing Analysis**

  – **Start on Results tab when editing Analysis**

  This preference is applied when you click an analysis' **Edit** link from a dashboard, the Home page, or the Catalog page.

- **Wizard (limited functionality)** — (Available only if you have been granted the Access to BI Composer privilege by the administrator.) This option specifies to use the "BI Composer wizard" as the editor when you work with analyses.

  The BI Composer wizard is a simple-to-use wizard that allows you to create, edit, or view analyses without the complexities of the Analysis editor. For more information, see "Using BI Composer to Work with Analyses."

Accessibility Mode

Use this option to select whether content for Oracle BI EE is rendered in a browser in a way that facilitates the use of a screen reader.

If you select:

- **Default**, then the default setting specified by your system administrator is used.

- **On**, then the BI Composer wizard in accessibility mode will be used as the analysis editor, regardless of the setting of the **Analysis Editor** component.

- **Off**, and the setting of the **Analysis Editor** component is **Wizard (limited functionality)**, then the BI Composer wizard in regular mode will be used as the analysis editor.

The setting that you specify here persists, unless, for example, it is overridden for the session by the accessibility mode setting that you specify in the "Sign In page." If the accessibility mode setting is overridden, then the cause of the override displays in a second box within this field

For information, see Appendix B, "Accessibility Features."

Notes

- For information on setting the default values for these options, see the *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

My Account dialog: Roles and Catalog Groups tab

Use this tab of the "My Account dialog" to view a list of the Application roles and Catalog groups to which you are assigned. You cannot modify this list. See the administrator to be added to or removed from Application roles.

An Application role defines a set of permissions. Any user or group assigned to an Application role is granted the permissions associated with that role. For example, you might belong to a role that enables you to view and not create business intelligence content.

A Catalog group is defined locally in Oracle BI Presentation Services and is used to grant privileges in the Oracle Business Intelligence user interface in addition to granting Oracle BI Presentation Catalog permissions.

For more information on Application roles and Catalog groups, see *Security Guide for Oracle Business Intelligence Enterprise Edition*.

New Action Link dialog

Use this dialog to create an action link to add to an analysis.

For more information, see:

- "What Are Actions?"
- "What Are Action Links and Action Link Menus?"
- "Adding Actions to Analyses"

This dialog is also displayed as:

Edit Action Link dialog

Components

Link Text
Use this field to enter the text to display as the link to execute the associated action.

Action
Displays the action to be associated with the action link.

Create New Action
Use this button to select the type of action to create. If you selected:

- **Navigate to BI Content**, first the "Select BI Content For Action dialog" is displayed, where you select the Oracle BI EE content to which to navigate, and then the "Create New Action dialog" is displayed.

- **Invoke a Web Service**, the "Select Web Service Operation dialog" is displayed, where you select a Web Service operation to be invoked, and then the Create New Action dialog is displayed.

- **Invoke a Java Method**, the "Select Java Method dialog" is displayed, where you select the Java method to be invoked, and then the Create New Action dialog is displayed.

- Any other action type, the Create New Action dialog is displayed.

Select existing action
Use this button to display the "Open dialog," where you select an existing action to add to the analysis.

Edit Parameter Mapping
This button is available only for named actions that have parameters that are not fixed or hidden.

Use this button to display the "Edit Parameter Mapping dialog," where you edit the action parameters.

More (>>)
Displays these options:

- **Edit Action** — Use this option to display the "Edit Action dialog," where you can edit the action.

- **Remove Action** — Use this option to remove the action.

- **Save Action As** — Use this option to display the "Save Action As dialog," where you can save the action to the catalog. If the action is an inline action, then the action is saved to the catalog rather than saved with the analysis. If the action is a named action, then you can save the action with the same name or another name.

Enable

Use this box to specify one of the following options:

- **Always** — Use to specify that the action link is always to be enabled.

- **Conditionally** — This option is not available when you are adding an action link to a column heading. Use to specify that the action link is to be enabled only under certain conditions. Selecting this option displays the **Conditions** area.

  For more information, see "About Conditionally Enabling Actions."

Conditions

(Displayed only if the **Conditionally** option is selected.)

Use this area to create one or more conditions to be used to conditionally enable the action link.

To create a condition, you select either an attribute column or a hierarchical column on which to base it but with these restrictions:

- If you select an attribute column, you can add multiple conditions.

- If you select a hierarchical column, you can add only one condition.

- You cannot combine conditions based on attribute columns with a condition based on a hierarchical column and vice versa.

If you add multiple conditions, then each additional condition you add is combined with the previous condition using the AND operator. The AND operator means that the criteria specified in each condition must be met. This is the default method for combining conditions. You can change the AND operator to OR by clicking **AND**. The OR operator means that the criteria specified in at least one condition must be met.

Depending on how you construct the condition combinations with the AND and OR operators, some conditions might be grouped. Grouped conditions are bounded by boxes.

This area includes the following components:

- **New Condition** — Use this button to first select the column on which to base the condition and then display the "New Condition dialog," where you can create a condition.

- **Edit Filter** — Use this option to display the "Edit Condition dialog," where you edit the condition.

- **Copy Filter** and **Paste Filter** — Use these options to add a copy of the condition to the list of conditions. The copy is added below the condition that you copied with the AND operator between them.

  You can then edit the copy of the condition. You can also change the operator to OR.

  This option is useful to quickly add a condition to the list by modifying an existing one.

- **Delete** — Use this button to delete the condition.

- **AND or OR** — Use this button to toggle between the AND and OR operators.
- **Edit Filter Group** — This button displays only for a group of conditions.

  Displays these options:

  - **Ungroup** — Use this option to ungroup the group of conditions.
  - **Delete Group** — Use this option to delete the group of conditions.
  - **Duplicate Group** — Use this option to duplicate the group of conditions

New Calculated Item dialog

Use this dialog to create or edit a calculated item or a group.

For more information, see "Working with Groups and Calculated Items."

This dialog is also displayed as:

Edit Calculated Item dialog
Edit Group dialog
New Group dialog

Components

> **Note:** Not all components are available in each version of the dialog.

Display Label
Use this field to specify the label for the calculated item or group when it is displayed in a view. This label can differ from the name under which the object is stored in the Oracle BI Presentation Catalog.

Values From
Use this box to select an attribute column or hierarchical column, which is included in the analysis, whose values you want to use for the calculated item or group. This field is read-only if you displayed the dialog from the Layout pane or from a location in which a column was previously selected.

Function
Use this box to select the function for the calculated item. Many of the functions are those described in "Aggregation Rules and Functions."

In addition, you can select **Custom Formula**, which provides a toolbar with which you select mathematical operators to include in the function for the calculated item. You can also enter the following functions: Absolute, Ceiling, Floor, Round, Sqrt.

A formula creates a dynamic custom grouping within the view. All measures referenced in a formula must be from the same column and must be present in the results. Formulas can be inserted into, or combined with, other calculated items.

Instead of specifying a named item for attribute columns, you can specify $n or $-n, where n is an integer that indicates the item's row position. If you specify $n, then the measure is taken from the nth row. If you specify $-n, then the measure is taken from the nth to the last row.

Available
Use this area to select members to move to the Selected List area. The "Catalog pane" is displayed so you can select members or groups from there. When you move a member to the Selected List area, it is displayed with a green check mark beside it in the Available List area.

Search
Use this button to display the Search area of the "Select Values dialog," where you can locate members.

Selected

Use this area to view the values that you have selected from the Available area and moved to the Selected area. If you selected Custom Formula, then use the toolbar of mathematical operators at the bottom to create the formula for this calculated item. Use the following operators:

- \+ Plus sign, for an addition operation in the formula.

- \- Minus sign, for a subtraction operation in the formula.

- * Multiply sign, for a multiplication operation in the formula.

- / Divide By sign, for a division operation in the formula.

- % percent sign, for include a percent in the formula.

- $ Dollar sign, for acting upon the row position in the resulting data view. This operator is not available for hierarchical columns.

- (Open parenthesis, to signify the beginning of a group operation in the formula.

-) Close parenthesis, to signify the ending of a group operation in the formula.

Format

Use this button to display the "Edit Format dialog" where you format the calculated item or group. If you apply formatting in this dialog, this formatting is applied first, then conditional formatting is applied.

Add to

Use these option buttons to apply the calculated item to either the **Current View** (the specific view that is currently active) or to **All Views** (all views within the Compound Layout).

Remove calculated item members from view

Use this box to suppress the display of the members that you have included in the calculated item in the current view or all views (depending on whether **Current View** or **All Views** is selected). For example, suppose that you have a pivot table that is displaying Region on the row edge, and it is currently showing the values Eastern, Western, and Central. Suppose that you create a calculated item called "Other Regions" that is the sum of Western + Central. If you select **Remove calculated item members from view**, then only two members are shown in the pivot table: Eastern and Other Regions.

If you select this box for a custom formula, then an implicit remove selection step is created using the items from either the custom formula or from the Selected list.

Selection Steps

Use this tab to see the steps that are saved as a group, if you select the **Steps** button. This tab is available only if you are editing a group that you have previously saved as a list of selection steps.

Results

Use this tab to see the members that have been specified by the selection steps.

Steps (generate results dynamically at run time)

Click this button to save the selection steps for a group. The results of the selection are refreshed at runtime.

Results (generate results now and display every time)

Click this button to save a group as a list of members, rather than as a list of steps.

Notes

- To select multiple values, press the Ctrl key, then click the values.

- To move one or more values from the Available List area to the Selected List area, use the **Move** or **Move All** button. You also can double-click a single value in the Available List area to move it to the Selected List area.

  For a group, the following options are displayed when you click **Move**. These options are not available when you create a nested group.

  - **Add** — Use this option to add the group to the analysis. You see an "Add: *group-name*" step in the Selected List area. You see an outline value for the group in a table or pivot table.

  - **Add Members** — Use this option to add the members of the group to the analysis. You see an "Add: Members of *group-name*" step in the Selected List area. You do not see an outline value in a table or pivot table; you see the members of the group.

- To remove one or more values from the Selected List area, use the **Remove** or **Remove All** button. You also can double-click a single value in the Selected List area to remove it.

New Category dialog

Use this dialog to specify the favorites category to create. For more information, see "Organizing Favorites" and "Manage Favorites dialog."

Component

Name
Use this field to enter the name of the favorites category. The category name that you enter will display when you click the Favorites list, located on the global header.

New Condition dialog

Use this dialog to create or edit a condition.

For more information, see Chapter 10, "Working with Conditions."

This dialog is also displayed as:

Create Condition dialog
Edit Condition dialog

Components

Create condition based on

Use this list to select whether the condition is to be based on an **Analysis** or **KPI**.

Browse

Use this button to display one of the following dialogs, where you select the analysis or KPI on which to base the condition:

- For an analysis, the "Select Analysis dialog" is displayed.

- For a KPI, the "Select KPI dialog" is displayed.

Condition Data

Displays the following:

- **Selected Analysis** — If the condition is based on an analysis, then use this button to view the analysis.

- Information about the analysis or KPI on which the condition is based.

Parameters

Displays the prompted filters associated with the analysis. (A prompted filter is a filter whose operator is set to **Is Prompted**.)

Click the **Edit** button adjacent to a prompted filter to display the "Edit Parameter Filter dialog," where you edit the filter.

Dimension Value area

Displays the KPI dimensions whose values were set to **Not Pinned** in the KPI. Use the Value fields to specify values for these dimensions.

> **Note:** You cannot pin multiple values for a KPI dimension when creating a new condition.

True If Row Count

This area is available only if the condition is based on an analysis.

Use this area to specify the evaluation criteria as follows:

- *Operator* — Use this box to select the operator to apply to the row count. Valid operators are:

- **is equal to** — Use to evaluate whether the number of rows in the analysis is equal to the number of rows specified

- **is not equal to** — Use to evaluate whether the number of rows in the analysis is not equal to the number of rows specified

- **is less than** — Use to evaluate whether the number of rows in the analysis is less than the number of rows specified

- **is greater than** — Use to evaluate whether the number of rows in the analysis is greater than the number of rows specified

- **is less than or equal to** — Use to evaluate whether the number of rows in the analysis is less than or equal to the number of rows specified

- **is greater than or equal to** — Use to evaluate whether the number of rows in the analysis is greater than or equal to the number of rows specified

- **is between** — Use to evaluate whether the number of rows in the analysis is between the range of rows specified

- **is not between** — Use to evaluate whether the number of rows in the analysis is not between the range of rows specified

■ *Row Count* — Use this box or boxes to specify the row count to be evaluated. For a range of rows, the start and end values that you specify are included in the range.

Condition true if KPI

This area is available only if the condition is based on a KPI.

Use this box to specify the KPI status on which the condition is to be evaluated.

Test

Use this button to test whether the condition evaluates to true or false. Displays the Test Condition dialog, which provides the results of the condition evaluation.

New Condition Step dialog

Use this dialog to create a condition step as part of working with selection steps.

For more information, see "Working with Selections of Data."

This dialog is also displayed as:

Edit Condition Step dialog

Components

Condition Type

Use to select from a list of condition types for the specified dimension column. The following list describes the categories of condition steps that you can create. The components in this dialog differ slightly, depending on which type you select.

- Exception — Conditions that select members using comparisons of values for measure columns. Sample conditions are "Sales > Cost" and "Sales <= Cost + 10%."

- Top/Bottom — Conditions that select the specified number of members after ranking the members by the specified measure column. You can specify an exact number of members or a percentage of the total members. Sample conditions are "Top 10 based on Sales" and "Top 5% based on Cost."

- Match — Conditions that select members based on matches with text strings and attribute values. A sample condition is "Name contains abc." You can use this condition only with columns that have a string data type.

- Time/Ordinal — Conditions that select members based on ranges of time and on hierarchical levels. A sample condition is "From July 2000 to December 2000." Available only for columns with a data type that relates to time.

Action

Use this box to select the type of action to create for the members that the condition step specifies. You can select to add the selected members to the selection, keep only the selected members and remove all others, or remove the selected members from the selection.

Use the box beside the action type to select the column for whose members you are creating the condition step.

Column

Use this box to select the attribute column on which to base the condition, when created condition steps of the type Match, All X Values where Y = values.

Operator

Use this area to select the operator, based on the type:

- For Exception, depends on the type. Sample values include Within, Not Within, Between, Greater than, and Equals.

- For Top/Bottom, whether the members have a ranking of top or bottom.

- For Time/Ordinal, either:

  – Whether to use the last or first number of time periods, using the value in the **Number** field.

- – Whether the members start with, end with, or come before or after the column value in the **Time Period** field.
- ■ For Match, whether the members contain, begin with, end with, or match the string in the **Text** field.

Number

Enter the number of time periods, such as 3, when creating condition steps of type Time/Ordinal.

Time Period

Select the column value on which to base the condition, when creating condition steps of type Time/Ordinal.

Rank or Range

Enter the percentage to use for the rank or range, such as 5, when creating condition steps of type Exception or Top/Bottom.

Value

Enter the value to use for the comparison, when creating condition steps of type Exception.

Text

Enter the string to use for matching with the members, when creating condition steps of type Match. Select **Match Case** to provide case-sensitivity for the matching.

Override with

Use this box to specify that an analysis prompt, a dashboard prompt, or a variable can override the values that you specify in this condition step. Depending on what you are overriding, you can override certain values with a prompt, a presentation variable, a session variable, or a repository variable.

If you select a variable type, then enter the name of the variable in the field. For example, suppose that you have a column called EMPLOYEE_ID. You can specify USER as the session variable with which to override the value of that column. When a user logs in, the column value is set to his login name. For more information on variables, see "Using Variables."

In a list of steps for a column, specify that only one step in the list be able to be overridden by a prompt or presentation variable.

For information, see Chapter 7, "Prompting in Dashboards and Analyses."

Measure

Use this list to select the name of the measure column whose data values you want to compare, when creating condition steps of type Exception or Top/Bottom.

For

Use this area to qualify all of the dimensions of the analysis other than the dimension whose members you want to select, when creating condition steps of type Exception or Top/Bottom. For each dimension, you select which of its members to include. You can select specific members, or All, which specifies to aggregate the members when creating the condition. For example, suppose that you are qualifying the Region dimension. You can select a specific region, such as East, whose value is used in the

condition. If you select All, then the values of all regions are aggregated and used in the condition.

You can use the **For** area to create a qualified data reference (QDR). A QDR is a qualifier that limits one or more of the dimensions to retrieve a single value for a measure column. A QDR is useful when you want to temporarily reference a measure column value without affecting the current status of the dimensions. The following is an example of a QDR:

```
Add members of Total Products (Rgd Sk Lvl) where "A - Sample Sales"."Base
Facts"."1- Revenue", For: Cust Segments Hier: 'Active Singles', 'Baby
Boomers' is greater than "A - Sample Sales"."Base Facts"."1- Revenue",
For: Cust Segments"
```

When you specify a QDR, you can specify multiple members for limiting the dimensions. When you specify multiple members, the measure column value is aggregated using the default aggregation from the Oracle BI Server. For example, suppose that you want to create a condition for displaying those Regions in which Units is greater than 100. Suppose that you create a QDR for the Year dimension that specifies 2000 and 2001 and that the default aggregation is Sum. If the values for 2000 and 2001 for the Central region are 50 and 60 respectively, then both those years are displayed, because their sum exceeds the 100 units that was indicated.

Offset

Use this list to select either addition or subtraction, to enter the number and to specify whether the number is a percent, when creating certain condition steps of type Exception.

Match in

Use this box to select the part of the member to match when creating condition steps of type Match. Options include any label, member ID, long label, medium label, and short label.

Note

To create a step that is based on a hierarchy, use the "New Hierarchy Selection Step dialog."

New Dashboard dialog

Use this dialog to specify the name, description, and location of the dashboard that you are creating.

For more information, see "Creating Dashboards."

Components

Name
Use this field to enter a name for the dashboard.

Description
Use this field to enter a description for the dashboard.

Location
Use this list to select a folder for the dashboard in the Oracle BI Presentation Catalog. If the folder you want is not in the list, click the **Browse Catalog** link (at the bottom of the list) to display the "Select Location dialog," where you can browse for the folder that you want.

If you choose a folder in which no dashboards have been saved, then a new "Dashboards" folder is automatically created in that folder in which to save the new dashboard. For example, if you choose folder named /Shared Folders/Sales in which no dashboards have been saved, a new Dashboards folder is automatically created and the Location entry changes to as /Shared Folders/Sales/Dashboards.

If you save the dashboard in the Dashboards subfolder directly under /Shared Folders/*first level subfolder*, then the dashboard is listed in the **Dashboard** menu in the global header. If you save it in a Dashboards subfolder at any other level (such as /Shared Folders/Sales/Eastern), then it is not listed.

Content
Displays the following options:

- **Add Content Now** — Select this option to add content to the new dashboard now. The new dashboard that contains one blank page is displayed in the "Dashboard builder" for editing.

- **Add Content Later** — Select this option to add content to the new dashboard later. An an empty dashboard is created (but not displayed) to which you can add content later.

See "Editing Dashboards."

New EVALUATE_PREDICATE Function dialog

Use this dialog to create or edit the EVALUATE_PREDICATE function's formula.

For more information, see:

- "How Can I Use the EVALUATE_PREDICATE Function with a Filter?"
- "EVALUATE_PREDICATE"

This dialog is also displayed as:

Edit EVALUATE_PREDICATE Function dialog

Components

Available

Displays the primary subject area and any related subject areas that have been added to the "Subject Areas pane." Use this area to select columns to use in the formula. To insert a column in a formula, select the column and click the **Add Column** button.

Formula

Use this area to create the EVALUATE_PREDICATE function's formula.

You can enter the formula manually or use these components:

- **Variable >** — Use this button to select the type of variable (**Session**, **Repository**, or **Presentation**) to add. The "Insert Variable dialog" is displayed, where you specify the name of the variable.
- **+** — Use this button to insert the addition operator to add values.
- **-** — Use this button to insert the subtraction operator to subtract values.
- **x** — Use this button to insert the multiplication operator to multiply values.
- **/** — Use this button to insert the division operator to divide values.
- **%** — Use this button to insert the percent sign to divide values by 100.
- **(** — Use this button to insert the left parenthesis to enclose data in brackets.
- **)** — Use this button to insert the right parenthesis to enclose data in brackets.
- **| |** — Use this button to insert the concatenation operator.

Notes

To manually enter a variable in an expression in the Formula area, follow the guidelines for referencing variables in expressions described in Table 2–2.

New Filter dialog

Use this dialog to create or edit a column filter, to specify a condition under which an action link is to be enabled, or to specify a condition for applying graph formatting.

For more information, see:

- "What are Filters and Selection Steps?"

- "Creating Column Filters"

- "Editing the Formula for a Column"

- "Adding Actions to Analyses"

- "Formatting the Visual Appearance of Graphs"

This dialog is also displayed as:

Edit Condition dialog
Edit Filter dialog
New Condition dialog

Components

> **Note:** When this dialog is displayed as the New Condition dialog or the Edit Condition dialog, not all components are available.

Column

Displays the name of the column for the filter.

Edit Formula

Use this button to display the "Edit Column Formula dialog" where you can modify the column's formula for use with the filter that you are creating.

Data Time Zone

Use this button to select the time zone.

Operator

Use this list to select the operator to apply to the value specified in the **Value**. For guidelines, see "Operators."

Note that, if your repository is configured for double columns, and you are creating the filter on a display column and select the **contains all**, **contains any**, **does not contain**, **begins with**, **ends with**, **is LIKE (pattern match)**, or **is not LIKE (pattern match)** operator, then filtering is always done by display values, not code values. For more information on double columns, see "Understanding the Double Column Feature."

Value

Use this field to specify one or more values to use when applying the filter or condition. You can:

- Type values.

- Select values from the list box or calendar.

The number of values that display in this field is determined by the MaxDropDownValues configuration setting. The administrator can modify this setting. For information about this configuration setting, see "Manually Changing Presentation Settings" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

To search for specific values from the list box, click **Search** in the list box. The "Select Values dialog" is displayed, where you can search for and select values.

If the analysis has other filters, the following options appear to the right of **Search**:

- **Limited Values** — Use this option to limit the values by any other filters that are associated with the analysis.

- **All Values** — Use this option to list all values, without limiting the values by any other filters that are associated with the analysis.

If your repository is configured for double columns, and you are creating the filter on a display column, then by default you specify display values. However, if your organization allows the display of code values, then you can specify code values rather than display values, but only if you use one of the following operators:

- **is equal to / is in**

- **is not equal to / is not in**

- **is between**

To specify code values, select the **Select by** *Code Column* box.

Note: If you create or modify a filter or condition using code values and, subsequently, the code column for that value is removed from the Presentation layer using the Administration Tool, then filtering by code values remains in effect (although the code values are not visible). When you edit the filter or condition, the code value (for example, 1) is converted to the equivalent display value (for example, Excellent).

For more information on double columns, see "Understanding the Double Column Feature."

Select by *Code Column*

Available only if your repository is configured for double columns, you are creating the filter on a display column whose code column is exposed in the repository Presentation layer, and you selected either the **is equal to / is in**, **is not equal to / is not in**, or **is between** operator.

Use this box to allow code values to be specified in the **Value** field. When this box is selected, the list box displays both the code values and the display values (for example, **1 - Beverages**) for selection and the **Filter by** box is selected but disabled. When this box is deselected, the list box displays only the display values (for example, **Beverages**).

Filter by *Code Column*

Available only if your repository is configured for double columns and you selected either the **is equal to / is in**, **is not equal to / is not in**, or **is between** operator.

Use this box to specify whether the column is to be filtered by code values or display values. Select this box to filter by code values. Deselect this box to filter by display values.

Saved Analysis

Available if you selected the **is based on the results of another analysis** operator.

Use this field to specify the saved analysis whose results are to be the basis for the filter.

Relationship

Available if you selected **is based on the results of another analysis** in the **Operator** field.

Use this list to select the appropriate operator to determine the analysis' column results that set the filter.

Use values in column

This field displays if you selected the **is based on the results of another analysis** operator.

Use this list to view a matching column name in the analysis, if there is one. To use another column, then select it instead. The values in this column set the filter.

Add More Options

Available for all operators except **is prompted** or the **is based on the results of another analysis**.

Click this button to add a SQL expression or a session, repository, or presentation variable to the filter. You can add one or more of these options. When you select an option, a corresponding field is displayed where you specify either a SQL expression or the name of the variable.

When this dialog is displayed as the New Conditions dialog from the "Column Properties dialog: Conditional Format tab" or as the Edit Condition dialog from the "Edit Action Link dialog," you can add only a presentation variable.

For more information on variables, see "Using Variables."

SQL Expression

Available if you selected **SQL Expression** from the **Add More Options** list.

Enter or paste a SQL expression.

Session Variable

Available if you selected **Session Variable** from the **Add More Options** list.

Enter the name of the session variable to use, for example USER.

Repository Variable

Available if you selected **Repository Variable** from the **Add More Options** list.

Enter the name of the repository variable to use, for example prime_begin.

Variable Expr.

Available if you selected **Presentation Variable** from the **Add More Options** list.

Enter the name of the presentation variable to use, for example MyFavoriteRegion.

(default)

Available if you selected **Presentation Variable** from the **Add More Options** list.

(Optional) Specify a default value to be used if no value is returned by the presentation variable.

Delete

Click this button to delete the corresponding value and field.

Clear All

Click this button to remove all values and codes. If you added a SQL expression or variable to the filter, then clicking the **Clear Values** button deletes all related values and fields.

Protect Filter

Select this option to protect the filter's value from being overridden by either a prompt value or when the user navigates to another analysis. When the user navigates from one analysis to another analysis, any prompt values that were specified in the first analysis transfer to the second analysis.

Convert this filter to SQL

Select this option to convert the filter that you have built to a SQL WHERE clause that you can edit manually. Note that after you convert a filter to SQL code, you can view and edit the filter item as SQL code in the "Advanced SQL Filter dialog," only. You can no longer view and edit the filter in the Edit Filter dialog.

Related Topics

"Applying a Named Filter to an Analysis"
"Combining and Grouping Column Filters"
"Using a Saved Analysis as a Filter"
"Creating and Editing the SQL Statements for a Column Filter in an Analysis"

Operators

Use the guidelines shown in Table D–4 when choosing an operator and specifying the required values. The operator list from which you can choose is populated based on the function you are performing (for example, creating a filter or creating a dashboard prompt) and the type of column that you selected.

Table D–4   Guidelines for Choosing an Operator When Creating a Column Filter

Operator	Usage Guidelines
is equal to / is in	Valid for a column that contains text, numbers, or dates. Specify a single value or multiple values. Results include only records where the data in the column matches the value in the filter.
is not equal to / is not in	Valid for a column that contains text, numbers, or dates. Specify a single value or multiple values. Results include only records where the data in the column does not match the value in the filter.
is less than	Valid for a column that contains numbers or dates. Specify a single value. Results include only records where the data in the column is less than the value in the filter.
is greater than	Valid for a column that contains numbers or dates. Specify a single value. Results include only records where the data in the column is greater than the value in the filter.
is less than or equal to	Valid for a column that contains numbers or dates. Specify a single value or multiple values. Results include only records where the data in the column is less than or the same as the value in the filter.
is greater than or equal to	Valid for a column that contains numbers or dates. Specify a single value or multiple values. Results include only records where the data in the column is greater than or the same as the value in the filter.
is between	Valid for a column that contains numbers or dates. Specify two values. Result include only records where the data in the column is between the two values in the filter.
is null	Valid for a column that contains text, numbers, or dates. Do not specify a value. The operator tests only for the absence of data in the column. Results include only records where there is no data in the column. Sometimes it might be useful to know whether any data is present, and using the is null operator is a way to test for that condition. For example, suppose your business has a worldwide address book and you want to extract the United States addresses only. You could do this by checking for the presence or absence of data in the "State" field. This field should be unpopulated (null) for non-United States addresses and populated (not null) for United States addresses. You can obtain a list of United States addresses without the need to check the column for a specific value.
is not null	Valid for a column that contains text, numbers, or dates. Do not specify a value. The operator tests only for the presence of data in the column. Results include only records where there is data in the column.
is ranked first	Valid for a column that contains text or dates. Specify a single value. Results include only the first n records, where n is a whole number specified as the value in the filter. This operator is for ranked results. For example, you could use this operator to obtain a list that contains the first ten brand names in alphabetical order.

Table D–4   (Cont.) Guidelines for Choosing an Operator When Creating a Column Filter

Operator	Usage Guidelines
is ranked last	Valid for a column that contains text or dates. Specify a single value. Results include only the last n records, where n is a whole number specified as the value in the filter.
	This operator is for ranked results. For example, you could use this operator to obtain a list of the dates of the last ten sales transactions.
is in top	Valid for a column that contains numbers. Specify a single value. Results include only the first n records, where n is a whole number specified as the value in the filter.
	This operator is for ranked results. For example, you could use this operator to obtain a list of the top ten sales in dollars.
is in bottom	Valid for a column that contains numbers. Specify a single value. Results include only the last n records, where n is a whole number specified as the value in the filter.
	This operator is for ranked results. For example, you could use this operator to obtain a list of the customers reporting the fewest numbers of problems.
contains all	Valid for a column that contains text, numbers, or dates. Specify a single value or multiple values. Results include only records where the data in the column contains all of the values in the filter.
does not contain	Valid for a column that contains text, numbers, or dates. Specify a single value or multiple values. Results include only records where the data in the column does not contain any of the values in the filter.
contains any	Valid for a column that contains text, numbers, or dates. Specify a single value or multiple values. Results include only records where the data in the column contains at least one of the values in the filter.
begins with	Valid for a column that contains text, numbers, or dates. Specify a single value. Results include only records where the data in the column begins with the value in the filter.
ends with	Valid for a column that contains text, numbers, or dates. Specify a single value. Results include only records where the data in the column ends with the value in the filter.
is LIKE (pattern match)	Valid for a column that contains text. Specify a single value or multiple values. Requires the use of a percent sign character (%) as a wildcard character. You might specify up to two percent sign characters in the value. Results include only records where the data in the column matches the pattern value in the filter.
is not LIKE (pattern match)	Valid for a column that contains text. Specify a single value or multiple values. Requires the use of a percent sign character (%) as a wildcard character. You might specify up to two percent sign characters in the value. Results include only records where the data in the column does not match the pattern value in the filter.
is prompted	Valid for a column that contains text, numbers, or dates. Choosing this operator for a filter's column flags it as ready to be filtered by a prompt. This means when a prompt is used, results include only records where the data in the column that is prompted matches the user's choices.
	Note: This operator is required for columns included in prompts where no prefiltered values are desired.
is based on the results of another analysis	Valid for a column that contains text, numbers, or dates. This operator constrains the filter by using the value of a column from the same subject area in another saved request.

Table D–4   (Cont.) Guidelines for Choosing an Operator When Creating a Column Filter

Operator	Usage Guidelines
prompt user	Valid for a column that contains text, numbers, or dates. Choosing this operator enables the user to select the dashboard or analysis' prompt operator at runtime.

New Folder dialog

Use this dialog box to specify the folder to create in the Oracle BI Presentation Catalog. For more information, see the "Catalog page."

Component

Name
Use this field to enter the name of the folder.

New Global Variable dialog

Use this dialog to add (or modify) a global variable to a formula in the "Edit Column Formula dialog: Column Formula tab."

For more information, see:

- "Using Variables"
- "What Are Global Variables?"

This dialog is also displayed as:

Edit Global Variable dialog

Components

Name

Use this text box to enter a name for the global variable. For example, gv_region, date_and_time_global_variable, or rev_eastern_region_calc_gv. See Table 2–1 in Chapter 2–1, " Syntax for Referencing Variables" for syntax requirements.

> **Note:** Note that the name for a global variable must be fully qualified when referencing the variable, and therefore is prefixed by the text "global.variables". For example, a global variable set to calculate revenue displays in the Column Formula dialog as follows:
> `"Base Facts"."1- Revenue"*@{global.variables.gv_qualified}`

Type

Use this list to specify the data type for the global variable. There are five data types:

- Date (default format: mm/dd/yyyy)
- Date and Time (default format: mm/dd/yyyy hh:mm:ss)
- Number
- Text
- Time

Value

Use this text box to specify the value for the global variable.

The following are some examples:

- 06/05/2013 (when the Date type is the data type)
- 12/27/2011 12:00:01 (when Date and Time is the data type)
- 3.14159 (when Number is selected as the data type)
- 05:16:00 (when Time is selected as the Data Type)
- ((("Base Facts"."1- Revenue"/"Base Facts"."2- Billed Quantity")*3)+500)/-.25 (when Text is selected as the data type and the column is a calculation)

New Prompt dialog

Use this dialog to define the column, variable, or currency prompt.

For more information, see "Creating a Column Prompt."

This dialog is also displayed as:

Edit Prompt
Edit Prompt: *Column* dialog
New Prompt: *Column* dialog

Components Common to Column, Currency, and Variables Prompts

> **Note:** This section describes the components that are common to column, currency, and variable prompts. Additional components are available for the column and variable prompts. See "Additional Components for Column and Variable Prompts."

Label
Use this field to enter an appropriate label for the prompt. For example, "Select a date range," "Select a currency," or "Select a percentage by which to calculate the region's dollars."

Description
Use this field to enter a short description of the prompt. This description is displayed as tool tip text, which is displayed when the user hovers the mouse over the prompt's label in the dashboard or analysis.

Additional Components for Column and Variable Prompts

Prompt for Column
This field displays for column prompts, only.

Use this field to view information about the column that you selected. You can edit the formula that displays in this field by clicking the **Edit Formula** button. For more information, see "Edit Column Formula dialog."

Edit Formula
This field displays for column prompts, only.

This button displays for attribute and measure column types, but not for hierarchical columns; however, if you are creating a column or variable prompt and choose to modify the column's formula, you can specify a hierarchical column in the column's formula.

Use this button to display the "Edit Column Formula dialog" where you can modify the column's formula for use with the prompt.

If you added a SQL case statement to the analysis' column instance and you want to use that case statement within the prompt, then you must specify the same SQL case statement in the prompt's column formula.

For example, on the analysis' column, you can use the Edit Formula functionality to create a "Beverage Type" bin to group a long list of beverages into two categories called "Carbonated Beverages" and "Fruit Juices and Non-Carbonated Beverages." When building the prompt, you then add the same bin or SQL case statement to the prompt's column formula. When the prompt is completed and previewed, the "Carbonated Beverages" and "Fruit Juices and Non-Carbonated Beverages" items are displayed in the prompt's value list.

Data Time Zone

Use this field to set the time zone.

Prompt for

This field displays for variable prompts, only.

Use this field to select the type of variable to create (**Presentation Variable** or **Request Variable)** and to type a name for the variable. This variable name is the name that you add to the analysis or dashboard where you want the variable prompt's value specified by the user to display.

Included Code Column

This field displays for display columns, only.

Displays the name of the code column that is mapped to the display column.

For more information on display and code columns, see "Understanding the Double Column Feature."

Operator

This field displays for column prompts, only.

Use this list to select the prompt's operator. For more information about each operator, see "Operators."

Note the following items:

- If you want the user to select the operator at runtime, then select the ***Prompt User** operator.

- If you are creating a dashboard prompt for an Oracle Business Intelligence Publisher report that receives its data from an Oracle BI Server or SQL Server, then you must set the operator to **is equal to/is in**.

- If you are creating a prompt that includes a group in the prompt's value selection list, the Operator must be set to either **is equal to/is in** or **is not equal to/is not in**. For more information about groups, see "Working with Groups and Calculated Items."

- If the repository is configured for double columns, and you are creating the prompt on a display column and select the **contains all**, **contains any**, **does not contain**, **begins with**, **ends with**, **is LIKE (pattern match)**, or **is not LIKE (pattern match)** operator, then filtering is always done by display values, not code values. For all other operators, filtering is done by code values. For more information on double columns, see "Understanding the Double Column Feature."

User Input

This field displays for column and variable prompts.

Use this list to specify the user interface component where the user selects the prompt values (for example, prompt the user with radio buttons to select only one prompt

value or prompt the user with a text box that requires the user to enter one or more specific prompt values). The input option that you select determines the fields that are displayed in the dialog. For a description and example of each user input option type, see "What Types of User Input Options Can I Use With a Column or Variable Prompt?"

User Input Values

This field displays for column and variable prompts.

Use this field to specify which data values you want to display in the user input method that you selected. For example, if you selected the **Choice List** user input method and the **All Column Values** option, then the user selects the prompt's data value from a list that contains all of the data values contained in the data source.

Note that for attribute columns and measures column, all choice list values type are available.

The *User Input* Values options are:

- **All Column Values** – Indicates that users can choose from a list that contains all the existing values or members.

  If the number of column values exceed the number that is specified in the **Page Values** box, the list that displays in the view contains a **Search** link that the user clicks to access the Select Values dialog. Users can use the search to locate more values.

- **Custom Values** – Indicates that users can select from a list of prompt values that you created rather than the values supplied by the column.

- **Specific Column Values** – For attribute columns and measures column, this option indicates that users can choose from a list that displays the values that you have selected for the column. This option is useful when prompting for multiple columns, or when the results contain a filter. It prevents the user from choosing values that would result in no data. For example, suppose an analysis contains a country column and a city column, and contains the filter Country=France. By selecting limited values for the city column prompt, the choices are constrained to cities in France only, which prevents the possibility of the user choosing a city that is not located in France, such as Country=France and City=Rome.

  This list can also contain a group as a selection option. Users can also click **Search** from the list of values to search for a value that does not display in the list of values. You can click the **Plus** button to display the Select Values dialog where you can search for and select the desired values to display to users. In the Column Values pane, you see all values for the column and you can select only those that you want users to choose from. If you are using either the **is equal to/is in** or the **is not equal to/is not in** operator, then you can expand the Catalog pane to browse and add a saved group. When you select a group, it is presented as one value in the list of values. For example, if the group is named Sales by Region and contains the Eastern and Southern members, within the prompt's list of values you see Sales by Region and when you select this value, the analysis contains the Eastern and Southern members.

  For hierarchical columns, this choice indicates that a list is displayed from which users can choose among the members that you have selected for the column. This list can also contain a group as a selection option. See the above paragraph for more information.

- **SQL Results** – Indicates that users can choose from a list that contains the values that you have specified through a SQL statement. A box is displayed where you can enter a SQL statement that creates the list of values from which users can

choose. You likely want to enter a WHERE clause as part of the SQL statement to limit the number of values from which users can select and include sorting commands to have the values display in a logical order.

If the SQL statement returns a list of values that exceeds the number that is specified in the **Page Values** box, then a **Search** link is displayed and when the user clicks this link, the Select Values dialog is displayed. Users cannot search in the Select Values dialog, but they can display more values to select from.

- **Members of Groups** – This option is not available for hierarchical columns.

  Indicates that users can choose from a list that contains all members included in a specified group or groups. For example, if the group you select is named Sales by Region and contains the Eastern and Southern members, at runtime you see Eastern and Southern regions listed in the prompt's list of values.

- **All Column Values and Specific Groups** – This option is not available for hierarchical columns. This option is available for the **is equal to/is in** or the **is not equal to/is not in** operators, only.

  Indicates that users can choose from a list that contains all column values and the groups that you have selected. When you select a group, it is presented as one value in the list of values. For example, if the group is named Sales by Region and contains the Eastern and Southern members, within the prompt's list of values you see Sales by Region and when you select this value, the analysis contains the Eastern and Southern members.

  Note: If you have a prompt with a choice list value that contains a group and the prompt is then used to override a **Keep only** or **Remove** selection step, then Oracle BI EE ignores the group at runtime. If the override selection step is an **Add** selection step, then Oracle BI EE uses the group.

Select Values or Remove selected value buttons

These buttons display for column and variable prompts. These buttons display if you selected **Custom Values**, **Specific Column Values**, **Members of Groups**, or **All Column Values and Specific Groups** in the **User Input Values** field.

Use the **Select Values** button to open the "Select Values dialog" to search for and add values or groups to the Select List. The prompt presents this values list to the user. This functionality is useful when you want to limit the number of user choices to a small, intuitive list. For example, if you chose Radio Buttons as the user input method and created a specific values list of five dates, the prompt presents the user with five radio buttons, one for each date. If you selected **Custom Values** in the **User Input Values** field, the Enter Value dialog displays rather than the Select Values dialog, where you enter a custom value.

Use the **Remove selected value** button to remove the selected value.

SQL Statement

This field displays if you selected **SQL Results** in the *User Input* Values field.

Use this field to create or edit a SQL statement. When run, the SQL statement produces a group of values that is displayed in the Select List.

Include "All Choices" choice in the list

This box displays if you selected either the **Choice List**, **List Box**, or **Radio Buttons** user input type.

Use this box to display the "All Choices" option in the value list. Users can select the "All Choices" option to select all of the values in the list.

Limit values by

This box displays if you selected either the **Check Box**, **Choice List**, **List Box**, or **Radio Buttons** user input type.

Use this box to select an existing prompt column or columns to limit the values that display in the select lists for the prompt column. This type of limitation is also known as a cascading prompt. Oracle suggests that you limit values by selecting multiple specific prompt columns rather than by selecting **All Prompts**.

Consider the following examples:

- Suppose you build a prompt containing the following columns: Year, Quarter, and Month. Then you limited the Quarter column by Year but do not limit the Month column. At runtime, if the user specifies a Year value of 2009, then the Quarter values available will be 2009 Q1, 2009 Q2, 2009 Q3, and 2009 Q4, only, and the Month values will be for all years (for example, 2006/01, 2007/02, and so on).

- Suppose you build a prompt containing the following column prompts: Year, Quarter, and Month. Then you limit the Quarter column by Year and the Month column by Year and Quarter. At runtime, if the user specifies a Year value of 2009, but does not specify a Quarter value, then the Month values available will be determined by the year (for example, 2009/01, 2009/02, and so on). If the user specifies a Year value of 2009 and a Quarter value of 2009 Q2, then the Month values will be limited to 2009/04, 2009/05, and 2009/06.

Enable user to select multiple values

This box displays if you selected either the **Choice List** or **List Box** user input type.

Use this box to allow the user to select multiple prompt values from the list of values. If you selected the **Choice List** user input option, then the prompt value selection list displays a check box before each prompt value.

If you selected the **List Box** option, then to select:

- Multiple values, the user presses the Control key, then clicks the values

- A range of values, the user clicks the first value in the range, presses the Shift key, then clicks the last value in the range

If you are creating the prompt on a hierarchical column, then this option is selected and you cannot deselect it. If you are creating a prompt with only one value, then use the "Select Values dialog" to select one value.

Enable user to type values

This box displays if you selected the **Choice List** user input type.

Use this box to allow the user to choose values from the choice list or place the cursor and type a value into the selection field. For example, select this box when the prompt's value list is lengthy and the user does not want to scroll through or search the list, or the user knows the specific prompt value. This option is useful when the prompt contains non-measure numeric values (for example, a product ID or employee ID) that cannot be easily or quickly located in a list of values.

If this option and the **Enable user to select multiple values** option are selected, users can enter multiple values (using the semicolon delimiter) into the prompt's selection field.

Require user input

This box displays for all user input types.

Use this box to make the prompt required. When the prompt is required, users cannot click the Go button to execute the prompt query until they have selected a prompt value. When you select this option, an asterisk displays to the left of the prompt label to indicate to the user that the prompt is required.

Slider Values

This field displays for the **Slider** user input type, only.

Use this field to specify the prompt values and value range to display in the slider. Currently, Within Specific Limits is the only available Slider Values option.

Lower limit

This field displays for the **Slider** user input type, only.

Use this field to specify the beginning prompt value that is displayed on the left-end of the slider. This prompt value is the lowest value that the user can select.

Upper limit

This field displays for the **Slider** user input type, only.

Use this field to specify the ending prompt value that is displayed on the right-end of the slider. This prompt value is the highest value that the user can select.

Show Spinbox

This box displays for the **Slider** user input type, only.

Use this box to display a spinbox where the user can click arrows to select a value. When the user clicks the spinbox's arrows, the slider resets to the same value. Deselect this box to remove the spinbox from the prompt.

Compress Values

This box displays for the **Slider** user input type, only.

Use this box to remove the zeros from values of 1,000 and over. For example, 1,000 displays as 1K and 1,000,000 displays as 1M. If you select this option and are using a non-English environment, the compressed value label is *not* translated. The value label is displayed in English (for example, 1K or 1M).

Slider Orientation

This field displays for the **Slider** user input type, only.

Use this field to specify whether you want the slider to be displayed horizontally or vertically on the prompts page.

Label location

This field displays for the **Slider** user input type, only.

Use this field to specify where you want the prompt's label to display in relation to the slider. Currently, Left of Slider is the only available Label location option.

Slider size

This field displays for the **Slider** user input type, only.

Use this field to choose the size of the slider. You can select **Small**, **Medium**, or **Large**.

Default selection

Use this field to specify the prompt value that you want users to see initially. First select one of the following options, then (except for the **None** option) specify the value in the box that is displayed:

- **None** – Select this option if you do not want to specify a default selection.

- **Specific Values** – Select this option to choose a specific default value from the complete prompt list that Oracle Business Intelligence generates based on the option you selected in the Choice List Values field. When you select this option, the Default value field, the **Select values** button, and the **Remove selected value** button are displayed. Click the **Select values** button to access the "Select Values dialog" dialog, where you can search for, select, and deselect a default value. Use the **Remove selected value** button to remove the selected value from the Default value field.

- **All Column Values** — This option is available only when the **Include "All Choices" choice in the list** option is selected. Select this option to specify the "All Choices" default value for the prompt.

- **Variable Expression** — Select this option to specify a variable or an expression containing a variable. When you select this option, the Default value field is displayed in which you enter the variable or expression.

    For guidelines on referencing a variable in an expression, see Table 2–2. For more information on variables, see "Using Variables."

- **Server Variable** — Select this option to specify a session or repository variable as the default value. When you select this option, the Default value field is displayed in which you enter the name of the variable. For a session variable, prefix the name with NQ_SESSION and a period, for example NQ_SESSION.USER.

    For guidelines on referencing a server variable, see Table 2–2. For more information on variables, see "Using Variables."

    > **Note:** If you specify a session variable, and a request variable exists with the same name, the value of the request variable is used instead of the value of the session variable. For more information on request variables, see "What Are Request Variables?"

- **SQL Results** — Select this option to set the prompt's default value based on the results of a logical SQL statement. If necessary, a presentation or server variable can be used in the logical SQL statement (for example, variables can be referenced in the "where" clause to constrain the default value based on another prompt).

    Each row of data returned by the SQL statement is treated as a value, and each row can have one or two columns. If each row contains one column, this would be both the display value and code value. If each row contains two columns, the first column is the display value and the second column is the code value. If the SQL statement returns multiple rows but the user interface can only accept one value, then the first row is used.

If your repository is configured for double columns, and you are creating the prompt on a display column and specify a SQL statement containing the code column, then filtering is done on code values, and not display values. Consider the following SQL syntax:

SELECT *display_column*, *code_column* FROM *subject_area_name* [*Optional Where Clause*]

For example,

SELECT companyName, companyID FROM SampleSales

Enable user to select by Code Column

This option displays for display columns, only.

Select this option to add a check box to the prompt that enables the user to specify whether to select prompt values by display values (for example, "Beverages") or by code-display values (for example, "1-Beverages"). This box is automatically labeled with the partial caption of "Select by." If you select this option, then add a label in the **Label** field that identifies what the user is selecting by.

Label

This field displays for display columns, only.

Use this field to complete the "Select by" label for the check box that enables the user to specify whether to select prompt values by display values (for example, "Beverages") or by code-display values (for example, "1-Beverages"). For example, you might enter "product codes" so that the check box label is "Select by product codes."

User Input Width

This box displays if you selected the **Choice List**, **Text Field**, **List Box**, **Check Boxes**, or **Radio Buttons** user input type.

Use this field to specify the width of the prompt's field that displays on the prompts page. This field determines the width of the area where the prompt's member values display and does not include the field's label. Note the following options:

- Select **Dynamic** if you want Oracle BI EE to automatically size the field width to accommodate the prompt's member values. Note that Oracle BI EE might truncates the member values. A user can mouse-over a truncated member value and Oracle BI EE displays the member's full value.

- Select **Pixels** and specify the size in pixels to which you want Oracle BI EE to adjust the field width. Note that if member values are larger than the pixel value that you specify, then Oracle BI EE truncates the member name. A user can mouse-over a truncated member value and Oracle BI EE displays the member's full value. If you selected the **is between** operator for the prompt, then both fields ("from" and "to") are adjusted to the pixel size that you specify. This field's default size is 250 pixels. Note that this value differs if the Administrator modified the default pixel value in the Oracle BI EE configuration file.

Note that setting the **Set width of all prompts to** field on the "Edit Page Settings dialog" overwrites what you specify in the *User Input* **Width** field. Likewise, specifying preferences for the individual prompt in the *User Input* **Width** field deselects the **Set width of all prompts to check box** in the "Edit Page Settings dialog." For more information, see the help for the ""Edit Page Settings dialog."

User Input Layout

This box displays if you selected the **Check Boxes** or **Radio Buttons** user input type.

Use this option button to specify the alignment of the prompt that displays on the prompts page. Select either horizontal or vertical alignment.

Set a variable

Use this field to create a variable that this column prompt is to populate.

Select the type of variable, either **Presentation Variable** or **Request Variable**, then, enter a name for the variable. Note if you selected **Request Variable**, you must use the name of the session variable that you want this request variable to override.

> **Note:** If you are creating a dashboard prompt for an Oracle BI Publisher report that receives its data from an Oracle BI Server or SQL Server, then you must type "Presentation" in the Variable Name field.

For more information about using variables, see "Using Variables."

Column

This field displays if you selected either **All Column Values**, **Specific Column Values**, or **Members of Groups** from the **User Input Values** field.

This field displays the name of the column upon which you selected to populate the variable prompt's list of values. This field is read-only. To specify a different column name to display in this field, you must click the **Select Column** button and browse for and select another column.

Select Column

Use this button to display the "Select Column dialog" where you can browse for and select the column to use to generate the prompt's list of values.

New Related Document dialog

Use this dialog to add a document that provides supporting information to a scorecard object, such as an objective. A related document that you add is displayed as a link in the Related Documents table and can link to a dashboard page or analysis that is stored in the Oracle BI Presentation Catalog or to a web address. For example, you might want to add analysis as a related document for an objective.

For more information, see:

- "Collaboration pane"

- "Related Documents area"

This dialog is also displayed as:

Edit Related Document dialog

Components

Name
Use this field to enter the text to be displayed as the link to the related document.

If you did not specify a name, then Oracle BI EE defaults to the name of the dashboard or analysis, or a shortened form of the URL.

Type
Displays the following options to specify the type of related document:

- **BI Content** — Specifies that the related document is a dashboard page or analysis from the catalog.

- **Web Address** — Specifies that the related document is a web address.

Location
If you selected as the type:

- **BI Content**, this field displays the path to the dashboard page or analysis. This path is read-only. To specify another path, click the **Browse** button and select another dashboard page or analysis.

- **Web Address**, enter or paste the URL into this field.

Browse
This option is available only if you selected the **BI Content** type. Displays the "Select an Object from the BI Catalog dialog," where you select the dashboard page or analysis from the catalog.

New Scorecard dialog

Use this dialog to create a scorecard.

For more information, see:

- "What Is Oracle Scorecard and Strategy Management?"
- "How Do I Create a Scorecard?"
- "Creating Scorecards"

Components

Name

Use this field to enter the name of the scorecard, for example, Marketing.

Location

Use this list to select a folder or create a folder in which to create the scorecard. To create a folder, click the **New Folder** option in the list to display the "Create New Folder dialog." To select a folder that is not listed, click the **Folder** button to display the "Select Scorecard Location dialog."

Description

Use this field to enter a description of the scorecard.

Use Default Perspectives?

Use this box to specify whether you want to use the default perspectives defined by the Balanced Scorecard Methodology. You can associate initiatives and objectives with these perspectives or to other custom perspectives that you create. For more information on perspectives, see "What Are Perspectives?"

Open dialog

Use this dialog to open objects, select objects, or save objects.

This dialog is also displayed as:

Choose Delivery Content dialog
Create New Folder dialog
Save dialog
Save Action dialog
Save Action As dialog
Save Agent dialog
Save As dialog
Save Selection Steps dialog
Select dialog
Select Action dialog
Select Agent Location dialog
Select Analysis dialog
Select an Object from the BI Catalog dialog
Select BI Content For Action dialog
Select Condition dialog
Select Dashboard dialog
Select Existing Action dialog
Select Existing Agent dialog
Select KPI dialog
Select a KPI dialog
Select Location dialog
Select Request dialog
Select Scorecard Location dialog

Components

Folders
Use this pane to select a folder in the Oracle BI Presentation Catalog to display in the **Open In** or **Save In** area.

Show Folder Tree
Displays the catalog folders in a tree structure.

Show Favorites
Displays your favorite folders in the Folder pane.

Open In or Save In
Displays the folder that is selected in the Folders pane and its contents.

You can save any object in any location. However, the **Save In** field sometimes recommends the best location based on the object type that you are saving. For example, you should save filters, groups, and calculated items within a subject area folder so that these items are available when you build an analysis for the same subject area. If a subject area folder does not exist in your /My Folders or within /Shared Folders, then a subject area folder is created automatically. The "Save In" field defaults a save path to /My Folders/Subject Area Contents/*<subject area>*, however, the dialog's Folders area displays all instances of the subject area folder in the catalog.

You can save other objects such as analyses, prompts, and conditions in any folder. Bear in mind the distinctions between shared and personal folders, when deciding whether to share the object that you are saving with other users.

Up

Selects the folder that is one level higher in the folder structure.

New Folder

Adds a new empty folder under the folder that is specified in the **Open In** or **Save In** field.

Change list view type

Displays the following options to change the view of the list:

- **List** — Displays the contents of the folder that is specified in the **Open In** or **Save In** field as a list of file or folder names preceded by small buttons.

- **Details** — Displays the contents of the folder that is specified in the **Open In** or **Save In** field as a list of file or folder names preceded by small buttons and provides detailed information about the objects, including, name, type, the date modified, and owner.

Name

Use this box to specify the name of the object to open, select, or save.

To specify the name of the object, do one of the following:

- Click an object in the **Open In** area

- Enter the name of the object

The name is displayed in the tree structure when a user moves the mouse over the object.

Description

Use this field to enter a description of the object.

Descriptions are displayed when administrators use the Oracle Business Intelligence Catalog Manager. Descriptions for analyses are helpful when including them on dashboard pages.

Replace analysis in <dashboard name>

This box displays if you are viewing a dashboard, click the embedded analysis' **Analyze** or **Edit** link, edit the analysis, and select **Save As** in the "Analysis editor" toolbar to save and rename the analysis.

Use this box to include the modified analysis on the dashboard from which you accessed it for editing.

Display Label

Available only for selection steps.

Use this field to enter the label for the group when it is displayed in a view. The display label can differ from the name of the group as it is saved in the catalog.

Steps

Available only for selection steps.

Click this button to save the selection steps for a group. The results of the selection are refreshed at runtime.

Results

Available only for groups.

Click this button to save a group as a list of members, rather than as a list of steps.

Replace current action (or steps, or condition) with a reference to the saved action (or group, or condition)

Use this box in the following situations:

- When you are saving an action or condition to the catalog, to specify whether to replace the reference to the current action or condition with the saved action or condition.

- When you are saving a series of steps to the catalog, to specify whether to replace the series of steps with the name of the group. For example, if you have created several selection steps for the Product column, click the **Save** button, then select this box in the dialog, the several steps are replaced by a single "Start with" step for the group.

Select this box to replace the reference with the saved action, group, or condition. Deselect this box to maintain the reference to the action, group, or condition.

Overview pane

Use this pane to view summary information about the selected initiative, objective, or KPI.

For more information, see "Viewing Overview Information."

This pane is part of the "Scorecard editor: Overview tab."

Summary Information

This area displays summary information about the selected objective, initiative, or KPI. For more information on the specific information that is displayed, see:

- "Initiative or Objective Overview"
- "KPI Overview"

Initiative or Objective Overview

This view is displayed in the "Overview pane" when you select an initiative in the "Initiatives pane" or an objective in the "Strategy pane." Use this view to view basic settings for the selected initiative or objective (for example, status, business owner, and so on) and a status summary showing the number of KPIs and initiatives, or KPIs and objectives, that evaluate progress in each performance state.

Components

Score

Displays the score for the selected initiative or objective in a gauge.

For more information on scores, see "Understanding Initiative or Objective Performance Assessment."

Children

Displays for the selected initiative or objective:

- The number of its child initiatives or child objectives in each status.

- The number of its child KPIs in each status.

If there is at least one child objective, initiative, or KPI for a particular status, the status name is a hyperlink that displays the "Scorecard editor: Breakdown tab," showing the child object or objects.

Descendants

Displays for the selected initiative or objective:

- The number of its descendant initiatives or objectives in each status.

- The number of its descendant KPIs in each status.

If there is at least one descendant objective, initiative, or KPI for a particular status, the status name is a hyperlink that displays the "Scorecard editor: Breakdown tab," showing the descendant object or objects.

Perspective

Displays the perspective with which the selected objective or initiative is associated. For example, an Improved Client Response Time objective might be associated with the Customer perspective.

For more information on perspectives, see "What Are Perspectives?"

Business Owner

Displays the user ID of the person responsible for managing the selected initiative or objective.

Assessment Formula

Displays the rule that is used to assess the overall performance of the selected initiative or objective, for example, **Worst Case** or **Weighted**.

Go to this initiative or Go to this objective

Displays the "Scorecard editor: Initiative Details tab" or the "Scorecard editor: Objective Details tab") for the selected initiative or objective in the current mode (edit or view).

KPI Overview

This view is displayed in the "Overview pane" when you select a KPI in the "Initiatives pane" or "Strategy pane." Use this view to view basic KPI settings for the selected KPI and performance data.

Components

Score

Displays the score for the selected KPI in a gauge.

For more information on scores, see "Understanding Initiative or Objective Performance Assessment."

Perspective

Displays the perspective with which the selected KPI is associated. For example, a Net Profit KPI might be associated with the Financial perspective.

For more information on perspectives, see "What Are Perspectives?"

Trend

Displays information in text or symbol format that indicates how the performance of the selected KPI has changed since the last reporting period or a date that you specify. Performance information text or symbols include the following:

- Decreasing (Bad) — Red down arrow (arrow displays vertically)

- Decreasing Slightly (Bad) — Red down arrow (arrow displays on a 45 degree angle pointing right)

- Decreasing (Good) — Down arrow outlined in green (arrow displays vertically)

- Decreasing Slightly (Good) — Down arrow outlined in green (arrow displays on a 45 degree angle pointing right)

- Increasing (Bad) — Red up arrow (arrow displays vertically)

- Increasing Slightly (Bad) — Red up arrow (arrow displays on a 45 degree angle pointing right)

- Increasing (Good) — Up arrow outlined in green (arrow displays vertically)

- Increasing Slightly (Good) — Up arrow outlined in green (arrow displays on a 45 degree angle pointing right)

- Unchanged — Light blue dashed line

Business Owner

Displays the user ID of the person responsible for managing the selected KPI.

Performance

Displays the following performance data for the selected KPI:

- **Actual** — Displays the current value of the KPI (for example, Product Sales).

- **Target** — Displays the desired value of the KPI (for example, Product Sales + 1500).

- **Variance** — Displays the amount by which the actual value differs from the target value. This partially determines the performance level of the KPI and indicates how realistic the target KPI value might be or if it must be adjusted.

- **% Variance** — Displays the amount by which the actual value differs from the target value expressed as a percentage.

- **Change** — If you enabled trending, displays the amount by which the current actual value differs from that of the previous period. For example, if an actual value for an "Annual Sales" KPI is 25000 but was 20000, the change is 5000.

- **% Change** — If you enabled trending, this displays the change value as a percentage.

History

Displays a graph showing, for the selected KPI, the actual values over time, such as for financial quarter, according to their assessed performance. For example, if four performance states (critical, warning, good, and excellent) were defined, KPI values are displayed according to these mappings.

The graph shows multiple time periods only if trending was enabled in the KPI's definition.

Go to this KPI

Displays the "Scorecard editor: KPI Details tab" for the selected KPI in the current mode (edit or view).

Page Properties dialog

Use this dialog to edit the content in a briefing book. You can change the content type, the number of navigation links to follow, and the content description.

For more information, see:

- "Working with Briefing Books"
- "Editing Briefing Books"
- "Edit Briefing Book dialog"

Components

Content Type

Use this area to select one of the following options:

- **Updatable** — Refreshes the data whenever the briefing book is downloaded, or when it is specified as the delivery content for an agent.

- **Snapshot** — Adds the content in its current state. Snapshot content preserves the original data and is not updated when the briefing book is rerun. Snapshot content is not updated when using agents.

Follow Briefing Book Navigation Links

This option applies only to updatable content, not to snapshot content.

Use this area to select one of the following options:

- **No** — Specifies that briefing book navigation links are not to be followed.

- **Yes** — Specifies that briefing book navigation links are to be followed. If you select this option, then you must also specify the number of links to follow.

- **Number of links to follow** — Specifies the number of briefing book navigation links to be followed, if you selected the **Yes** option.

Description

Use this field to enter a description of the content being saved to the briefing book.

Related Topics

"Adding Content to New or Existing Briefing Books"
"Downloading Briefing Books"
"Adding a List of Briefing Books to a Dashboard Page"
"Using Agents to Deliver Briefing Books"

Performance Tile Properties dialog

Use this dialog to:

- Edit the properties for a performance tile.

- Select the tile size.

- Customize the size.

- Customize the background or border color.

- Change the values format.

- Align the label text.

- Edit conditional formatting.

For additional information, see:

- "Editing Performance Tile Views"

Components

Tile Size

Use this list to determine the size of the performance tile. Sizes include:

- **Small**

- **Medium**

- **Large**

- **Custom** — Use this box to specify a custom size. If you select this box, then complete the **Width** or **Height** text fields for the performance tile.

Height

This text field is available only if the **Custom** box is selected. Use this text field to enter the height of the tile in pixels.

Width

This text field is available only if the **Custom** box is selected. Use this text field to enter the width of the tile in pixels.

Autofit Options

Displays options to automatically fit the value on the tile:

- **Increase width to fit value** — Use this option to automatically increase the width of the tile to fit the value.

- **Shrink value to fit width** — Use this option to automatically decrease the size of the value to fit the width.

- **Do not Autofit** — Use this option to not automatically fit the value on the tile.

Value and Labels

Displays options to align the performance tile label:

- **Fixed positions** — Use this option to set (or "fix") the positions of the labels. The label text appears in fixed positions. This option is recommended for layouts with

multiple performance tiles (of the same size) in a row, where the author wants to ensure visual consistency by rendering text anchored at the same height despite variations in content.

- **Utilize available space** — Use this option to evenly space the label text on the performance tile vertically. The label text utilizes all available space on the performance tile. Note that when you have multiple tiles placed beside each other, the labels might appear at different heights and look uneven based on the varying label content.

See "Drop Target Guidelines for Performance Tiles" for additional information about the performance tile label area.

Abbreviate Values

Use this check box to eliminate compression on the tile and to display the value in full precision.

- The value on the tile is compressed to fit the tile. In other words, 50 million appears as 50M, 125 thousand appears as 125K, and so on. By default, this value inherits its format from the Criteria page definition and then compression is applied. If you deselect the Compress Values check box, the full precision of the value is rendered. Measure values are never truncated on the tile. Any measure value less than 1,000 displays as the actual value. Compression is available only for numeric data (number, percentage, and currency). See "Specifying the Scaling of Numbers in Performance Tiles" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition* for additional information on scaling factor and compression.

Background

Use this box to select the color of the background. Background color will be applied to the entire tile.

Border

Use this box to select the color of the border.

Edit Conditional Formatting

Use this link to display the "Conditional Formatting dialog" to add conditional formatting or to change the conditional formatting carried over from the Criteria page.

Permissions dialog

Use this dialog to manage accounts and to assign permissions for a catalog object. You can also use it to replace account entries in the Access Control List (ACL).

Permissions determine which user, group, or role can view, open, or modify the object. If you are using this dialog to assign permissions to a catalog object and need more information about the privileges that further refine the tasks users can perform, see "Managing Presentation Services Privileges" in *Security Guide for Oracle Business Intelligence Enterprise Edition*.

For more information, see:

- "Properties Buttons for Objects"
- "Changing the Properties of a Dashboard and its Pages"
- "What Are Permissions?"
- "Assigning Permissions"

This dialog is also displayed as the:

Section Permissions dialog

Components

> **Note:** Not all components are available in each version of the dialog.

Location
Displays the folder in which the object resides.

Owner
Displays the account name of the object owner. To change the name that displays in this field, go to the **Owner** column in the **Permission** area and select the button corresponding to the account you want to assign as the owner. Note that this field sets the catalog owner of the object, which differs from setting the business owner for a KPI or scorecard object. For more information about the business owner, see "KPI editor: General Properties page."

Permissions
Use this area to manage accounts and assign permissions. Note the following options:

- To manage accounts and assign permissions, use the **Permissions** toolbar buttons.
- To assign a permission to an account, in the **Permission** column, select the permission from the **Permission** list.
  - If you are working with section permissions, select **Granted** to include the section in the corresponding account's dashboard. Select **Denied** to remove the section from the corresponding account's dashboard. Where applicable, these permissions override the permissions that are set on the catalog object.
  - If you are working with catalog permissions, see "Permissions Available by Object Type" and "Permission Definitions" for more information about the permission options. For information about the options available for the Custom permission option, see "Custom Permissions dialog." Note that most

of the permissions in this list are compound permissions, made up of the most commonly used combinations of permissions, so when you select a permission from the list, Oracle BI EE displays a label listing what the selected permission includes. For example, if you selected the Modify permission, Oracle BI EE displays "Read, Write, Delete." If none of the permissions available in the permissions list meets your requirements, you can select the **Custom** option to access the Custom Permissions dialog where you can create your own compound permission for the object.

- To change the owner of the object, select the button in the **Owner** column for the account to designate as the owner.

Note that this area also lists any Unresolved Accounts for you to manage. An unresolved account is an account for which information is no longer available, for example, an account for a user who is no longer with your organization.

Permissions Toolbar

This toolbar contains the following buttons:

- **Apply effective permissions** — Use this button to assign permissions based on the user's membership in a group. For example, if a user belongs to the Marketing group account which has full control permissions to a Corporate Sales scorecard directory, then the user also has full control to the directory.

- **Replace with parent's folder permissions** — Use this button to inherit the permissions defined for the highest folder in the directory hierarchy.

- **Set parents folders permission to "Traverse Folder"** — Use this button skip over any folders to which the permissions should not be applied.

- **Add users/roles** — Use this button to display the "Add Application Roles, Catalog Groups, and Users dialog," where you select accounts to add.

- **Apply permissions for selected users/roles** — Displays the permissions menu. Use this menu to select a permission to assign to the selected account or accounts. To select multiple accounts, hold down the Control key and then click the accounts that you want. For more information about the permissions that you can select, see "Permissions Available by Object Type." For information about the options available for the Custom permission option, see "Custom Permissions dialog."

- **Delete selected users/roles** — Use this button to delete the selected accounts.

Apply permissions to sub-folders

Use this option to assign permissions to the folder's subfolders, but not to the individual objects within the folder.

Apply permissions to items within a folder

Use this option to assign permissions to the folder's individual objects, but not to the subfolders within the folder.

Apply permissions to all descendants

This option is available only in the "Scorecard editor" when you apply permissions to an object in the Initiatives pane tree or the Strategy pane tree.

Use this option to assign permissions to all descendants of an object in the "Initiatives pane" or the "Strategy pane."

Replace Options

Use this list to specify how entries in the ACL are to be replaced for the object and also for its children, but only if one or more of these options are selected: **Apply permissions to sub-folders**, **Apply permissions to items within a folder**, or **Apply permissions to all descendants**:

■ **Replace All** — Select this option to replace the existing entries in the ACL with the entries currently in the dialog.

■ **Replace Listed Accounts** — Select this option to change only the entries currently displayed in the dialog and leave the other entries in the ACL unchanged. Make sure that you also remove the entries that you do not want changed from the list in the Permissions area.

■ **Remove Listed Accounts** — Select this option to remove only the entries currently displayed in the dialog and leave the other entries in the ACL unchanged. Make sure that you also remove the entries that you do not want changed from the list in the Permissions area.

Perspectives pane

Use this pane to:

- Create custom perspectives
- Edit or view the four standard perspectives defined by the Balanced Scorecard Methodology (Financial, Customer, Internal Process, and Learning and Growth) and any custom perspectives that you have created
- Delete perspectives

For more information, see:

- "What Are Perspectives?"
- "Creating Custom Perspectives"

This pane is part of the "Scorecard editor."

Components

Perspectives List

Displays a list of the perspectives for the scorecard.

Toolbar

This toolbar contains the following buttons:

- **New Perspective** — Use this button to display the "Scorecard editor: Perspective tab," where you create a perspective.
- **Open** — Use this button to display the selected perspective for viewing or editing, depending on your privileges and permissions.
- **Delete** — Use this button to delete a perspective that you created or for which you have the permissions to delete.

Preview pane

Use this pane to preview the object that you selected in the Catalog page. Not all object types have previews available. For example, if you select an analysis or dashboard, those objects display in the Preview pane, but none of the interactive features such as drilling, pivoting, and sorting are available. However, if you select an action, the "View not available" message is displayed in Preview pane.

Working with the Preview pane expanded can consume considerable system resources, so Oracle recommends that you only open the Preview pane when needed.

This pane is part of the "Catalog page."

Print & Export Options dialog

Use this dialog to specify for dashboard pages and analyses the settings for printing and exporting. You can:

- Specify page settings for the output.

- Specify items to include in the output, such as headers and footers

- Select which layouts are to be available for printing and exporting

- Create, edit, replace, and remove custom print layouts.

Dashboard pages are printed in Adobe Acrobat PDF format. Adobe Reader 6.0 or greater is required to print using Adobe PDF.

> **Notes:** The print selections that you specify apply to PDF output only. If you then print the PDF on a local or network printer, then the print selections that are specified in the browser are in effect, such as the selection for paper size.

This dialog is displayed from the Print & Export Options option in the **Tools** menu on the "Dashboard builder" toolbar and the Print & Export Options button on the "Analysis editor: Results tab" toolbar.

For more information, see:

- "Editing Dashboards"

- "About Creating Custom Layouts for Printing and Exporting Dashboard Pages"

- "Creating Custom Layouts for Printing and Exporting Dashboard Pages"

- "Editing, Replacing, or Removing Custom Layouts"

- "Changing Print and Export Options for Views"

- "Printing Views"

- "Printing Dashboard Pages"

- "About Exporting Results"

- "About Exporting Dashboards and Dashboard Pages"

Components

Paper Size

Use this list to select the size of the paper to use.

Orientation

Use this list to select one of the following orientation options for PDF and Powerpoint:

- **Default** — Uses the default PDF and Powerpoint orientation settings specified by your system administrator.

- **Custom** — Displays options to specify the orientation (either **Portrait** or **Landscape**) for PDF exports and for Powerpoint exports.

Print Rows

Use this list to specify which rows are displayed, either all rows or only the visible rows.

Hide Margins

Use this box to show or hide margins in the PDF and Powerpoint output.

Include

Use these boxes to include the following items in the output:

- Charts

- Images, including custom images

- Formatting

- Header

- Footer

You can click **Edit** to display the "Edit Footer or Header dialog," where you can specify the layout and formatting of the contents of the header or footer. You can also specify whether to display the header or footer in the HTML output.

> **Note:** Headers and footers that you include do not take affect for custom layouts.

Wrap Text

This box is disabled and deselected when you set the **Limit Column Width to x pixels** field to a value greater than 0.

Use this box to specify whether to wrap the column text.

Limit Column Width to *x* pixels

Use this field to specify the number of pixels by which to limit the column width.

If you specify a value greater than 0, then the **Wrap Text** box is disabled and deselected (and the text is automatically wrapped). If you set the value back to 0, then the **Wrap Text** box is enabled and deselected.

Standard Print Layouts

Use this area to select which standard print layout options are to be available in the Print menu for the dashboard page. You can select **Printable HTML**, **Printable PDF**, or both.

Standard Excel Output

Use this area to select which standard Excel output options are to be available in the Export to Excel menu for the dashboard page. You can select **Current Page**, **Entire Dashboard**, or both.

Custom Print & Export Layouts

Use this area to:

- Create, edit, replace, and remove custom print and export layouts. To do so, click the **Custom Print & Export Layouts** button to display the following options:

- **Create Layouts** — (Available only if no custom layouts exist.) Use this option to create custom layouts for the dashboard page. Selecting this option:

  * Generates a new layout based on the standard layout.

  * Generates a BI Publisher report and data model.

  * Opens BI Publisher in a new window and displays the generated layout as a thumbnail in the BI Publisher Layout Editor, where you can edit, delete, or create layouts.

  Note that the page settings and the header and footer settings are exported to BI Publisher. You can changes these settings in BI Publisher.

- **Create and Edit Layouts** — (Available only if custom layouts already exist.) Use this option to edit existing layouts. Selecting this option:

  * Creates a new layout based on the standard layout, if you specify that you want to remove existing layouts in the warning message that is displayed.

  * Generates a new data model.

  * Opens BI Publisher in a new window and displays the generated layout as a thumbnail in the BI Publisher Layout Editor, where you can edit, delete, or create layouts.

- **Replace Layouts** — Use this option to remove all existing custom layouts and create new layouts. Selecting this option:

  * Removes all existing layouts.

  * Generates a new layout based on the standard layout.

  * Removes the associated BI Publisher report and data model, and generates a new BI Publisher report and data model.

  * Opens BI Publisher in a new window and displays the generated layout as a thumbnail in the BI Publisher Layout Editor, where you can edit, delete, or create layouts.

- **Remove Layouts** — Use this option to remove all custom layouts as well as the associated BI Publisher report and data model.

If custom layouts exist, they are listed in this area. Use this list to select which custom layouts are to be available for printing and exporting to Excel.

Privilege dialog

Use this dialog to control the privileges that users are granted. Privileges control the rights that users have to access the features and functionality of Oracle BI Presentation Services. This dialog is displayed from the "Administration: Manage Privileges page."

For more information, see "Managing Presentation Services Privileges" in *Security Guide for Oracle Business Intelligence Enterprise Edition*.

Components

Permissions

Use this area to add accounts and grant or deny privileges.

To add accounts and grant or deny privileges, use the Permissions toolbar buttons.

To grant or deny a privilege to an account, in the **Permission** column, select either **Granted** or **Denied**.

Permissions Toolbar

This toolbar contains the following buttons:

- **Add Users/Roles** — Use this button to display the "Add Application Roles, Catalog Groups, and Users dialog," where you select users, roles, or Catalog groups to add to the list in this dialog.

- **Apply Permissions for Selected Users/Roles** — Use this button to grant or deny privileges to the selected accounts.

- **Delete Selected Users/Roles** — Use this button to delete the currently selected accounts from the list in this dialog.

Prompt editor

Use this editor to create prompts.

For more information, see:

- "Creating a Column Prompt"
- "Creating a Currency Prompt"
- "Creating an Image Prompt"
- "Creating a Variable Prompt"

This dialog is also displayed as:

Analysis editor: Prompts tab

Components

Definition
Use the "Definition pane" to create prompts that allow users to select values that dynamically filter all views within the analysis.

Display
Use the "Display pane" to view the prompt's layout and design.

Toolbar
The toolbar contains the following buttons:

- **Save** — Use this button to save the prompt.
- **Save As** — Use this button to make a copy of the prompt.

Prompt Links dialog

Use this dialog to specify whether to display the **Edit** link with a prompt. This link, which displays at runtime, allows users (with the proper privileges) to edit the prompt.

For more information, see "Adding a Dashboard Prompt to a Dashboard or Dashboard Page."

Components

Edit

Use this option to specify whether the **Edit** link is displayed with the prompt at runtime. When users with the proper privileges click the **Edit** link, the prompt is displayed in the "Prompt editor" where users can edit the prompt definition.

Copy

Use this option to specify whether the **Copy** link is displayed with the prompt at runtime. This link enables users to copy the prompt in its current state (that is, the prompt definition with the default or selected prompt values) to the Windows Clipboard.

Properties dialog

This dialog box is displayed when you select an object in the "Catalog page" and click **Properties** in the Tasks pane or click **More**, then **Properties** below the object.

For more information, see:

- "Who Owns an Object?"
- "Assigning Ownership of Objects"
- "Taking Ownership of Objects"

Components

General

Use this area to view and modify general information about the object. You can view the object's name, type (such as action or analysis), and location in the catalog. You can also enter a description for the object.

Access

Use this area to learn the following information about an object:

- The date and time when it was created.
- The date and time when it was last modified.
- The date and time when it was last accessed.

Attributes

Use the options in this area to set the following attributes of the object:

- **Hidden** — Specifies that the object is hidden.
- **System** — Specifies that the object is a system object.
- **Read Only** — Specifies that the object is read-only.
- **Do Not Index** — Specifies that the object is excluded from the crawl that indexes the catalog for the full-text catalog search. If you select to exclude the object, then it does not display in the results of any full-text catalog search. The object, however, can still be found using the basic catalog search. See "How Can I Search for Objects?" for more information about full-text and basic searches.

  Note that a newly created object that is included in the index cannot be located during a full-text catalog search until a crawl of the catalog has occurred.

Custom Properties

This area is read-only and contains system-generated information for troubleshooting object and catalog problems.

Ownership

Use this area to take ownership of the object. This area displays only if the proper privileges were assigned to the user, group, or role. Note that the owner of an object or folder cannot automatically access the object or folder. To access an object or folder, the user must have the proper permissions assigned in the object or folder's "Permissions dialog."

- **Set Ownership of this item** — Click to become the owner of the item.

- **Set Ownership of this item and all subitems** — Click to become the owner of the item and any subfolders or subitems contained within the item. For example, if you click this link for a scorecard, then you take ownership of all of the scorecard's components.

Publish Page to Dashboard dialog

Use this dialog to specify the shared dashboard to which you want to publish the current dashboard page so that you can share the page with others.

This dialog is displayed from the "Dashboard builder."

For more information, see "Publishing Dashboard Pages."

Components

Dashboard

Use this field to specify the dashboard to which to publish the current dashboard page. Click **Browse** to display the "Select Dashboard dialog," where you select the dashboard.

Related Items pane

Use this pane to identify the following:

- For a KPI listed in the "Strategy pane," objectives and KPIs that cause or effect the KPI.

- For a KPI listed in the "Initiatives pane," initiatives and KPIs that cause or effect the KPI.

- For an objective, other objectives and KPIs that cause or effect the objective, and initiatives that drive the objective.

- For an initiative, the objectives that are driven by the initiative.

For more information, see:

- "Working with KPI Details"

- "Creating Initiatives"

- "Creating Objectives"

This pane is part of the "Scorecard editor: KPI Details tab," the "Scorecard editor: Initiative Details tab," and the "Scorecard editor: Objective Details tab."

Components

Causes

This table is available only in the Scorecard editor: KPI Details tab and the Scorecard editor: Objective Details tab.

Displays the following:

- For a KPI listed in the "Strategy pane," displays the objectives and KPIs that cause the KPI.

- For a KPI listed in the "Initiatives pane," initiatives and KPIs that cause the KPI.

- For an objective, other objectives and KPIs that cause the objective.

Use this table to view and manage the causes:

- To add an objective, initiative, or KPI, drag it from the Strategy pane or the Initiatives pane and drop it in the table. The "Causal Linkage dialog" is displayed, where you specify the strength of the cause and effect relationship and how the values of the added object impact or support the values of the object you are defining.

- To edit a causal linkage, select it in the list and click the **Edit Row** button to display the Causal Linkage dialog.

- To delete a causal linkage, select it in the list and click the **Delete Row** button.

Effects

This table is available only in the Scorecard editor: KPI Details tab and the Scorecard editor: Objective Details tab.

Displays the following:

- For a KPI listed in the Strategy pane, displays the objectives and KPIs that effect the KPI.

- For a KPI listed in the Initiatives pane, initiatives and KPIs that effect the KPI.

- For an objective, other objectives and KPIs that effect the objective.

Use this table to view and manage the effects:

- To add an objective, initiative, or KPI, drag it from the Strategy pane or Initiatives pane and drop it in the table. The Causal Linkage dialog is displayed, where you specify the strength of the cause and effect relationship and how the values of the added object impact or support the values of the object you are defining.

- To edit a causal linkage, select it in the list and click the **Edit Row** button to display the Causal Linkage dialog.

- To delete a causal linkage, select it in the list and click the **Delete Row** button.

Initiatives driving this Objective

This table is available only in the Scorecard editor: Objective Details tab.

Displays the initiatives that drive the objective.

Use this table to view and manage the initiatives:

- To add an initiative, drag it from the Initiatives pane and drop it in the table. The Causal Linkage dialog is displayed, where you specify the strength of the cause and effect relationship and how the values of the added initiative impact or support the values of the objective you are defining.

- To edit an initiative linkage, select it in the list and click the **Edit Row** button to display the Causal Linkage dialog.

- To delete an initiative linkage, select it in the list and click the **Delete Row** button.

Objectives Driven by this Initiative

This table is available only in the Scorecard editor: Initiative Details tab.

Displays the objectives that are driven by the initiative.

Use this table to view and manage the objectives or KPIs:

- To add an objective, drag it from Strategy pane and drop it in the table. The Causal Linkage dialog is displayed, where you specify the strength of the cause and effect relationship and how the values of the added objective impact or support the values of the initiative you are defining.

- To edit an objective linkage, select it in the list and click the **Edit Row** button to display the Causal Linkage dialog.

- To delete an objective linkage, select it in the list and click the **Delete Row** button.

Rename dialog

Use this dialog to enter a different name for:

- An object in the catalog (a KPI or a dashboard page, for example)
- A favorites category
- A view, such as a table view
- A compound layout

For more information about the catalog, see:

- "Managing Objects in the Oracle BI Presentation Catalog"
- "Changing the Properties of Objects Added to Dashboard Pages"
- "Editing Dashboards"
- "Changing the Properties of a Dashboard and its Pages"

For more information about favorites, see:

- "Organizing Favorites"

This dialog is also displayed as:

Rename View dialog

Components

Name (or View Name)
Use this field to enter a new name for the object, favorites category, view, or compound layout.

Format
This button is available when you rename a section in the "Dashboard builder."

Use this button to display the "Section Heading Properties dialog," where you can format the name of a section.

Use Dashboard Object name as link text
This option is available when you rename an analysis in the Dashboard builder.

Use this option to specify whether to use the new name of the analysis as the link text when you display analysis results as a link on a dashboard.

Select this box to use the new name you specify. Deselect this box to use the name with which the analysis is stored in the catalog.

For more information on displaying the analysis results as a link, see the **Display Results** option on the Analysis Properties button described in "Properties Buttons for Objects."

Preserve references to old name of this item
This option is not available for all objects.

Use this option to specify to maintain any existing references to the previous name of the object. This creates a shortcut with the old name that points to the renamed object

in the Oracle BI Presentation Catalog. If you do not select this option, then existing references break.

Replace Icon dialog

Use this dialog to select an icon to represent an assessment range.

For more information, see:

- "Understanding Initiative or Objective Performance Assessment"
- "Defining Assessment Mappings for Scorecards"
- "Settings dialog: Assessment Mappings tab"

Components

Standard Images

Use the "Replace Icon dialog: Standard Images tab" to select a standard image to use as the icon.

Custom Images

Use the "Replace Icon dialog: Custom Image tab" to specify a custom image to use as the icon.

Replace Icon dialog: Custom Image tab

Use this tab of the "Replace Icon dialog" to specify a custom image to use as the icon to represent an assessment range.

For more information, see:

- "Understanding Initiative or Objective Performance Assessment"
- "Defining Assessment Mappings for Scorecards"
- "Settings dialog: Assessment Mappings tab"

Components

Web Address
Use this field to specify a custom image. To do so, enter one of the following:

- The URL to a custom image.
- The fmap syntax to reference a custom image that is stored locally in the Oracle Business Intelligence environment. For more information on the fmap syntax, see "Storing Custom Files Locally and Using the fmap Function to Reference Them."

> **Note:** If you are trying to save an object that uses the fmap syntax, then you must have the Save Content with HTML Markup privilege. See "Managing Presentation Services Privileges" in *Security Guide for Oracle Business Intelligence Enterprise Edition* for information on privileges.

The custom image should be one that is accessible to all users who view or edit the scorecard.

Update Preview
Use this button to display the image in the **Preview** area.

Preview
Displays the custom image.

Replace Icon dialog: Standard Images tab

Use this tab of the "Replace Icon dialog" to select a standard image to use as the icon to represent an assessment range. Also use this dialog to select an image to display for a range of data on a map. You display this dialog from the "Image (Layer) dialog."

This tab is also displayed as:

Select Image dialog

For more information, see:

■ "Understanding Initiative or Objective Performance Assessment"

■ "Defining Assessment Mappings for Scorecards"

■ "Settings dialog: Assessment Mappings tab"

■ "Editing Map Views"

Components

Image Categories (left pane)

Displays the categories of images. Click a category to display the available images in the right pane. The bottom-most category, which is marked by a globe icon, indicates the list of images that you imported on the Image Library tab of the "Administration: Manage Map Data page."

Standard Images (right pane)

Displays the standard images that are available for the category that you selected in the left pane. Click the image that you want.

If you must add an image, then see the administrator.

Report Links dialog

Use this dialog to specify the links that are to be displayed with analyses on a dashboard page. You can specify these link setting at the following levels:

- Dashboard level — The link settings apply to all analyses in the dashboard, unless customized settings have been specified for an individual dashboard page or analysis.

  To specify the report links at the dashboard level, click the **Tools** button on the "Dashboard builder" toolbar to display the "Dashboard Properties dialog" and then click the **Dashboard Report Links Edit** button.

- Dashboard page level — The link settings apply to all analyses in the dashboard page, unless customized settings have been specified for particular analyses.

  To specify the report links at the dashboard level page, click the **Tools** button on the Dashboard builder toolbar and then select **Page Report Links**.

- Analysis level — The link settings apply only to the particular analysis.

  To specify the report links at the analysis level, click the **Properties** button for the analysis in the "Page Layout area" of the Dashboard builder and select **Report Links**.

For more information, see:

- "Changing the Properties of a Dashboard and its Pages"
- "Changing the Properties of Objects Added to Dashboard Pages"

Components

Inherit Dashboard Settings
Select this option to specify that the link settings for the dashboard are to be used.

This option is available only when you are specifying the link settings at the dashboard page level.

For more information, see "Changing the Properties of a Dashboard and its Pages."

Inherit Page Settings
Select this option to specify that the link settings for the dashboard page are to be used.

This option is available only when you are specifying the link settings at the analysis level.

Customize
Select this option to customize the link settings for a particular dashboard page or analysis.

This option is available only when you are specifying the link settings for a dashboard page or an analysis.

Analyze
Select this option to specify that the **Analyze** link is to be displayed. This link displays the analysis in its current state (that is, with the current context, for example, with

applied filters, prompts, and so on) in the "Analysis editor," where users can edit it.

> **Note:** When creating an analysis, if you selected in the Operator field **is based on the analysis of another analysis**, the link displays the analysis in its current state, without the filters.

For more information on editing an analysis, see "Editing Analyses."

Edit

Select this option to specify that the **Edit** link is to be displayed. This link displays the analysis in its original state (that is, without the current context) in the "Analysis editor," where users can edit it.

For more information on editing an analysis, see "Editing Analyses."

Export

Select this option to specify that the **Export** link is to be displayed. This link provides users with various options to export the results of the analysis, for example, **Excel 2007+**. For more information on the available export options, see "Export Menu Options for Views and Results."

For more information on exporting an analysis, see "Exporting Results."

Refresh

Select this option to specify that the **Refresh** link is to be displayed. This link enables users to refresh the analysis.

Add to Briefing Book

Select this option to specify that the **Add to Briefing Book** link is to be displayed. This link displays the "Save Briefing Book Content dialog," where users can add the analysis to a briefing book.

For more information about adding an analysis to a briefing book, see "Adding Content to New or Existing Briefing Books."

Print

Select this option to specify that the **Print** link is to be displayed. This link provides users with the following print options:

- **HTML** — Displays a printer-friendly version of the analysis in HTML

- **PDF** — Displays a printer-friendly version of the analysis in Adobe PDF (Portable Document Format).

Related Topics

"Dashboard Properties dialog"

Results tab: Column Selector editor

Use this editor of the "Analysis editor: Results tab" to edit a column selector view. A column selector is a set of drop-down lists that contain pre-selected columns. Users can dynamically select columns and change the data that is displayed in the views of the analysis.

For more information, see "Editing Column Selector Views."

Components

Include Selector
Use this box to specify whether a drop-down list is to be displayed for the column that contains this box.

Label
Use this field to enter a label for this column in the selector.

Choices
Displays the columns that are to be displayed as the choices in the drop-down list for the column. To add a new column to a drop-down list, ensure that the column to which you want to add a new column is active by clicking it to highlight it. Then double-click the new column to add in the "Subject Areas pane."

Column Properties
Use this button to display the "Column Properties dialog" for the column.

Edit Formula
Use this button to display the "Edit Column Formula dialog" for the column.

Delete
Use this button to delete the column from the drop-down list.

Clear Choices
Use this link to clear all the columns that are selected to be displayed in the drop-down list, except for the first column that was selected for the analysis.

Toolbar
The toolbar contains the following buttons and boxes:

- Buttons that are common to all views. For more information, see "Toolbar Buttons Common to All Views."

- **Label Position** — Use this box to select a position for the label of each drop-down list, either **Left** or **Above**.

- **Automatically refresh when a new column is selected** — Automatically refreshes the drop-down list of columns in the editor when you add a column from the Subject Areas pane.

Done
Use this button to save your edits and return to the compound layout view.

Revert
Use this button to restore the settings in effect prior to your edits.

Results tab: Create Segment editor

The editor is for users of the Oracle Siebel Marketing operational application, Version 7.7 (or higher), integrated with Oracle Business Intelligence.

Use this editor of the "Analysis editor: Results tab" to edit a create segment view, which displays a Create Segment link in the results. Users can click this link to create a segment in their Oracle Siebel Marketing operational application, based on the results data.

For more information, see:

- "Editing Views"
- The online help for the Marketing Segmentation interface

Components

Toolbar

The toolbar contains the buttons that are common to all views. For more information, see "Toolbar Buttons Common to All Views."

Done

Use this button to save your edits and return to the compound layout view.

Revert

Use this button to restore the settings in effect prior to your edits.

Results tab: Create Target List editor

This editor is for users of Oracle's Siebel Life Sciences application integrated with Oracle's Siebel Life Sciences Analytics applications.

Use this editor of the "Analysis editor: Results tab" to edit a create target list view, which enables automatic integration of lists of contacts and accounts based on the results of an analysis. For example, you can create a target list in Oracle's Siebel Pharma Sales application and use it in Oracle's Siebel Pharma Mobile Analytics application.

When you add a create target list view, a link named Create Target List is displayed in an analysis on a user's interactive dashboard. The user can click this link to populate or refresh a list of contacts or accounts in the Life Sciences application.

For more information, see:

■ "Editing Views"

■ The documentation for the Siebel Life Sciences application

Components

Create Target List

Use this link to create a target list.

Toolbar

The toolbar contains the buttons that are common to all views. For more information, see "Toolbar Buttons Common to All Views."

Done

Use this button to save your edits and return to the compound layout view.

Revert

Use this button to restore the settings in effect prior to your edits.

Results tab: *Data View* editor

Use this editor of the "Analysis editor: Results tab" to edit one of the following data views:

- Funnel
- Gauge
- Graph
- Heat matrix
- Map
- Performance Tile
- Pivot table
- Table
- Treemap
- Trellis

For more information, see:

- "Editing Gauge Views"
- "Editing Graph Views"
- "Editing Heat Matrix Views"
- "Editing Map Views"
- "Editing Performance Tile Views"
- "Editing Table and Pivot Table Views"
- "Editing Treemap Views"
- "Editing Trellis Views"
- "Editing Views"

This editor is displayed as:

Results tab: Funnel editor
Results tab: Gauge editor
Results tab: Graph editor
Results tab: Heat Matrix editor
Results tab: Map editor
Results tab: Performance Tile editor
Results tab: Pivot Table editor
Results tab: Table editor
Results tab: Treemap editor
Results tab: Trellis editor

Components

Subject Areas
Use the "Subject Areas pane" to select the columns for an analysis and to work with subject areas.

Analysis Results

Displays the analysis results in a funnel graph, gauge, graph, heat matrix, map, performance tile, pivot table, table, treemap, or trellis, depending on the type of view.

Layout

This pane is not available for maps.

Heat matrix views have a unique Layout pane. See "Drop Target Guidelines for Heat Matrices" for additional information.

Use the "Layout pane" to specify the layout of the data for the view. Performance tiles have a unique Layout pane. See "Drop Target Guidelines for Performance Tiles" for additional information.

Treemap views have a unique Layout pane. See "Drop Target Guidelines for Treemaps" for additional information.

Catalog

Use the "Catalog pane" to drag and drop named groups and named calculated items from the Oracle BI Presentation Catalog to the view. The Catalog pane is not available for performance tiles in edit mode on the Results tab. For more information on named groups and named calculated items, see "What are Inline or Named Objects?"

Selection Steps

This pane is available only in the Graph, Heat Matrix, Map, Pivot Table, Table, Treemap, and Trellis editors.

Use the "Selection Steps pane" to create and modify steps for data selections. Selection steps are not visible until you click the plus button (+) to expand the Selection Steps pane.

Settings

This pane is available only in the Funnel and Gauge editors.

Use the "Settings pane" to set the thresholds for a funnel graph or gauge.

Toolbar

The toolbar contains buttons that are common to all views and buttons that depend on the type of data view. For more information on the buttons common to all views, see "Toolbar Buttons Common to All Views." For more information on specific data view buttons, see "Data View Editor Toolbar."

Done

Use this button to save your edits and return to the compound layout view.

Revert

Use this button to restore the settings in effect prior to your edits.

Right-Click Menu

Displays interactions that allow you to work with views. This option is available when you right-click a column heading or member in a heat matrix, table, pivot table, treemap, or trellis, or an outside edge for heat matrices. This option is also available when you right-click on a legend, data marker, or group-level (X-axis) or an outside edge for heat matrices. This option is also available when you right-click on a legend, data marker, or group-level (X axis) item for funnel, gauge, and graph views. See

"Right-Click Menu for Data Views" for additional information.

Paging Buttons

These buttons are available only when editing or working with heat matrices, tables, pivot tables, and trellises.

When a heat matrix, table, pivot table, or trellis includes a large number of rows, a set of buttons can be displayed under the view. You can use the following buttons to page through the rows in the view:

- **First *x* Rows** — Displays the first *x* rows of data for the view. The number that is used for the **First**, **Previous**, and **Next** buttons is specified by the **Rows per Page** field in the "Table Properties dialog: Style tab," "Pivot Table Properties dialog," or the "Trellis Properties dialog: General tab."

- **Previous *x* Rows** — Displays the previous *x* rows of data for the view.

- **Next *x* Rows** — Displays the next *x* rows of data for the view.

- **Display maximum (500) rows per page** — Enables you to display as many as the maximum number of rows per page at one time temporarily. The default is 500. The administrator can specify a different maximum value that is displayed on the tooltip for the button using the MaxVisibleRows element in the configuration file.

Components Specific to Map

Map View Area

Use this area to interact with the components of the map such as the zoom controls, legend, and overview map.

BI Data Layers

Use this area to work with the applicable formats for the BI layers of the map. Not all formats are available for all layer types. For example, point layers cannot have Color Fill formats. The map cannot display multiple non-point formats at a time (at a single zoom level) but can display multiple point formats simultaneously, if they do not share the same latitude and longitude location. If multiple graph formats are specified at the same geographic layer, then they render on top of each other.

You can do the following:

- Click **View** then **View All Formats** to specify that all defined formats are listed in this area, or click **View Visible Formats** to specify that only those formats that are currently displayed on the map are listed in this area.

- Click **New**, select a format type, then select a layer to display the appropriate dialog for defining that format. You can select an existing layer, or you can choose to create a custom point layer, which enables you to apply formats to points on the map based on the latitude and longitude.

  When you add a format, it is displayed at the top of the list of formats, to ensure that you see it on the map.

- Select **Automatically create formats when drilling** to specify whether to automatically create formats when you drill in a map. The formats that are added are listed in the Map Formats pane. For example, suppose you drill from Districts to Cities. Additional formats are added for the Cities layer.

  You can also specify this option in the "Map Properties dialog: Interaction tab." The option is updated in both places when you make a change in either place.

■ Hover over a layer name in the list to display the following buttons for modifying the layer:

– **Add New Map Formats** — Displays a list of formats so that you can select the appropriate format to display the appropriate dialog for defining that format. The list contains only those formats that apply for the geometry of that layer. For example, bar graphs and pie graphs do not apply to point layers. After selecting a format, select the column to which it applies.

If you add a format but do not see it on the map, then ensure that the map is showing the appropriate zoom level.

– **Delete** — Removes the layer and all its formats from display on the map.

■ Hover over a format name under a layer name in the list to display the following buttons for modifying the format:

– **Up or Down** — Reorders the format in the lists of formats. The order is important, because formats higher in the list overlay those formats that are lower in the list.

– **Edit** — Displays the dialog for modifying the format.

– **Delete** — Deletes the format.

■ Click the box beside a format name to make the format visible or invisible on the map.

■ Re-order formats within a geographic layer (such as State).

■ Work with thresholds whether section sliders are displayed or not. If the slider is not displayed, then you can display a map format dialog to manipulate the threshold values.

If no layers are specified in the map formats area, then click **New Map Format**. The map prompts you to import the geo-encoded columns for displaying a format for a particular geo-layer, if the columns are not part of the analysis.

When you specify to create a map view, you likely see at least one layer available in the Map Formats area. If no layer is available, then the **New Map Format** link is displayed.

Limits exist for how much data can be displayed for formats on a map view. As you work with formats, you might exceed the data limit. If you do so, then you see a message that alerts you to the data limit and the fact that not all formatting can be displayed, so you can contact the administrator. The administrator controls the limit with the MaxRecords configuration element. For information on setting this element, see "Manually Configuring for Map Views" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

Feature Layer

Use this area to add non-BI layers to the map. These layers have not been associated with BI data so are not interactive. Click **New**, then select the layer that you want to add to the map.

Components Specific to Performance Tiles

Styles pane

Use the Styles pane to select a predefined tile size option button or to select a new theme for your tile.

For more information, see:

- "Editing Performance Tile Views"
- "Styles pane"

Right-Click Menu for Data Views

When editing or working with graphs, heat matrices, pivot tables, tables, treemaps, and trellises, you can right-click to display a menu of interactions that are applicable to the view.

The interactions that are available when you right-click depend on:

■ The type of data view.

■ The selected data. When you right-click a:

– Column heading, the available right-click interactions are related to that column, for example, **Exclude column**, **Show Subtotal**, or **Add Custom Calculated Item**.

– Member, the available right-click interactions are related to that member, for example, **Create Calculated Item** and **Create Group**. Interactions that are related to the column that contains the member are also available.

– Legend item or group-level (X axis) item in a graph view, the available right-click interactions are related to that legend item or group-level (X axis) item, for example, **Drill** or **Sort**.

– Data marker in a graph view, the available right-click interactions are related to that data marker, for example, **Keep Only** or **Remove**. For example, you can click on the data marker or data point on a line graph, but not on the portion of the line that is not interactive.

– Prompts label or Sections label, the available right-click interactions are related to the specific prompt label or section label, for example, **Drill** or **Sort**.

■ Whether you are working in design mode (for example, in the Analysis editor), in a dashboard, or in runtime mode.

Note that a content designer can specify which right-click interactions are available for an analysis at runtime. For more information, see "Right-Click Interactions in Views."

> **Note:** Right-click interactions are not available for graphs in trellis views (Simple Trellis and Advanced Trellis), but you can right-click on text in the trellis view in the same manner as in a pivot table. This includes data cells in an advanced trellis that have Visualization set to Text.

The right-click menu can include the following interactions (listed in alphabetic order):

■ **Add Custom Calculated Item** — Available only in design mode. Displays the "New Calculated Item dialog," where you create a calculated item using a custom formula. It also automatically creates a selection step that contains the custom calculated item.

■ **Add Members** — Available only in design mode. Displays the "New Member Step dialog," where you select members to add.

■ **Add Related** — Available only for hierarchical columns. Creates a selection step that adds members to the selection based on a selected type of relationship.

You can select a family relationship (such as **Parents** or **Children**), a specific hierarchy level (for level-based hierarchies only), or the selected member and a

family relationship (such as **Parents** or **Children**). For more information on the family relationship, see "Notes."

- **Collapse** — Available only for hierarchical columns. Collapses the selected value.

- **Collapse all items for this column** — Available only for hierarchical columns. Collapses all the values in the column up to the top level.

- **Collapse all items in view** — Available only for a view that includes at least one hierarchical column. Collapses all the values in all the hierarchical columns in the view up to the top level.

- *Column Name* or **Column Options** —Displays a submenu of right-click interactions (such as **Drill** or **Exclude column**) for a column.

- **Create Calculated Item** — Creates a new calculated item based on the selected members and calculated items, and displays the "New Calculated Item dialog," where you specify the label and the function for the new calculated item, and whether to remove the calculated members from the view. It also automatically creates a selection step that contains the calculated item. See "Creating Groups and Calculated Items" for additional information.

- **Create Group** — Creates a new group based on the selected members and groups, and displays the "New Group dialog," where you specify the label for the new group. It also automatically creates a selection step that contains the group. See "Creating Groups and Calculated Items" for additional information.

  Be sure to select what you want to include in the group first before selecting this option because you cannot add more members or other groups from the New Group dialog.

- **Drill** — Drills down to more detailed information. When you drill in:

  - An attribute column, you add the lower level to the view. All views are affected by drilling in an attribute column, which is equivalent to a filter drill. After you click the value, a column is added to the analysis and a filter is automatically created and listed in the Criteria tab

  - A hierarchical column, you expand and collapse the nodes of data that are in the view. Drilling in a hierarchical column affects only that particular view. No other views are affected.

    Note: If you drill in multiple-level hierarchies for treemap views, all members from the lowest levels will display as tiles, and the detail level data will replace the current data.

  - A legend item or a group-level (X axis) item in a graph view, you display the lower level of data that represents a plotted series or comprises the intersection of a specific series with a data point. All views are affected by drilling a legend item or a group-level (X axis) item. After you click the legend item or group-level (X axis) item, each view is redrawn to reflect the new series of values.

- **Edit Calculated Item** —Displays the "Edit Calculated Item dialog," where you make changes to the calculated item.

- **Edit Group** — Displays the "Edit Group dialog," where you make changes to the group.

- **Exclude column** — Moves the column to the Excluded drop target. For information, see "Columns in the Excluded Drop Target." Excluding a column excludes it from the query.

- **Exclude Custom Member** — Displays a list of custom members (either calculated items or groups) that you want to exclude from your view. These custom members must have already been created for a column and were neither previously included in or excluded from the view.

- **Expand** — Available for hierarchical columns only. Displays the next level down in the hierarchy. For information, see "About Drilling in Results."

- **Include column** — Displays a list of the columns that have been excluded from the view (that is, columns that are in the Excluded drop target). Select a column to include it in the view. Including a column includes it in the query.

- **Include Custom Member** — Displays a list of custom members (either calculated items or groups) that you want to include in your view. These custom members must have already been created for a column and were neither previously included in or excluded from the view.

- **Keep Only** — Creates a selection step that keeps only the selected members and removes all others.

- **Keep Only Related** — Creates a selection step that keeps only certain members based on a selected type of relationship and removes all others.

  You can select a family relationship (such as **Parents** or **Children**), a specific hierarchy level (for level-based hierarchies only), or the selected member and a family relationship (such as **Parents** or **Children**). For more information on the family relationship, see "Notes."

- **Move Column** — Displays a menu of the following options:

  - **Before Current Column** — Moves the column to the left of its current location.

  - **After Current Column** — Moves the column to the right of its current location.

  - **To** *Drop Target Name* — Moves the column to the named drop target.

- **Move Measure Labels** — Displays a menu of the drop targets to which to move the column.

- **Remove** — Creates a selection step that removes the selected members from the view.

- **Remove All Steps** — Available only in design mode. Removes all the steps (whether they were added in the "Selection Steps pane" or from the right-click menu) for the selected column.

- **Remove Calculated Item** — Removes the selected calculated item and the selection step that contains the calculated item. (If the calculated item is a named calculated item, **Remove Calculated Item** does not remove it from the catalog.) See "Editing Groups and Calculated Items" for additional information.

- **Remove Group** — Removes the selected group and the selection step that contains the group. (If the group is a named group, **Remove Group** does not remove it from the catalog.) See "Editing Groups and Calculated Items" for additional information.

- **Remove Related** — Creates a selection step that removes members in the selection based on a selected type of relationship.

You can select a family relationship (such as **Parents** or **Children**), a specific hierarchy level (for level-based hierarchies only), or the selected member and a family relationship (such as **Parents** or **Children**). For more information on the family relationship, see "Notes."

- **Send master-detail event** — Available only in accessibility mode and only when the primary interaction for the column value is set to **Send Master-Detail Events** in the "Column Properties dialog: Interaction tab." Sends a master-detail event, which passes information to update the data in a detail view. For more information on master-detail relationships, see "What Is Master-Detail Linking of Views?"

- **Show Column level Grand Total** — Displays the following options for showing column-level grand totals:

    - **None** — Select this option to omit column-level grand totals.

    - **After Values** — Select this option to show column-level grand totals after a group of values that can be totaled in relation to a higher-level column or level of a hierarchy.

    - **Before Values** — Select this option to show column-level grand totals before a group of values that can be totaled in relation to a higher-level column or level of a hierarchy.

- **Show Row level Grand total** — Displays the following options for showing row-level grand totals:

    - **None** — Select this option to omit row-level grand totals.

    - **After Values** — Select this option to show row-level grand totals after a group of values that can be totaled in relation to a higher-level column or level of a hierarchy.

    - **Before Values** — Select this option to show row-level grand totals before a group of values that can be totaled in relation to a higher-level column or level of a hierarchy.

- **Show Running Sum** — Available in pivot tables only. Displays numeric measures as running sums, where each consecutive cell for the measure displays the total of all previous cells for that measure.

    When you select this option a check mark is displayed to the left of the option. To hide running sums, right-click and select Show Running Sum again to deselect it.

    For more information on displaying running sums, see "Displaying Running Sums and Relative Values for Measure Columns in Pivot Tables."

- **Show Subtotal** — Available only for attribute columns, depending on the column placement within the view (for example, inner-most attribute columns cannot have subtotals). Displays the following options for the location of subtotals in a column:

    - **None** — Select this option to omit subtotals.

    - **After Values** — Select this option to add subtotals after a group of values that can be totaled in relation to a higher level column or level of a hierarchy.

    - **Before Values** — Available only for pivot tables. Select this option to add subtotals before a group of values that can be totaled in relation to a higher level column or level of a hierarchy.

    - **At the Beginning** — Available only for pivot tables. Select this option to add subtotals of all values in the column at the beginning of the column.

- **At the End** — Available only for pivot tables. Select this option to add subtotals of all values in the column at the end of the column.

- **Sort** or **Sort Column** — Displays either the "Sorting Options Menu" or the "Sort dialog," where you select options for sorting values. For more information on sorting data, see "Sorting Data in Views."

- **View Calculated Item Definition** — Displays the "View Calculated Item: Item dialog," where you view the definition of the selected calculated item.

- **View Group Definition** — Displays the "View Group: Group dialog," where you view the definition of the selected group.

For more information on selections steps, see "Working with Selections of Data." For more information on groups and calculated items, see "Working with Groups and Calculated Items."

Notes

- For the **Add Related**, **Keep Only Related**, and **Remove Related** interactions, you can select one of the following family relationship options:

  - **Including selected and** — Selects the selected member and all the members of the family relationship (such as **Children**) that you specify.

    For example, selecting **Keep Only Related**, **Including selected and**, then **Children** of 2011 returns: 2011, 2011 Q1, 2011 Q2, 2011 Q3, and 2011 Q4.

  - **Descendants** — Selects all members that are descended from the selected member.

  - **Siblings** — This option is not available for columns in a skip-level hierarchy. Selects all members that are on the same level and have the same parent as the selected member.

  - **Parents** — Selects the parent of the selected member.

  - **Children** — Selects all the children of the selected member.

  - **Ancestors** — Selects all members from which the selected member is descended.

  - **Leaves** — Selects all members that are descended from the selected member and that have no lower levels.

  - **Members At Hierarchy Levels** — Displays the Select Levels dialog, where you specify one or more hierarchy levels from which members are to be selected.

- To select multiple values in a view and apply a right-click interaction, press the Control key, right-click the values, then select the right-click interaction.

Toolbar Buttons Common to All Views

The following toolbar buttons are common to all views:

- **Print This Analysis** — Use this button to print the analysis as HTML or PDF. For more information on printing, see "Printing Views."

- **Export This Analysis** — Use this button to select an option for exporting the analysis. For information, see "Export Menu Options for Views and Results."

- **Show how results will look on a Dashboard** — Use this button to preview how the edited view is displayed on a dashboard.

- **Duplicate View** — Use this button to create a copy of the view that you are editing.

- **Rename View** — Use this button to display the "Rename View dialog," where you specify a new name for the view.

- **Refresh the results of the current analysis** — Use this button to refresh the data that is displayed in the view.

Data View Editor Toolbar

The toolbar on a *data view* editor contains some buttons that are common to all data views and other buttons and boxes that are particular to specific views. See the following sections:

- "Toolbar Buttons Common to All Views"

- "Toolbar Buttons Common to All Data Views"

- "Toolbar Buttons Specific to Graph and Funnel Graph Views"

- "Toolbar Buttons and Boxes Specific to Gauge Views"

- "Toolbar Buttons and Box Specific to Map Views"

- "Toolbar Buttons and Box Specific to Pivot Table, Table, and Trellis Views"

Toolbar Buttons Common to All Data Views

The following toolbar buttons are common to all data views:

- **New Group** — Use this button to display the "New Group dialog," where you add a new group.

- **New Calculated Item** — Use this button to display the "New Calculated Item dialog," where you add a new calculated item.

- *Data View* **Properties** or **Edit** *Data View* **Properties** — Use this button to display the properties dialog for the view.

- **Display Results** — Use this button to specify whether to show the view's results in the editor.

- **Show/Hide Layout Pane** — Use this button to specify whether to show the "Layout pane" for all data views except for map.

- **Show/Hide Selection Steps Pane** — Use this button to specify whether to show the "Selection Steps pane." This pane is not available for performance tile views.

- **New Calculated Measure** — Use this button to display the "New Calculated Measure dialog," where you add a new calculated measure to the specific view. This button is disabled for combined requests and direct database queries.

  > **Note:** To add a new calculated measure to all views, click the **New Calculated Measure** button from within the "Analysis editor: Results tab."

Toolbar Buttons Specific to Graph and Funnel Graph Views

The toolbar contains the following buttons and boxes that are specific to a graph view:

- **Type** — Use this button to select the subtype of graph. Options depend on the type of graph.

- **Style** — Use this button to select the style for the graph. Options depend on the type of graph.

- **Effect** — Use this button to select either a 2D effect or a 3D effect for the graph.

- **Format Styles** — Use this button to select a specific format for waterfall graphs. See "What Types of Waterfall Graph Formats Are Available?" for additional information.

Toolbar Buttons and Boxes Specific to Gauge Views

The toolbar contains the following buttons and boxes that are specific to a gauge view:

- **Show/Hide Settings Pane** — Use this button to specify whether to show the "Settings pane."

- **Gauge Type** — (Not available for funnel graphs.) Use this button to select the type of gauge. Options are: **Dial**, **Horizontal Bar**, **Vertical Bar**, and **Bulb**.

- **Effect** — (Not available for all gauge types.) Use this box to select either a 2D effect or a 3D effect for the gauge.

- **Size** — Use this box to specify the size of the gauge — **Fit to Canvas**, **Small**, **Medium**, **Large** or **Custom**.

  If you select **Custom**, then you must complete the **Width** and **Height** fields, where you specify the width and height in pixels.

Toolbar Buttons and Box Specific to Map Views

The toolbar contains the following buttons and box that are specific to a map view:

- **Background Map** — Use this box to select the background map for the map view.

- **Pan** — Click this button and click and drag to move the map either side to side or up and down so that you see a certain portion of it. When you can pan, the cursor is in the shape of a hand and you can move the map in various directions.

- **Zoom In** and **Zoom Out** — Click these buttons to zoom in and out of the map. When you can zoom in or out, the insertion point is in the shape of a magnifying glass with a plus or minus button over the glass.

- **Legend** — Use this button to display or hide the legend for the map.

- **Auto Correct** — Use this button to have the Map View compiler attempt to automatically correct a map error.

See "About Working with Map Views on Dashboard Pages" for more information.

Toolbar Buttons and Box Specific to Pivot Table, Table, and Trellis Views

The toolbar contains the following buttons and box that are specific to a pivot table, table, or trellis view:

- **Import formatting from another analysis** — Use this button to display the "Open dialog," where you select an analysis from which to import formatting for columns and views. For more information, see "Using a Saved Analysis to Modify the Cosmetic Appearance of Other Analyses."

- **Graph Pivoted Results** — Available only for pivot tables. Click this button to display the results of the pivot table in a graph view, which is displayed alongside the pivot table. The two views are fully linked, which means that changes made to one view are automatically reflected in the other.

  The following items are added to the toolbar:

  - **Position** — Use this box to select the location of the graph relative to the pivot table that you created. Options are: **Right**, **Below**, **Above**, **Left**, **Graph Only**.

  - **Edit Graph Properties** — Use this button to display the "Graph Properties dialog."

  - **Available Graph Types** — Use this option to select the type of graph. Options include: **Bar**, **Line**, **Area**, **Pie**, **Line-Bar**, **Time Series Line**, **Pareto**, and **Radar**.

- **Type** — (Not available for all graph types.) Use this box to select the subtype of graph. Options depend on the type of graph.

- **Style** — (Not available for all graph types.) Use this box to select the style for the graph. Options depend on the type of graph.

- **Effect** — (Not available for all graph types.) Use this box to select either a 2D effect or a 3D effect for the graph.

For information on available graph subtypes and styles, see Table 4–2.

Export Menu Options for Views and Results

You can use the following options to export the results of an analysis or a view. When you export the results of an analysis, any tables, pivot tables, trellises, or graphs that are displayed with the analysis are included.

The output option you select determines the numeric data's decimal places in the output file. This number might differ from what is included on the analysis. For example, numeric data outputted to Excel 2007+ will contain up to 15 decimal places.

For more information, see "Exporting Results."

- **PDF** — Displays the File Download dialog, where you can open or save the results or view as a PDF file.

  Numeric data ouputted with this option contains the same number of decimal places shown in the analysis.

- **Excel 2007+** — Displays the File Download dialog, where you can open or save the results or view as a spreadsheet file.

  Numeric data outputted with this option contains up to 15 decimal places.

- **Powerpoint 2007+** — Displays the File Download dialog, where you can open or save the results, or view as a Powerpoint presentation file.

- **Web Archive (.mht)** — Displays the File Download dialog where you can open or save the results or view as an MHT file. This enables you to export the underlying data for an existing analysis or view as a web page (MHTML) file.

- **Data** — Displays these options for exporting the raw data from the results or view:

  - **CSV Format** — Displays the File Download dialog, where you can open or save all the columns in the results or view as a CSV file. This export results in a character-delimited list of values in a file that you can open in an application such as Excel. (By default, the delimiter is a comma, but your system administrator can specify another character, as described in "Notes.")

    Numeric data outputted with this option contains up to 38 decimal places.

    Note: Expanded members of hierarchical columns are not exported to the CSV file. For example, in a view that includes the Time Hierarchy, if Total Time is expanded to show Year, only Total Time is exported and not Year. To include expanded members in a CSV file, use selection steps instead to show the data in the view.

  - **Tab delimited Format** — Displays the File Download dialog, where you can open or save all the columns in the results or view as a CSV file. This export results in a tab-separated list of values in a file that you can open in an application such as Excel.

  - **XML Format** — Displays the File Download dialog, where you can open or save the results or view as an XML file. This file uses the Microsoft MD Data Set standard for representing data in XML format.

Notes

- Export to Excel 2007+ and export to PDF do not support custom CSS styles. When you export an analysis for which a custom CSS style or custom CSS class has been

specified to Excel 2007+ or to PDF, the customization will be lost. (You specify a custom CSS style or custom CSS class for an analysis using the **Custom CSS Style Options (HTML Only)** component in the "Column Properties dialog: Style tab.")

- By default:

  - Data values (that is, numbers and dates) are exported in raw format with full number precision and format mask, rather than as a string in the data format specified, when exporting to Excel.

  - A table or pivot table to Excel, the **Value Suppression** option in the "Column Properties dialog: Column Format tab" determines whether cells that span rows and cells that span columns are repeated when exporting to Excel (rather than always repeated):

    * If **Value Suppression** is set to **Suppress**, then cells that span rows and cells that span columns are not repeated. For example, in a table that has Year and Month values, Year is displayed only once for Month values.

    * If **Value Suppression** is set to **Repeat**, then cells that span rows and cells that span columns are repeated. For example, in a table that has Year and Month values, Year is repeated for all Month values.

  - The column delimiter character for the CSV option when exporting raw data is a comma (,).

  - Rows are split across page breaks rather than kept together when exporting to PDF.

  Your system administrator can change these default behaviors. For more information, see "Manually Configuring for Export" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

- Action links are not included in exported formats, for example, Excel and PDF.

- While you can export directly to an Excel format, you might notice greater performance when exporting large numbers of rows if you export first to CSV, then import that file into Excel. If you must export a large data set without using the CSV format, then you might experience an out-of-memory error. Contact the administrator for assistance in resolving the error, as described in "Increasing Heap Size to Assist in Exports to Excel" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

Sorting Options Menu

The options that are available on the Sorting Options menu depend on the type of data view and the location in which you right-clicked and can include the following options:

- **Sort Ascending** — Sorts the values in the column by ascending order, as a first-level sort. For example, string values sort alphabetically A through Z, numbers sort lowest to highest, and dates sort earliest to latest. In the Selected Columns pane, when you select this option as the first sort, a **Sort** button is displayed to the left of the column name in the Selected Columns pane. If you later add another sort, then the **Sort** button includes the number 1.

- **Sort Descending** — Sorts the values in the column by descending order, as a first-level sort. In the Selected Columns pane, when you select this option as the first sort, a **Sort** button is displayed to the left of the column name in the Selected Columns pane. If you later add another sort, then the **Sort** button includes the number 1.

- **Add Ascending Sort** — Specifies that an ascending sort for this column is added as another sort for the analysis. In the Selected Columns pane, when you select this option, a **Sort** button with a number such as 2 or 3 is displayed to the left of the column name in the Selected Columns pane.

- **Add Descending Sort** — Specifies that a descending sort for this column is added as another sort for the analysis. In the Selected Columns pane, when you select this option, a **Sort** button with a number such as 2 or 3 is displayed to the left of the column name in the Selected Columns pane.

- **Clear Sort** — Removes the sort specification for the specified column. This option works differently in the Selected Columns pane than in other places. If you make sort specifications in both the Selected Columns pane and in the view itself, then you return to the Selected Columns pane and click **Clear Sort**, only the sort that you specified in the Selected Columns pane is removed. A sort that you specified in the view remains.

- **Clear All Sorts in All Columns** or **Clear All Sorts in View** — Removes all sort specifications that you have made. The **Clear All Sorts in All Columns** option works differently in the Selected Columns pane than in other places. If you make sort specifications in both the Selected Columns pane and in the view itself, then you return to the Selected Columns pane and click **Clear All Sorts in All Columns**, only the sorts that you specified in the Selected Columns pane are removed. Sorts that you specified in the view remain.

In a pivot table that has more than one measure in a column (or a row), when you right-click and select one of the sorting options (such as **Sort Ascending**) to sort a row (or a column), options that allow you to select which measure to use in the sort are displayed.

For more information on sorting, see "Sorting Data in Views."

Results tab: Filters editor

Use this editor of the "Analysis editor: Results tab" to view the filters in effect for an analysis.

For more information, see "Editing Views."

Components

Toolbar

The toolbar contains the buttons that are common to all views. For more information, see "Toolbar Buttons Common to All Views."

Done

Use this button to save your edits and return to the compound layout view.

Revert

Use this button to restore the settings in effect prior to your edits.

Notes

■ If the column that is used in the filter is a display column, then the filter view shows display values rather than code values, unless the display values cannot be found. Then code values are displayed. For more information on display and code columns, see "Understanding the Double Column Feature."

Results tab: Legend editor

Use this editor of the "Analysis editor: Results tab" to edit a legend view, which documents the meaning of special formatting used in an analysis, such as the meaning of custom colors applied to gauges. Legends are displayed in HTML and PDF output, and can be localized.

For example, suppose you use conditional formatting in an analysis to show critical items in the color red and items that need attention in the color yellow. You can add a legend with text that documents the meaning of the colors and captions that summarize the appropriate action. You can use cosmetic formatting to make the background colors of the text match the colors in the conditional analysis.

Each legend item consists of a legend symbol with sample text (for example, a red box that displays Critical) and a caption that documents the meaning of the legend symbol (for example, Requires Immediate Attention).

For more information, see "Editing Legend Views."

Components

Title
Use this field to enter a title for the legend.

Format Title
Use this button to display the "Format Title dialog," where you format the title.

Caption
Use this field to enter, for each legend item, the meaning of the legend symbol, such as Requires Immediate Attention.

Format Caption
Use this button to display the "Format Caption dialog," where you format the caption.

Sample Text
Use this field to enter, for each legend item, the text that is to be displayed within the legend symbol, for example, Critical.

Format Text
Use this button to display the "Format Text dialog," where you format the caption text.

Move Down and Move Up
Use these buttons to reorder captions by moving them up or down one row in the list. Available only when you have multiple captions.

Delete
Use this button to delete a caption.

Add Caption
Use this button to add another caption.

Toolbar

The toolbar contains the following buttons and boxes:

- Buttons that are common to all views. For more information, see "Toolbar Buttons Common to All Views."

- **Format Legend View** — Use this button to display the "Format Legend View dialog," where you format the legend.

- **Captions** — Use this box to select a position for the caption relative to the legend symbol — **Right**, **Left**, or **None**.

- **Legend items per row** — Use this box to specify the number of legend items to display in a row.

- **Import formatting from another analysis** — Use this button to display the "Open dialog," where you select an analysis from which to import formatting for views. For more information, see "Using a Saved Analysis to Modify the Cosmetic Appearance of Other Analyses."

Done

Use this button to save your edits and return to the compound layout view.

Revert

Use this button to restore the settings in effect prior to your edits.

Results tab: Narrative editor

Use this editor of the "Analysis editor: Results tab" to add one or more paragraphs of text to be displayed with the results. Narrative text is useful for providing information such as context, explanatory text, or extended descriptions along with column values. You can perform the following actions in the narrative view:

- Type a sentence with placeholders for each column in the results.

- Specify how rows should be separated.

- Use HTML formatting buttons to make text bold, italic, or underlined, and insert line breaks.

- Apply cosmetic formatting to the fonts used in the narrative view, or import the font formatting from a previously saved view.

- Add references to variables.

For example, suppose that you have created an analysis that shows a user's sales by region and want to provide explanatory text with the analysis. Using a narrative view, you can create the following explanatory text:

This report shows your sales by region. The regions are:
East Region
West Region

For more information, see "Editing Narrative Views."

Components

Bold, Italic, Underline
Use these buttons to insert the HTML tags to begin and end bold, italic, or underlined text in the **Prefix**, **Narrative**, or **Postfix** fields.

Line Break
Use this button to insert a line break in the **Prefix**, **Narrative**, or **Postfix** fields.

> **Note:** Pressing Enter does not result in multiple lines of text in the **Prefix**, **Narrative**, or **Postfix** fields.

Contains HTML Markup
Use this option to work with HTML codes, as described in "Working with HTML Markup." If you are trying to save a narrative object that contains HTML code, then you must have the Save Content with HTML Markup privilege. See "Managing Presentation Services Privileges" in *Security Guide for Oracle Business Intelligence Enterprise Edition* for information on privileges.

Prefix
Use this field to enter the header for the narrative. This text is displayed at the beginning of the narrative.

For example, the following prefix entry:

[b]This analysis shows your sales by region. The regions are:[/b][br/][br/]

Displays this text:

This analysis shows your sales by region. The regions are:

Narrative

Use this field to enter the narrative text that is displayed for each row in the results. You can include both text and column values. Include a line break code at the end of this field to force each line of text and values onto its own line.

To include values, use the at sign (@), as described in the following list:

- Use an at sign by itself to indicate the first column. If you include multiple at signs, then the first occurrence of the sign corresponds to the first column, the second occurrence corresponds to the second column, and so on.

- Use `@n` to include the results from the designated column in the narrative. For example, `@1` inserts the results from the first column in the analysis, and `@3` inserts the results of the third column.

For example, for an analysis that returns the region name in the second column, the following narrative entry:

```
@2
```

Displays this text:

East Region
West Region

Row separator

Use this field to enter a row separator for each line from the **Narrative** field that contains values. For example you might enter a string of plus signs (+) between each line.

Rows to display

Use this field to enter the number of rows from the column to return. For example, enter 5 to display values from the first 5 rows of the column. For a hierarchical column, you can use selection steps to display hierarchy levels with the hierarchical column. For example, create a step to select members based on hierarchy and add members of the specified level. A hierarchy level is considered a row.

Postfix

Use this field to enter the footer text to be displayed at the bottom of the narrative. To display the footer information on a separate line from the actual narrative text, include markup tags in the **Postfix** field. Ensure that the narrative ends in a line break, or that the footer begins with a line break.

Toolbar

The toolbar contains the following buttons:

- Buttons that are common to all views. For more information, see "Toolbar Buttons Common to All Views."

- **Format Narrative View** — Use this button to display the "Format Narrative View dialog," where you format the view.

- **Import formatting from another analysis** — Use this button to display the "Open dialog," where you select an analysis from which to import formatting for columns

and views. For more information, see "Using a Saved Analysis to Modify the Cosmetic Appearance of Other Analyses."

Done

Use this button to save your edits and return to the compound layout view.

Revert

Use this button to restore the settings in effect prior to your edits.

Notes

- You can reference variables in the **Prefix**, **Narrative** and **Postfix** fields. For the syntax to use, see "What Is the Syntax for Referencing Variables?" For more information on variables, see "Using Variables."
- The following characters are reserved characters:
  - @ (at sign, unless used as a column placeholder in the **Narrative** field)
  - [(left bracket)
  -] (right bracket)
  - ' (single quote)
  - \ (backslash)

Note: If you want to include a reserved character, then precede it with a backslash character (\) to escape it. For example, to include a backslash character, type \\.

Results tab: Selection Steps editor

Use this editor of the "Analysis editor: Results tab" to view the selection steps in effect for the analysis.

For more information, see:

- "Editing Views"
- "Working with Selections of Data"

Components

Selection Steps Area

Displays the selection steps. Use the **List** box to specify which column to view in the area. If the selection steps contain a calculated item or group member link, the area will display a link that you can click to view more details. For example, if the selection steps contain a group, you can click the group link and the "View Group: Group dialog" displays and shows the members of the group.

Note that you cannot modify the selection steps from this area. To modify the selection steps, you must exit the Selection Steps editor and in the Analysis editor: Results tab, go to the "Selection Steps pane."

> **Note:** If a selection step was created by using the right-click interaction menu, then you must use the right-click interaction menu to remove the selection step. See "Working with Selections of Data" for additional information.

Toolbar

The toolbar contains the buttons that are common to all views. For more information, see "Toolbar Buttons Common to All Views."

Done

Use this button to save your edits and return to the compound layout view.

Revert

Use this button to restore the settings in effect prior to your edits.

Results tab: Static Text editor

Use this editor of the "Analysis editor: Results tab" to edit a static text view, which enables you to add or edit text to be displayed with the analysis results.

The markup can contain anything that is supported by the browser, but only formatting defined using the buttons at the top of the workspace is displayed in PDF output.

For more information, see "Editing Views."

Components

Bold, Italic, Underline

Use these buttons to insert the HTML tags to begin and end bold, italic, or underlined text in the **Static Text** field.

Line Break

Use this button to insert a line break in the **Static Text** field.

> **Note:** Pressing Enter does not result in multiple lines of text in the **Static Text** field.

Contains HTML Markup

Use this option to work with HTML code, as described in "Working with HTML Markup."

Static Text

Use this field to enter the text to be displayed with the analysis results.

For the syntax to use for variables, see "What Is the Syntax for Referencing Variables?" For more information on variables, see "Using Variables."

See the **Notes** section for some examples of static text.

Toolbar

The toolbar contains the following buttons:

- Buttons that are common to all views. For more information, see "Toolbar Buttons Common to All Views."

- **Format Static Text View** — Use this button to display the "Format Static Text View dialog," where you format the view.

- **Import formatting from another analysis** — Use this button to display the "Open dialog," where you select an analysis from which to import formatting for columns and views. For more information, see "Using a Saved Analysis to Modify the Cosmetic Appearance of Other Analyses."

Done

Use this button to save your edits and return to the compound layout view.

Revert

Use this button to restore the settings in effect prior to your edits.

Notes

Table D–5 lists and describes several static text view examples.

Table D–5   Static Text View Examples

Static Text View Example	Description and Usage Notes

HTML text	Paste or type the HTML (or appropriate formatted text) into the text box. You can also click the HTML tag buttons. Based on the format of the text that you are entering, you can use markup tags to control the format of the text. The following are some examples of what you can do:
	
	■ To set font size and color:
	
	`<FONT SIZE="4" COLOR="red">Red Text</FONT>`
	
	■ To combine tags for additional effects:
	
	`<B><FONT COLOR="red">Bold Red Text</FONT></B>`

ActiveX object	The Active-X object must be self-contained and supported by the browser. Paste or type the object into the HTML Text window, making sure to include the beginning and ending tags `<object...>` and `</object>`.
JavaScript or VBScript	The script must be self-contained and supported by the browser. Paste or type the script into the text box, making sure to include the beginning and ending tags `<script>` and `</script>`.

Audio	Ensure that you know where the audio clip is located. If the audio clip is for use in a shared environment, then it must be located on a network drive that accessible to all users.
	
	Use the HTML tag `<EMBED>` to add audio. The following format is an example format. Your browser might require a different format.
	
	`<EMBED SRC="audio" AUTOSTART="true" LOOP="true" HIDDEN="true"></EMBED>`
	
	where `"audio"` is the location and name of the audio clip.
	
	To add an audio clip located on the hard drive, the following HTML is an example:
	
	`<EMBED SRC="c:\mycomputer\MIDIfiles\wakeup.mid" AUTOSTART="true" LOOP="true" HIDDEN="true"></EMBED>`
	
	To add the same audio clip from a shared location on the Web server, the following HTML is an example:
	
	`<EMBED SRC="\DashboardFiles\wakeup.mid" AUTOSTART="true" LOOP="true" HIDDEN="true"></EMBED>`

Background image	The following example uses JavaScript. Ensure that you know where the image to use as the background is located. If the image is for use in a shared environment, then it must be located on a network drive that is accessible to all users. If the image is located in a shared dashboard files folder, then the following is example HTML: `<script language="javascript"> document.body.background = "/dashboardfiles/"NameOfGraphic";</script>` where `NameOfGraphic` is the name of the file to use, such as bricks.gif or sand.jpg.

Table D–5   (Cont.) Static Text View Examples

Static Text View Example	Description and Usage Notes

Variables	The following example includes variables:
	
	`[u] Static Text View [/u][br/]`
	`Region: @{variables.myFavoriteRegion} - Year:`
	`@{variables.myFavoriteYear}[br/]`
	`System Time: @{system.currentTime}[dddd,MMMM dd,yyyy][br/]`
	`Product Version: @{system.productVersion}[br/]`
	`[br/]`

Results tab: Ticker editor

Use this editor of the "Analysis editor: Results tab" to edit a ticker view, which displays the results of an analysis as a marquee (moving results that scroll across the page). You can customize the size of the scroll area, the speed and direction in which the results scroll, and other display settings.

> **Note:** If the web browser does not support moving text, then the results are displayed, but they do not scroll across the page.

For more information, see "Editing Views."

Components

Behavior

Use this box to select how the results move in the ticker:

- **Slide**— The results start hidden, scroll on to the page, then stop once touching the other side.

- **Scroll** — The results start hidden, scroll on to the page, then off the page before repeating.

- **Alternate** — The results bounce back and forward inside the marquee.

Direction

Use this box to select the direction the results move in the ticker — **Left**, **Right**, **Down**, or **Up**.

Width

Use this field to enter the width of the ticker, either in pixels or as a percentage of the page width. For example, a value of 200 indicates a width of 200 pixels, and a value of 25% indicates a width of one-quarter of the page.

Height

Use this field to enter the height of the ticker, either in pixels or as a percentage of the page height.

Contains HTML Markup

Use this option to work with HTML code, as described in "Working with HTML Markup." If you are trying to save a ticker object that contains HTML code, then you must have the Save Content with HTML Markup privilege. See "Managing Presentation Services Privileges" in *Security Guide for Oracle Business Intelligence Enterprise Edition* for information on privileges.

Beginning Text

Use this field to enter any optional text or graphics to display at the beginning of each redraw of the analysis results. You can use HTML to format the text.

If you include an image, then ensure you know where the image is located. If the image is for your use only, then the following is a sample location:

```
c:\mycomputer\temp\report.gif
```

If the image is for use in a shared environment, then it must be located on a network drive accessible to all users. For a shared image, specify the UNC name, for example:

```
\\ALLUSERS\graphics\report.gif
```

Row Format

Use this field to enter the HTML to use in formatting the rows in the results.

To include the results from a designated column, use @*n*. For example, @1 inserts the results from the first column, and @3 inserts the results of the third column.

Row Separator

Use the field to enter the character that separates one row from another. The default character is a vertical bar (|).

Column Separator

Use this field to enter the character that separates one column from another. The default character is a vertical bar (|).

Ending Text

Use this field to enter any optional text or graphics to display at the end of each redraw of the analysis results. You can use HTML to format the text.

If you include an image, then ensure that you know where the image is located. If the image is for your use only, then the following is a sample location:

```
c:\mycomputer\temp\report.gif
```

If the image is for use in a shared environment, then it must be located on a network drive accessible to all users. For a shared image, specify the UNC name, for example:

```
\\ALLUSERS\graphics\report.gif
```

Set Defaults

Use this button to generate default settings for the most commonly used field.

> **Note:** If you click **Set Defaults** after entering values in other fields, your entered values are cleared.

Clear Fields

Use this button to clear all fields.

> **Note:** After you clear all fields, you can click **Set Defaults** to restore default settings for the most commonly used fields.

Advanced

Use this button to display the "Advanced Ticker Options dialog," where you specify additional options for the ticker, such as number of loops and background color.

Toolbar

The toolbar contains the buttons that are common to all views. For more information, see "Toolbar Buttons Common to All Views."

Done

Use this button to save your edits and return to the compound layout view.

Revert

Use this button to restore the settings in effect prior to your edits.

Results tab: Title editor

Use this editor of the "Analysis editor: Results tab" to edit a title view. You can add a title, a subtitle, a logo, a link to a custom help or other related information, and timestamps to the analysis.

For more information, see "Editing Views."

Components

Title

Use this field to enter the text to display as the title. Do not include HTML markup.

If you do not specify a title, then the name of the saved analysis is used as the title. For unsaved analyses, the Title text box is blank.

Format Title

Use this button to display the "Format Title dialog," where you format the title.

Display Saved Name

Use this box to specify whether to show the saved name of the analysis. Select the box to show the saved name. Deselect the box to hide it.

Logo

Use this field to specify a logo image or other graphic to display in the title. To do so, enter one of the following:

- The URL to a logo image or graphic.

  > **Note:** Printing to PDF does not support a logo image or graphic that you specify using a URL. If you want to print to PDF, use the fmap syntax instead.

- The fmap syntax to reference a logo image or graphic that is stored locally in the Oracle Business Intelligence environment. For more information on the fmap syntax, see "Storing Custom Files Locally and Using the fmap Function to Reference Them."

  > **Note:** If you are trying to save an object that uses the fmap syntax, then you must have the Save Content with HTML Markup privilege. See "Managing Presentation Services Privileges" in *Security Guide for Oracle Business Intelligence Enterprise Edition* for information on privileges.

The image or graphic file should be one that is accessible to all users who view the analysis.

Format Logo

Use this button to display the "Format Logo dialog," where you format the logo.

Subtitle

Use this field to enter the text to display as a subtitle. The subtitle follows the title on a new line.

Format Subtitle

Use this button to display the "Format Subtitle dialog," where you format the subtitle.

Started Time

Use the box to specify whether to display a timestamp indicating when an analysis started to execute. You can specify the date, the time, the date and time, or no display.

Format Time

Use this button to display the "Format Time dialog," where you format the time for the analysis.

Help URL

Use this field to display a Help icon (that is, a question mark) that links to a custom help file or other related information in the title. To do so, enter one of the following:

- The URL to a custom help file or other related information.

- The fmap syntax to reference a custom help file or other related information that is stored locally in the Oracle Business Intelligence environment. For more information on the fmap syntax, see "Storing Custom Files Locally and Using the fmap Function to Reference Them."

> **Note:** If you are trying to save an object that uses the fmap syntax, then you must have the Save Content with HTML Markup privilege. See "Managing Presentation Services Privileges" in *Security Guide for Oracle Business Intelligence Enterprise Edition* for information on privileges.

The custom help file or other related information should be one that is accessible to all users who view the analysis.

Toolbar

The toolbar contains the following buttons:

- Buttons that are common to all views. For more information, see "Toolbar Buttons Common to All Views."

- **Format Title View** — Use this button to display the "Format Title View dialog," where you specify formatting for the view.

- **Import formatting from another analysis** — Use this button to display the "Open dialog," where you select an analysis from which to import formatting for columns and views. For more information, see "Using a Saved Analysis to Modify the Cosmetic Appearance of Other Analyses."

Done

Use this button to save your edits and return to the compound layout view.

Revert

Use this button to restore the settings in effect prior to your edits.

Notes

- Titles and subtitles are formatted using the style sheet in use in your organization.

- You can reference variables in the **Title**, **Logo**, **Subtitle** and **Help URL** fields. For the syntax to use, see "What Is the Syntax for Referencing Variables?" For more information on variables, see "Using Variables."

Storing Custom Files Locally and Using the fmap Function to Reference Them

You can store custom files, such as images and help files, locally in your Oracle Business Intelligence environment and then reference them using the fmap function. For example, you can store an image locally to display in a title view. Then, when you specify the image for the title view in the "Results tab: Title editor," you can use the fmap function to reference it.

To store custom files locally, you must use the following directory and expose it according to the instructions for the HTTP Server that your organization uses:

```
ORACLE_
INSTANCE/bifoundation/OracleBIPresentationServicesComponent/coreapplication_
obipsn/analyticsRes
```

> **Note:** Because the analyticsRes directory gets replicated for every instance that is populated, the custom files must be replicated in each instance.

You can store files directly in this directory or in subdirectories in this directory. It is strongly recommended that you use ASCII characters for names of custom files that you reference using the fmap syntax.

> **Note:** Custom files that were stored locally in previous releases (prior to 11*g*) of Oracle Business Intelligence must be manually migrated in Release 11*g*.

To reference custom files that are stored in the analyticsRes directory, use the following fmap syntax:

```
fmap:location/file_name
```

where:

- *location*/ is the subdirectory path in the analyticsRes directory in which the custom file resides, if the custom file resides in a subdirectory of analyticsRes (for example: Images/).

  > **Note:** Logo images and graphics located in the analyticsRes directory should all be stored in the same folder.

- *file_name* is the name of the custom file (for example: newlogo.gif).

The following are examples of fmap commands:

```
fmap:mylogo.gif
fmap:Images/newlogo.gif
```

If you are trying to save an object that uses the fmap syntax, then you must have the Save Content with HTML Markup privilege. See "Managing Presentation Services Privileges" in *Security Guide for Oracle Business Intelligence Enterprise Edition* for information on privileges.

Results tab: View Selector editor

Use this editor of the "Analysis editor: Results tab" to edit a view selector view, which enables users to select a specific view of an analysis from among the saved views. For example, users can select to display a graph view for the analysis.

For more information, see "Editing View Selector Views."

Components

Caption

Use this field to enter a caption for the view selector.

Format Caption

Use this button to display the "Format Caption dialog," where you format the caption.

Caption Position

Use this box to select a position for the caption — **Left**, **Above**, or **Right**.

Available Views

Displays the views that are available to be included as choices in the view selector. Select a view and click the right arrow to move it into the Views Included area.

> **Note:** The None view shows the view selector only.

Views Included

Displays the views to be included as choices in the view selector. To change the order of the view in the list, select a view and use the up and down arrows. To remove a view from this area, select a view and click the left arrow.

Toolbar

The toolbar contains the following buttons:

- Buttons that are common to all views. For more information, see "Toolbar Buttons Common to All Views."

- **Import formatting from another analysis** — Use this button to display the "Open dialog," where you select an analysis from which to import formatting for columns and views. For more information, see "Using a Saved Analysis to Modify the Cosmetic Appearance of Other Analyses."

Done

Use this button to save your edits and return to the compound layout view.

Revert

Use this button to restore the settings in effect prior to your edits.

Save Briefing Book Content dialog

Use this dialog to add content to a briefing book.

For more information, see:

- "What Are Briefing Books?"
- "Adding Content to New or Existing Briefing Books"

Components

Content Type
Use this area to select one of the following options:

- **Updatable** — Refreshes the data whenever the briefing book is downloaded, or when it is specified as the delivery content for an agent.
- **Snapshot** — Adds the content in its current state. Snapshot content preserves the original data and is not updated when the briefing book is rerun. Snapshot content is not updated when using agents.

Follow Briefing Book Navigation Links
This option applies only to updatable content, not to snapshot content.

Use this area to select one of the following options:

- **No** — Specifies that briefing book navigation links are not to be followed.
- **Yes** — Specifies that briefing book navigation links are to be followed. If you select this option, then you must also specify the number of links to follow.
- **Number of links to follow** — Specifies the number of briefing book navigation links to be followed, if you selected the **Yes** option.

Description
Use this field to enter a description of the content being saved to the briefing book.

Location
Use this field to enter the briefing book in which to save the content. Click **Browse** to display the "Save As dialog," where you can select an existing briefing book or create a briefing book by entering the new briefing book name in the **Name** field.

Related Topics

"Editing Briefing Books"
"Downloading Briefing Books"
"Adding a List of Briefing Books to a Dashboard Page"
"Using Agents to Deliver Briefing Books"

Save Current Customization dialog

Use this dialog to save a customization for a dashboard page.

For more information, see:

- "What Are Saved Customizations for Dashboard Pages?"

- "Saving Customizations"

Components

Name
Use this field to enter a name for the saved customization.

Save For
Use this area to specify for whom the customization is to be saved. It contains the following components:

- **Me** — Use this option to save the customization for your own personal use.

- **Others** — Use this option to save the customization for use by others.

- **Set Permissions** — Use this button to display the "Saved Customization Permissions and Defaults dialog," where you specify the accounts that have permission to use the customization and whether the customization is to be the default customization for the accounts.

Make this my default for this page
Use this option to specify whether to use this saved customization as your default customization when you display this page in a dashboard.

Saved Customization Permissions and Defaults dialog

Use this dialog to specify the accounts that have permission to use the customization and whether the customization is to be the default customization for the accounts.

For more information, see:

- "Saving Customizations"
- "Save Current Customization dialog"
- "Edit Saved Customizations dialog"

Components

Permissions

Displays the accounts that have permission to use the customization and indicates whether the customization is to be the default customization for the accounts.

To indicate that the customization is to be the default customization for an account, click the **Group Default** box for the account.

Add Users/Roles

Use this button to display the "Add Groups dialog," where you select the users, Application roles, and Catalog groups to have permission to use a saved customization.

Delete Selected Users/Roles

Use this button to delete the selected account.

Scale Markers dialog

Use this dialog to define scale markers for a graph.

Scale markers are accenting lines or shaded background ranges that mark key points, thresholds, ranges, and so on in a graph. There are two types of scale markers:

- **Line** — A line that is drawn across the graph at a specified position on the scale

- **Range** — A shaded background area that is displayed behind the graph

Line or range scale markers can be applied on one or more axes depending on the type of graph.

> **Note:** Some graph types do not use scale markers, such as pie graphs.

For more information, see "Graph Properties dialog: Scale tab."

Components

Click to add a new scale marker

Use this button to add a new scale marker row to the Scale Markers area.

Click to remove selected scale markers

Use this button to remove selected scale markers. To select a scale marker for removal, select the first box in the scale marker row.

Scale Markers

Use this table to define scale markers using the following components:

- **Caption** — Use this column to enter the caption to be displayed in the legend for the scale marker.

- **Type** — Use this box to specify the type of scale marker: **Line** or **Range**.

- **Width** (for a line) — Use this column to select a width (in pixels) for the line.

- **Low** (for a range) — Use this column to enter the low value of the range or click **Customize Scale Markers** to set the value.

- **Position** (for a line) — Use this column to enter the position of the line or click **Customize Scale Markers** to set the value.

- **High** (for a range) — Use this column to enter the high value of the range or click **Customize Scale Markers** to set the value.

- **Customize Scale Markers** — Displays the "Customize Scale Marker dialog," where you set the value for the position of a line or the low or high values of a range. To set the value, you can use a static value, a presentation variable, a measure column, or a SQL query.

- **Color** — Use this column to select the color of the scale marker.

Scorecard Breadth pane

Use this pane to view pie graphs that show how evenly the objectives (and the KPIs that support them) that compose your scorecard are distributed among the following categories:

- Financial versus non-financial

- Internal versus external

- Leading versus lagging

These pie graphs are helpful to determine how balanced your scorecard is.

For more information, see:

- "What Is Oracle Scorecard and Strategy Management?"

- "What Is a Balanced Scorecard?"

- "Viewing Overview Information"

This pane is part of the "Scorecard editor: Overview tab."

Components

Financial versus Non-Financial Pie Graph

Displays how many objectives are finance-specific and how many are not finance-specific. To maintain a balanced scorecard, financial and non-financial perspectives should be equally implemented.

Internal versus External Pie Graph

Displays how many objectives are specific to your internal corporate processes, and how many are related to external, customer-related objectives.

Leading versus Lagging Pie Graph

Displays how many objectives drive the performance of other objectives (that is, how many are leading) and how many are affected by the performance of other objectives or by other data or processes (that is, how many are lagging).

Scorecard Content Properties dialog

Use this dialog to specify how a scorecard object that you have added to a dashboard page is to be formatted.

For more information, see:

- "Adding Content to Dashboards"
- "Changing the Properties of Objects Added to Dashboard Pages"

Components

Width
Use this field to enter the width of the object as a percentage of its original size.

Height
Use this field to enter the height of the object in pixels.

Hide Scroll Bars
Use this option to specify whether scroll bars are to be hidden.

Render as Watchlist
Use this option to specify whether the object is to be displayed as a watchlist (that is, as a table that lists the details) rather than as a diagram. For more information on watchlists, see "Watchlists."

Scorecard Documents pane

Use this pane to create scorecard objects that present and analyze corporate strategy, such as vision and mission statements, strategy maps, cause & effect maps, and so on.

For more information, see

- "Defining Vision Statements"
- "Defining Mission Statements"
- "Creating Strategy Trees"
- "Creating Strategy Maps"
- "Creating Cause & Effect Maps"
- "Creating Custom Views"
- "What Are Key Performance Indicators (KPIs)?"
- "What Are KPI Watchlists?"
- "Creating Agents from KPIs"

This pane is part of the "Scorecard editor."

Components

Object List
Displays a list of objects that present and analyze corporate strategy.

Toolbar
The toolbar contains the following buttons:

- **Objects** — Displays the following options:
  - **Open** — Use this option to open the selected object. (Whether you can open an object and whether the object opens as read-only depends on your privileges and permissions and on the type of object.)
  - **Cut** — Use this option to remove the selected folder or object for pasting in another folder.
  - **Copy** — Use this option to duplicate the selected folder or object and paste it in another folder.
  - **Paste** — Use this option to paste the folder or object that you have cut or copied in another folder.
  - **Delete** — Use this option to delete the selected folder or object.
- **View** — Displays the option **System Objects**. Use this option to display system folders or objects in the object list. (System folders or objects are those for which the system attribute is set in the "Properties dialog.")
- **New Object** — Displays these options:
  - **Create New Folder** — Use this option to create a folder in which to organize objects. To rename the folder, right-click the folder and enter a new name.
  - **Create Cause & Effect Map** — Use this option to display the "Scorecard editor: Cause & Effect Map tab," where you create a cause & effect map.

-   **Create Custom View** — Use this option to display the "Scorecard editor: Custom View tab," where you create a custom view.

-   **Create KPI** — Use this option to display the "KPI editor," where you create a KPI.

-   **Create Mission** — Use this option to display the "Scorecard editor: Mission tab," where you define a mission statement.

-   **Create Strategy Map** — Use this option to display the "Scorecard editor: Strategy Map tab," where you create a strategy map.

-   **Create Strategy Tree** — Use this option to display the "Scorecard editor: Strategy Tree tab," where you create a strategy tree.

-   **Create Vision** — Use this option to display the "Scorecard editor: Vision tab," where you define a vision statement.

-   **Create KPI Watchlist** — Use this option to display the "Scorecard editor: KPI Watchlist tab," where you create a KPI watchlist.

-   **Create Agent** — (This option is available only when you select a KPI.) Use this option to display the "Create New Agent dialog," where you create an agent from the KPI.

■ **Open** — Use this option to open the selected object. (Whether you can open an object and whether the object opens as read-only depends on your privileges and permissions and on the type of object.)

■ **Delete** — Use this option to delete the selected folder or object.

■ **Refresh** — Use this button to refresh the objects that are displayed in the object list.

Scorecard editor

Use this editor to create a scorecard of your entire organization or of individual departments.

For more information, see:

- "What Is Oracle Scorecard and Strategy Management?"
- "What Is a Balanced Scorecard?"
- "What Are Scorecard Objects?"
- "How Do I Create a Scorecard?"

Components

Point of View

Displays dimensions of KPIs that are used in the Scorecard to measure the progress and performance of initiatives and objectives. Use this area to pin values for the dimensions. See "About the Point of View Area" for additional information.

Strategy

Use the "Strategy pane" to create, organize, and leverage the objectives that form the strategic structure, also called a strategy tree, of the corporate entity (for example, department) to evaluate using KPIs or to drive by initiatives.

Initiatives

Use the "Initiatives pane" to create, organize, and leverage the initiatives that are the tasks required to achieve objectives. You can monitor the progress of initiatives by assigning KPIs.

Scorecard Documents

Use the "Scorecard Documents pane" to create diagrams and views that provide different depictions of strategy dynamics and structures (for example, cause & effect maps and strategy maps).

You can also use this pane to build custom maps to present scorecard data and define mission and vision statements that articulate the overarching goal of the entity that you are scorecarding such as your organization or department.

Catalog

Use the "Catalog pane for Scorecard" to locate and drag and drop objects from the catalog to build a scorecard. For example, you might select a predefined KPI and drag it to the objective or initiative whose progress it measures.

Perspectives

Use the "Perspectives pane" to modify the default perspectives defined by the Balanced Scorecard Methodology, create custom perspectives, and delete perspectives.

Tab area

Displays tabs for the objects that you choose to view, create, or modify (for example, initiatives, strategy objectives, and strategy maps), including:

- "Scorecard editor: Overview tab"

- "Scorecard editor: Breakdown tab"

- "Scorecard editor: Perspective tab"

- "Scorecard editor: Vision tab"

- "Scorecard editor: Mission tab"

- "Scorecard editor: Objective Details tab"

- "Scorecard editor: Initiative Details tab"

- "Scorecard editor: Strategy Map tab"

- "Scorecard editor: Strategy Tree tab"

- "Scorecard editor: Custom View tab"

- "Scorecard editor: Cause & Effect Map tab"

- "Scorecard editor: KPI Watchlist tab"

- "Scorecard editor: KPI Details tab"

- "Scorecard editor: Smart Watchlist tab"

Toolbar

The toolbar contains the following buttons:

- **Back** — Use this button to go backward through your point of view history to select a previous point of view. The **(Default Value)** option returns to the point of view with which you started.

- **Forward** — Use this button to go forward through your point of view history to select a previous point of view.

- **Refresh KPI Values** — Use this button to update the page to reflect changes.

- **Scorecard Settings** — Use this button to display the "Settings dialog," where you define the score thresholds and assessment ranges to be used for scoring scorecard objects, edit dimension-related settings, and customize watchlist styles.

- **Change Permissions on Scorecard** — Use this button to display the "Permissions dialog," where you change the permissions of the scorecard.

- **Edit Mode Toggle** — Use this button to toggle between these two modes:

  - Edit mode — Enables you to create, modify, and delete all scorecard objects and views.

  - View mode —Enables you to fully navigate scorecard but not add new data, or modify and delete existing data.

- **Close Tab** — Use this option to close the current tab.

Scorecard editor: Breakdown tab

Use this tab of the "Scorecard editor" to view and manage the objects that are used to evaluate the performance of an initiative or an objective.

You generate this tab dynamically (in either Edit mode or View mode) from the **Children** and **Descendants** components in the following panes:

- "Overview pane" of the "Scorecard editor: Overview tab"
- "Analytics pane" of the "Scorecard editor: Initiative Details tab" or the "Scorecard editor: Objective Details tab"

You cannot save this tab.

Using this tab, you can filter the objects in the list by descendants or children, by object type, and by status. For example, for an objective, you might want to show only the child KPIs that have a status of OK.

For more information, see:

- "Viewing Overview Information"
- "What Are Objectives?"
- "What Are Initiatives?"

Components

Show

Use this component to specify whether to display either the descendants or the children of the objective or initiative in the Breakdown table.

Type

Use this component to filter the objects displayed in the Breakdown table by type as follows:

- If the breakdown tab is for an objective, you can select **Objectives**, **KPIs**, or both **Objectives** and **KPIs**.
- If the breakdown tab is for an initiative, you can select **Initiatives**, **KPIs**, or both **Initiatives** and **KPIs**.

Status

Use this component to filter the objects displayed in the Breakdown table by the statuses that have been defined for the scorecard. For example if the defined statuses are **OK**, **Warning**, and **Critical**, you could select to display only objects with the **OK** status, only objects with the **Warning** status, only objects with the **Critical** status, or any combination of these statuses.

Breakdown

Lists the following:

- For an initiative, the KPIs and the child or descendant initiatives that are used to evaluate the performance of the initiative
- For an objective, the KPIs and the child or descendant objectives that are used to evaluate the performance of the objective

Use this watchlist to view and manage these initiatives, objectives, and KPIs. See "Watchlists" for additional information.

Scorecard editor: Cause & Effect Map tab

Use this tab of the "Scorecard editor" to create, view, and edit a cause & effect map.

For more information, see:

- "What Are Cause & Effect Maps?"
- "Creating Cause & Effect Maps"

Components

Diagram

Use the "Cause & Effect Map tab: Diagram tab" to create a diagram that illustrates the cause and effect relationships among objectives and KPIs.

Details

Use the "Cause & Effect Map tab: Details tab" to specify supporting information for a cause & effect map.

Toolbar

This toolbar contains the following buttons:

- **Save** — Use this button to save the cause & effect map.
- **Save As** — Use this button to display the "Save As dialog," where you save the cause & effect map with another name.
- **Contact Owner** — Use this button to display the "Contact Owner dialog," where you can contact the business owner of the cause & effect map.
- **Zoom In** — Use this button to enlarge the view of the diagram.
- **Zoom Out** — Use this button to minimize the view of the diagram.
- **Cause & Effect Map Preferences** — Use this button to display the "Cause & Effect Map Preferences dialog," where you specify how cause and effect relationships are to be displayed on a cause & effect map.

Scorecard editor: Custom View tab

Use this tab of the "Scorecard editor" to create, view, and edit a custom view.

For more information, see:

- "What Are Custom Views?"
- "Creating Custom Views"

Components

Diagram

Use the "Custom View tab: Diagram tab" to create a diagram that shows a personalized view of your business data.

Details

Use the "Custom View tab: Details tab" to specify supporting information for a custom view.

Toolbar

This toolbar contains the following buttons:

- **Save** — Use this button to save the custom view.

- **Save As** — Use this button to display the "Save As dialog," where you save the custom view with another name.

- **Contact Owner** — Use this button to display the "Contact Owner dialog," where you can contact the business owner of the custom view.

- **Zoom In** — Use this button to enlarge the view of the diagram.

- **Zoom Out** — Use this button to minimize the view of the diagram.

- **Properties** — Use this button to display the "Custom View Properties dialog," where you specify a background image, a background color, or both for the diagram.

- **Display As** — Use the (**Full**, **Simple**, and *Property*) buttons to specify how you want each objective or KPI to be displayed on the diagram. For each objective or KPI, select it on the diagram and then:

  - Click **Full** to display the full version.

  - Click **Simple** to display the simple version.

  - Click *Property* to display it as one of its properties and then select one of these options:

    * **Name** — Full name.

    * **Icon** — The icon used to represent an objective or KPI.

    * **Status** — Current performance status or level (Warning, for example).

    * **Trend** — An icon indicating if the performance has improved or declined, is good or bad, or has remained the same since the previous comparison period. Only select this if trending is enabled for this node.

    * **Value** — Current value.

* **Target** — The desired value.

* **Variance** — Value by which the actual value differs from the target.

* **% Variance** — Percent by which the actual value differs from the target.

* **Change** — Value by which the actual value differs from that in a previous period.

* **% Change** — Percent by which the actual value differs from that in a previous period.

Scorecard editor: Initiative Details tab

Use this tab of the "Scorecard editor" to create, view, and edit an initiative.

For more information, see:

- "What Are Initiatives?"
- "Creating Initiatives"

Components

Name
Use this box to enter a new name for the initiative.

Description
Use this box to enter a description of the initiative.

Status
Displays the current performance status of the initiative, for example, Warning.

Type
Displays the type of object, that is, Initiative.

Analytics
Use this "Analytics pane" to specify basic information about the initiative, to identify the KPIs and other objectives that support and measure the performance of the initiative, and to add action links.

Collaboration
Use the "Collaboration pane" to identify information helpful for collaborating on the initiative, including the business owner, key resources, and related documents.

Related Items
Use the "Related Items pane" to identify the objectives that drive the initiative.

Toolbar
This toolbar contains the following buttons:

- **Save** — Use this button to save the initiative.
- **Contact Owner** — Use this button to display the "Contact Owner dialog," where you can contact the business owner of the initiative.

Scorecard editor: KPI Details tab

Use this tab of the "Scorecard editor" to work with KPI details, such as viewing basic KPI settings, pinning dimensions, specifying information helpful for collaborating on the KPI, and identifying related items.

For more information, see:

- "Working with KPI Details"

- "What Are KPIs?"

Components

Name
Use this box to enter a new name for this use of the KPI.

Description
Use this box to enter a description of this KPI usage.

Status
Displays the current performance status of this KPI, for example, Warning.

Trend
Displays information that indicates how the performance of the selected KPI has changed since the last reporting period or a date that you specify.

Type
Displays the type of object, that is, KPI.

Analytics
Use the "Analytics pane" to view basic KPI settings and a graph that presents actual values and target values, pin dimensions, and run actions.

Collaboration
Use the "Collaboration pane" to identify information helpful for collaborating on the KPI, including the business owner, key resources, and related documents.

Related Items
Use the "Related Items pane" to identify the objectives that drive the KPI or are driven by the KPI.

Toolbar
This toolbar contains the following buttons:

- **Save** — Use this button to save the KPI details.

- **Open KPI Definition** — Use this button to open the KPI in the "KPI editor" where you can edit it.

- **Contact Owner** — Use this button to display the "Contact Owner dialog," where you can contact the business owner of the KPI.

Scorecard editor: Mission tab

Use this tab of the "Scorecard editor" to define, view, and edit a mission or vision statement for your organization.

For more information, see:

- "What Are Mission Statements?"

- "Defining Mission Statements"

- "What Are Vision Statements?"

- "Defining Vision Statements"

The tab is also displayed as:

Scorecard editor: Vision tab

Components

Document

Use the "Mission tab: Document tab" or "Vision tab: Document tab" to enter and format your mission statement or vision statement.

Details

Use the "Mission tab: Details tab" or "Vision tab: Details tab" to specify supporting information for the mission or vision statement.

Toolbar

This toolbar contains the following buttons:

- **Save** — Use this button to save the mission or vision statement.

- **Save As** — Use this button to display the "Save As dialog," where you save the mission or vision statement with another name.

- **Contact Owner** — Use this button to display the "Contact Owner dialog," where you can contact the business owner of the mission or vision statement.

Scorecard editor: Objective Details tab

Use this tab of the "Scorecard editor" to create, view, and edit an objective.

For more information, see:

- "What Are Objectives?"
- "Creating Objectives"

Components

Name
Use this box enter a new name for the objective.

Description
Use this box to enter a description of the objective.

Status
Displays the current performance status of the objective, for example, Warning.

Type
Displays the type of object, that is, Objective.

Analytics
Use this "Analytics pane" to specify basic information about the objective, to identify the KPIs and other objectives that support and measure the performance of the objective, and to add action links.

Collaboration
Use the "Collaboration pane" to identify information helpful for collaborating on the objective, including the business owner and related documents.

Related Items
Use the "Related Items pane" to identify other objectives that cause or effect the objective and initiatives that drive the objective.

Toolbar
This toolbar contains the following buttons:

- **Save** — Use this button to save the objective.
- **Contact Owner** — Use this button to display the "Contact Owner dialog," where you can contact the business owner of the objective.

Scorecard editor: Overview tab

Use this tab of the "Scorecard editor" to:

- View summary information for an initiative, objective, or KPI.

  The summary information displayed depends on which object you last selected in the "Initiatives pane" or the "Strategy pane":

  If you last selected:

  - An initiative or objective, then the basic settings for the initiative or objective are displayed (for example, status, business owner, and so on) along with a status summary showing the number of KPIs and initiatives, or KPIs and objectives, that evaluate progress in each performance assessment range.

    If there is at least one child or descendant objective, initiative, or KPI for a particular status, the status name is a hyperlink that displays the "Scorecard editor: Breakdown tab," showing the child or descendant objectives, initiatives, and KPIs.

  - A KPI, then the basic settings for the KPI are displayed (for example, status, business owner, and so on) as well as performance data and a performance graph.

- Link to information on how to get started with scorecarding.

- View pie graphs that show how the objectives that compose your scorecard are distributed.

See "Viewing Overview Information" for additional information.

Components

Overview

Use the "Overview pane" to view summary information about the selected initiative, objective, or KPI.

Getting Started

Use the "Getting Started pane" to learn how to use scorecard to drive and assess corporate performance, to link to the Oracle Business Intelligence glossary, and to link to information about how to create scorecards.

Scorecard Breadth

Use the "Scorecard Breadth pane" to view pie graphs that show how evenly the objectives (and the KPIs that support them) that compose your scorecard are distributed among the following categories:

- Financial versus non-financial

- Internal versus external

- Leading versus lagging

Scorecard editor: Perspective tab

Use this tab of the "Scorecard editor" to create, view, and edit perspectives.

For more information, see:

- "What Are Perspectives?"
- "Creating Custom Perspectives"

Components

Perspective Name
Use this field to enter the name of the perspective.

Description
Use this field to enter a description of the perspective.

Business Owner
Displays the user ID of the person responsible for managing the perspective. To specify the business owner, click the **Set User** button to display the "Business Owner dialog," where you can search for and select the business owner.

Focus
Displays the following options to indicate the focus of the perspective:

- **Financial** — Use this option to specify that the perspective focuses on objectives, initiatives, and KPIs that relate to or support the monetary or economic health and development of your organization.
- **Internal facing** — Use this option to specify that the perspective focuses on objectives, initiatives, and KPIs that form internal processes and functions, for example, employee training programs.

Objectives, Initiatives & KPIs
Lists the initiatives, objectives, and KPIs that are associated with this perspective.

Use this watchlist to view and manage these initiatives, objectives, and KPIs. See "Watchlists" for additional information.

Related Documents
Use the "Related Documents area" to view and manage documents that provide supporting information to the perspective.

Toolbar
This toolbar contains the following buttons:

- **Save** — Use this button to save the perspective.
- **Contact Owner** — Use this button to display the "Contact Owner dialog," where you can contact the business owner of the perspective.

Scorecard editor: Smart Watchlist tab

Use this tab of the "Scorecard editor" to create a smart watchlist.

For more information, see:

- "What Are Smart Watchlists?"
- "Creating Smart Watchlists"

Components

Filter Pane

Depending on the setting of the **Filter Criteria Display** component in the "Smart Watchlist Properties dialog," this pane is displayed as a control panel, as a text summary, or is hidden. If displayed as a:

- Control panel, it displays the following tabs, where you specify the criteria to be used to filter the smart watchlist:

  - "Filter pane: Relationship tab" — Use this tab to filter the smart watchlist by scorecard object relationships.

  - "Filter pane: Type tab" — Use this tab to filter the smart watchlist by scorecard object types.

  - "Filter pane: Perspective tab" — Use this tab to filter the smart watchlist by the perspectives to which scorecard objects are associated.

  - "Filter pane: Performance tab" — Use this tab to filter the smart watchlist by the performance criteria (status, score, or ranking) of scorecard objects, and to include KPIs, Objectives, and Initiatives with null statuses in the smart watchlist.

  - "Filter pane: Ownership tab" — Use this tab to filter the smart watchlist by the business owners to whom scorecard objects are assigned.

  Selections you make in the Filter pane are reflected immediately in the smart watchlist, with the exception of text box entries. For text boxes, you must change the focus off the text box for the entry to take effect.

- Text summary, it displays a read-only summary of the current filter criteria.

Smart Watchlist

Lists the initiatives, objectives, and KPIs within a scorecard that meet the criteria that you specified in the Filter pane.

Use this watchlist to view and manage these initiatives, objectives, and KPIs, or to view a KPI contribution wheel. See "Watchlists" and "About KPI Contribution Wheel Diagrams" for additional information.

Toolbar

This toolbar contains the following buttons:

- **Save** — Use this button to save the smart watchlist.

- **Save As** — Use this button to display the "Save As dialog," where you save the smart watchlist with another name.

- **Properties** — Use this button to display the "Smart Watchlist Properties dialog," where you can specify how the Filter pane is to be displayed and the amount of indentation for hierarchical objects in the smart watchlist.

Filter pane: Relationship tab

Use this tab of the "Scorecard editor: Smart Watchlist tab" to filter a smart watchlist by scorecard object relationships. For example, you might want to include only the Improve Customer Satisfaction objective and its children.

Components

Start With

Use this area to specify which nodes (that is, the representation of an initiative, objective, or KPI in the Strategy pane or Initiatives pane) to start with in the smart watchlist. To do so, click **Browse** to display the "Choose Starting Nodes dialog," where you select one or more nodes with which to start.

> **Note:** As an alternative to clicking the **Browse** button, you can add objectives, initiatives, or KPIs by dragging the objects from the Strategy and Initiatives panes and dropping them in the Filter pane.

Include

Use this area to specify:

- Whether to include in the smart watchlist, the starting nodes themselves, if they meet all other filtering criteria. To do so, select the **Self** option.

- Whether for each starting node to include descendants, children, or no descendants and children. To do so, select one of the following options:

    - **All Descendants** — Use this option to include all descendents.

    - **Children** — Use this option to include only children.

    - **None** — Use this option to exclude descendants and children. If you select this option, you must also select the **Self** option.

Filter pane: Type tab

Use this tab of the "Scorecard editor: Smart Watchlist tab" to filter a smart watchlist by scorecard object types. For example, you might want to include only objectives and KPIs.

Components

Type

Use this area to select which types of scorecard objects to include in the smart watchlist. To do so, select **Objectives**, **Initiatives**, **KPIs**, or any combination of the three.

Note that you can include only KPIs that are associated with objectives and initiatives in the scorecard. You cannot include KPIs from the catalog that are not associated with objectives and initiatives in the scorecard.

Filter pane: Perspective tab

Use this tab of the "Scorecard editor: Smart Watchlist tab" to filter a smart watchlist by the perspectives to which objects are associated. For example, you might want to include only objects that are associated with the Financial perspective.

Components

Perspectives
Use this area to specify the perspective associations to include in the smart watchlist. To do so, select one of the following options:

- **All** — Use this option to include all perspective associations.

- **Specific** — Use this option to include only specific perspective associations. If you select this option, then select one or more perspectives from the list to the right of this option.

Filter pane: Performance tab

Use this tab of the "Scorecard editor: Smart Watchlist tab" to do the following:

- Filter a smart watchlist by the performance criteria (status, score, or ranking) of scorecard objects. For example, you might want to include all scorecard objects that have a status of Warning or you might want to display the top 10 best performing KPIs.

- Include KPIs, Objectives, and Initiatives with null statuses in the smart watchlist. To include KPIs, Objectives, and Initiatives with null statuses, check **Include No Status**.

Components

Select

Use this area to specify whether to include **All**, **Top** *n*, or **Bottom** *n* objects that meet the **based on** criteria. If you select **Top** or **Bottom**, then enter the number of objects in the text box to the right.

based on

Use this area to specify the criteria on which to base the inclusion of all, top *n*, or bottom *n* objects. To do so, select one of the following options:

- **Best Performance (% Variance)** — Use this option to specify that the inclusion of all, top *n*, or bottom *n* objects is to be based on the best performance ranking.

  This option causes a descending row sort on the % Variance value and, due to sorting, objects will not be shown with indentation.

- **Worst Performance (% Variance)** — Use this option to specify that the inclusion of all, top *n*, or bottom *n* objects is to be based on the worst performance ranking.

  This option causes an ascending row sort on the % Variance value and due to sorting, objects will not be shown with indentation.

- **Biggest Improvements (% Change)** — Use this option to specify that the inclusion of all, top *n*, or bottom *n* objects is to be based on the biggest improvement ranking.

  This option causes a descending row sort on the % Change value and, due to sorting, objects will not be shown with indentation

- **Biggest Declines (% Change)** — Use this option to specify that the inclusion of all, top *n*, or bottom *n* objects is to be based on the biggest decline ranking.

  This option causes an ascending row sort on the % Change value and, due to sorting, objects will not be shown with indentation.

- **Score** — Use this option to specify that the inclusion of all, top *n*, or bottom *n* objects is to be based on score. If you select this option, then specify the score range to be used.

  With this option, if you have specified **All** (and not **Top** *n* or **Bottom** *n*, objects will be displayed in hierarchical order with indentation, unless a column sort is in effect.

- **Status** — Use this option to specify that the inclusion of all, top *n*, or bottom *n* objects is to be based on status. If you select this option, then specify which statuses by selecting one or more of the status boxes.

With this option, if you have specified **All** (and not **Top** *n* or **Bottom** *n*, objects will be displayed in hierarchical order with indentation, unless a column sort is in effect.

If you do not select any status boxes, the rows that have no status (often due to missing data for the specific KPI and dimension values in effect) will be displayed.

Filter pane: Ownership tab

Use this tab of the "Scorecard editor: Smart Watchlist tab" to filter a smart watchlist by the business owners to whom scorecard objects are assigned.

Components

Business Owners

Use this area to specify the business owners. To do so, click the **Add or Remove Business Owners** button to display the "Select User dialog," where you select business owners.

Scorecard editor: Strategy Map tab

Use this tab of the "Scorecard editor" to create, view, and edit a strategy map.

For more information, see:

- "What Are Strategy Maps?"
- "Creating Strategy Maps"

Components

Diagram

Use the "Strategy Map tab: Diagram tab" to create a diagram that shows how the objectives that have been defined for a scorecard and the KPIs that measure their progress are aligned by perspectives.

Details

Use the "Strategy Map tab: Details tab" to specify supporting information for the strategy map.

Toolbar

This toolbar contains the following buttons:

- **Save** — Use this button to save the strategy map.

- **Save As** — Use this button to display the "Save As dialog," where you save the strategy map with another name.

- **Contact Owner** — Use this button to display the "Contact Owner dialog," where you can contact the business owner of the strategy map.

- **Zoom In** — Use this button to enlarge the view of the diagram.

- **Zoom Out** — Use this button to minimize the view of the diagram.

- **Draw a Causal Linkage Between Two Objectives** — Use this button to add a cause and effect relationship between two objectives, two KPIs, or between an objective and a KPI.

  To do so, click this button, select the objective or KPI that is the cause (that is the objective or KPI that drives the second objective or KPI), and then drag to and select the objective or KPI that is the effect (that is, the objective or KPI that is driven by the first objective or KPI.) Click the button again to turn this functionality off. A line is drawn on the diagram connecting the two objectives, two KPIs, or the objective and KPI. The two objectives, two KPIs, or the objective and KPI are added to the Causes and Effects tables on the "Scorecard editor: Objective Details tab" accordingly.

Scorecard editor: Strategy Tree tab

Use this tab of the "Scorecard editor" to create, view, and edit a strategy tree.

For more information, see:

- "What Are Strategy Trees?"
- "Creating Strategy Trees"

Components

Diagram

Use the "Strategy Tree tab: Diagram tab" to view an objective and its supporting child objectives and KPIs hierarchically in a tree diagram or wheel diagram.

Details

Use the "Strategy Tree tab: Details tab" to specify supporting information for the strategy tree.

Toolbar

This toolbar contains the following buttons:

- **Save** — Use this button to save the strategy tree.
- **Save As** — Use this button to display the "Save As dialog," where you save the strategy tree with another name.
- **Contact Owner** — Use this button to display the "Contact Owner dialog," where you can contact the business owner of the strategy tree.
- **Zoom In** — Use this button to enlarge the view of the diagram.
- **Zoom Out** — Use this button to minimize the view of the diagram.
- **Properties** — Use this button to display the "Strategy Tree View Properties dialog," where you set properties that control the appearance of the diagrams for a strategy tree.
- **Wheel Diagram Type** — Use this button to display the strategy tree in a wheel diagram (called a strategy contribution wheel).
- **Tree Diagram Type** — Use this button to display the strategy tree in a tree diagram.

Search pane

Use this pane to find objects by name, directory location, and type (agents and scorecards, for example). This pane enables you to quickly locate the objects that you need.

For more information, see:

- "What is the Oracle BI Presentation Catalog?"
- "Who Uses the Catalog?"
- "Searching for Objects in the Catalog"

This pane is part of the "Catalog page."

Components

Search

Use this field to enter the full or partial name of the object or folder to find. You can enter an asterisk (*) in your search string to perform a wildcard search where the asterisk (*) specifies zero or more alphanumeric characters within a search value.

In the Search pane and in the Search field in the global header of Oracle BI EE, you can enter text and you can use "glob matching". "Glob matching" refers to the syntax that allows you to search for and match a pattern within an object name. Table D–6 describes strings that you can use with the "glob syntax" while performing a basic search.

Table D–6   Using glob Syntax in Search Criteria

Search String Entered	Result
a	Searching for "a" simply matches all strings that have an "a" occurring any where in them.
^a	Searching for "^a" only matches all strings that begin with an "a".
a$	Searching for "a$" only matches all strings that end with an "a".
a*	Searches explicitly for strings containing a character followed by an asterisk (*) for example, "a*".
?	Simply matches any one character. For example, "b?t" would match *bat*, *bit*, *but*, *bet*, and so on.
[] or {}	Not recognized by search.

To match any of the glob special characters themselves ('^$*?'), you must precede the character with a backslash. A backslash escapes a glob special character. For example, to exactly match the string "cost*units", enter a search string of "^cost*units$".

To find an exact match of characters, include the appropriate characters at both ends of the search string. If you want to find the file called "a", then enter a search string of "^a$". Otherwise, you obtain a list of every file that includes the letter "a" anywhere in its name or description.

Location

Use this list to select a folder in which to search for objects:

- **My Folders** — Search folders that you created or that were automatically generated for you.

- **Shared Folders** - Search all folders that you can access.

Administrators can search for all user and object folders in the catalog root directory.

Type

Use this list to find only certain kinds of objects. For example, reports, dashboards, or KPIs.

Section Condition dialog

Use this dialog to specify the condition to be used to determine whether a section in a dashboard is to be displayed.

You might want to display a section conditionally, for example, when the results of an analysis show that sales are down by 15 percent or greater in the past week and you want to display a section that contains links to related reports.

This dialog is displayed from the "Page Layout area" in the "Dashboard builder."

For more information, see "Changing the Properties of Objects Added to Dashboard Pages."

Components

Condition
Displays the condition under which the section is to be displayed.

New Condition
Use this button to display the "New Condition dialog," where you create a condition.

Select Condition
Use this button to display the "Select Condition dialog," where you select an existing condition.

More (>>)
Display these options:

- **Test Condition** — Use this button to test whether the condition evaluates to true or false.

- **Edit Condition** — Use this button to display the "Edit Condition dialog," where you edit the condition.

- **Remove Condition** — Use this button to remove the condition.

- **Save Condition As** — Use this button to display the "Save As dialog," where you save the condition by name to the catalog.

Section Properties dialog

Use this dialog to specify the properties for a section of data in a view using the Layout pane.

For more information, see "Setting Properties for View Bodies and Drop Targets."

Components

Column Heading Display

(Available for pivot tables and tables) Displays these options to specify how to display the column heading for the section: **None**, **Above**, or **Left**.

Insert Page Break

Use this area to indicate whether to create a page break before the section, when you export an analysis to PDF, PPT, or Excel or print to PDF. This means that every time a value changes in the section drop target, the new section for that column is displayed on a new page, slide, or sheet. In addition, all other views on the compound layout are rendered on separate pages regardless of the section property break setting. This is useful for data-driven detail analyses.

You can select from the following:

- **No Page Break** — Do not break pages.

- **Each member of all columns** — Break at the innermost column, which inserts a page break between every section.

- **Each member of the first column** — Break at the outermost column, which inserts a page break when the section label in the outermost column changes.

  When the value of an outermost column changes, the value of the inner column is also considered changed. Therefore, setting page breaks at the innermost column inserts manual page breaks between every section.

Show Blank Rows

(Available for pivot tables and tables) Use this box to indicate whether to display rows that have no data in the section. Select the box to display all rows, even if a row is an empty text string and contains no value. Deselect the box to hide rows when there are no results to display. This option might be useful for example, to hide empty address lines.

Maximum number of section slider values

(Available for graphs, gauges, and funnels) Use this box to enter the maximum number of values to display on a section slider bar, but not to exceed the system maximum. The administrator configures the system maximum. If you enter a number that exceeds the system maximum, then it is ignored.

For more information about section sliders, see "Defining Section Sliders in Graphs, Gauges, and Funnels."

The remaining components of this dialog are described in "Column Properties dialog: Style tab."

Sections Formatting dialog

Use this dialog to specify how to break pages for printing and exporting and to format sections in a trellis or heat matrix.

Components

Display Options

Use the "Sections Formatting dialog: Display Options tab" to specify how to break pages for printing and exporting.

Sections Format

Use the Sections Formatting dialog: Sections Format tab to format sections in a trellis.

Sections Formatting dialog: Display Options tab

Use this tab of the "Sections Formatting dialog" to specify how to break pages for printing and exporting.

Component

PDF Printing Page Break

Use this area to indicate whether to create a page break before the section, when you export an analysis to PDF, PPT, or Excel or print to PDF. This means that every time a value changes in the section drop target, the new section for that column is displayed on a new page, slide, or sheet. In addition, all other views on the compound layout are rendered on separate pages regardless of the section property break setting. This is useful for data-driven detail analyses.

You can select from the following:

- **No Page Break** — Do not break pages.

- **Each member of all columns** — Break at the innermost column, which inserts a page break between every section.

- **Each member of the first column** — Break at the outermost column, which inserts a page break when the section label in the outermost column changes.

  When the value of an outermost column changes, the value of the inner column is also considered changed. Therefore, setting page breaks at the innermost column inserts manual page breaks between every section.

Select Column dialog

Use this dialog to navigate to and select the columns or members to include in an analysis, prompt, filter, KPI, or when associating columns with layers for maps. In some cases, you can also use this dialog to add additional subject areas to the dialog.

For more information, see:

- "What Are Subject Areas and Columns?"
- "Creating a Column Prompt"
- "Editing Map Views"

This dialog is also displayed as:

Add Columns dialog
Select BI Key Columns dialog
Select Columns dialog
Select member in *Dimension* Hierarchy dialog

Components

Add Related Subject Area

This button is available only if one or more related subject areas are available and you have permission to access them.

Use this button to display the "Add/Remove Subject Areas dialog," from which you can add or remove related subject areas.

Search

Not available for maps. Click this button to search.

Subject Area

Use this tree to browse for and select the column for which you want to build the prompt, the column to add to the filter, the dimension to add to the KPI, or the column to associate with a layer for a map. For a map, you can select a single column, multiple columns from multiple subject areas, or multiple columns from a single subject area.

Selected Columns

This area is available only for columns to associate with a layer for a map. You can view and modify the columns that you have selected.

Shuttle

These buttons are available only for columns to associate with a layer for a map. You can select columns in one or more subject areas and move them between the two lists in the dialog.

Reorder

These buttons are available only for columns to associate with a layer for a map. You can select columns then click the buttons to modify the order or the columns in the list. If you are trying to duplicate the name of a geographic layer that has multiple parts, then ensure that the columns are in order from top to bottom to match that layer name. For example, if the layer name is Country_State, then ensure that you include the Country column above the State column in the list.

Related Topics

"Definition pane"
"Edit Layer dialog"

Select Java Method dialog

Use this dialog to select one of the following items:

- For an Invoke a Java Method action, the Java method to be invoked
- For a Navigate to EPM Content action, the Hyperion resource to which to navigate

For more information, see:

- "What Are Actions?"
- "What Action Types Are Available?"
- "Specifying the Settings for New Actions"

This dialog is also displayed as:

Select the Hyperion resource you want this action to invoke dialog

Components

EJB or Hyperion Resources

Displays the following:

- For an Invoke a Java Method action, Java methods that you can select
- For a Navigate to EPM Content action, the Hyperion resources that you can select

Use this list to select a Java method or a Hyperion resource.

Selected

Displays the Java method or the Hyperion resource that you have selected in the list.

Select Script Function dialog

Use this dialog to select the function to be executed by an Invoke a Browser Script action.

For more information, see:

■ "What Are Actions?"

■ "What Action Types Are Available?"

■ "Specifying the Settings for New Actions"

Components

Function
Use this list to select the function to be executed.

Name
Displays the name of the function selected in the list.

Select Values dialog

Use this dialog to search for and select one or more values from a list of available values, for example:

- In a filter or prompt, when performing write back on a table view or pivot table view, or when creating or editing a member step

- In a list of KPI dimensions, when pinning a dimension

Using this search function, you can limit the list of available values (for example, find all those values that start with the letter D) so that you can more easily find the value or values that you want.

This dialog is also displayed as:

Choose Members dialog
Edit Hierarchy Selection Step dialog
Edit Member Step dialog
Edit Select Existing Groups and Calculated Items
Member Selection Dialog
New Hierarchy Selection Step dialog
New Member Step dialog
New Select Members dialog
New Select Existing Groups and Calculated Items
Search Members dialog

Components

> **Note:** Not all components are available in each version of this dialog.

Relationship
Available only when working with a member step that is based on a hierarchy.

Use this box to select the type of relationship with which to create the member step for the hierarchical column. You can select a family relationship, a specific hierarchy level (for level-based hierarchies only), or a level relationship (for level-based hierarchies only). For parent-child hierarchies, the only option available is family relationship.

Action
Not available when working with multiple values for pinning KPI dimensions.

Use this box to select the type of action to create. You can select to add the selected members to the selection, keep only the selected members and remove all others, or remove the selected members from the selection. For groups and calculated items, the only action available is Add.

When working with a member step that is based on a hierarchy, use the box beside the **Action** box to specify a hierarchy level (for level-based hierarchies only) or a family relationship.

For a family relationship, you can select one of the following options:

- **Children of** — Selects all the children of the selected member.

- **Parents of** — Selects the parent of the selected member.

- **Descendants of** — Selects all members that are descended from the selected member.

- **Ancestors of** — Selects all members from which the selected member is descended.

- **Siblings of** — This option is not available for columns in a skip-level hierarchy. Selects all members that are on the same level and have the same parent as the selected member.

- **Leaves of** — Selects all members that are descended from the selected member and that have no lower levels.

When you edit the first step in a list, the choices for actions are **Start with All Members**, **Start with Selected Members**, and **Start with Groups or Calculated Items**.

Search

Use this button to show or hide the Search area that is displayed within the Available List area. See "Components of Search Area."

Available List

Use this area to:

- Initiate a search in the Search area.

- Select values to move to the Selected List area.

- Show additional choices, if available, by clicking **More**.

Items that you have selected are displayed with a green check mark beside them.

Selected List

Use this area to view the values that you have selected from the Available List area and moved to the Selected List area.

Include selected members

Use this box to specify whether to include the selected member in addition to all the members of the family relationship (such as **Children of**) that you specify.

For example, specifying **Keep Only** and **Children of** 2011 and also selecting this box, returns: 2011, 2011 Q1, 2011 Q2, 2011 Q3, and 2011 Q4.

Edit

Use this button to display the "Edit dialog," where you can refine the values with which you are working.

This button is not available when you select members for selection steps or when working with multiple values for pinning KPI dimensions.

Override with

Use this box to specify that an analysis prompt, a dashboard prompt, or a variable can override the member step.

If you select a variable type (**Presentation Variable**, **Session Variable**, or **Repository Variable**) then enter the name of the variable in the field. For example, suppose that you have a column called EMPLOYEE_ID. You can specify USER as the session variable with which to override the value of that column. When a user logs in, the column value is set to his login name. For more information on variables, see "Using Variables."

> **Note:** For hierarchical columns, session and repository variables that you use to override a member step must contain valid JSON syntax rather than SQL syntax in their initialization strings. For more information see "Initialization Strings Used in Variables to Override Selection Steps" in *Metadata Repository Builder's Guide for Oracle Business Intelligence Enterprise Edition*.

In a list of steps for a column, specify that only one step in the list be able to be overridden by a prompt or variable.

For more information on prompting, see Chapter 7, "Prompting in Dashboards and Analyses."

Notes

- To select multiple values, press the Control key, then click the values.

- To select a range of values, click the first value in the range, press the Shift key, then click the last value in the range.

- To move one or more values from the Available List area to the Selected List area, use the **Move** or **Move All** button. You also can double-click a single value in the Available List area to move it to the Selected List area.

  For a group, the following options are displayed when you click the arrow beside **Move**:

  - **Add** — Use this option to add the group to the analysis. You see an "Add: *group-name*" step in the Selected List area. You see an outline value for the group in a table or pivot table.

  - **Add Members** — Use this option to add the members of the group to the analysis. You see an "Add: Members of *group-name*" step in the Selected List area. You do not see an outline value in a table or pivot table; you see the members of the group.

- To remove one or more values from the Selected List area, use the **Remove** or **Remove All** button. You also can double-click a single value in the Selected List area to remove it.

- In the search criteria, you can use % (percent sign) as a wildcard.

Components of Search Area

Use this area to initiate a search for values or members and view the results of the search.

Name

Use these fields to specify text data on which to search. In the **Name** box, select the appropriate option such as **Starts**, **Contains**, **Ends**, or **Is Like (pattern match)**. Enter the string for which you must search.

Between and

Not available for member search. Use this field to specify a range of numeric or date and time data for which to search.

Children of

Available only when searching for hierarchical members. Use this field to specify the node in whose sub-tree you want to start searching for members. For example, suppose that you have a geography hierarchy with All Countries as the root node and 50 countries below that. You want to search for all cities that start with the letter "A" in the country called USA. Use the **Children of** field to specify USA.

Select **Member** to display the Select Member dialog.

Select a Specific Member to Search Within

Available only when searching for hierarchical members. Click this button to display the Select Member dialog in which you specify the member whose children you want to search.

At Level

Available only when searching for members of level-based hierarchies. Use this field to select the level below which you want to search for members. The default of <Any> specifies to search for members below any level. For parent-child hierarchies, no levels exist, so this setting is always <Any>. Certain levels are disabled because they are at or above the level you selected, which does not constitute a valid search.

Limited Values or Constrained

Use this button to limit the values by any other filters that are associated with the analysis.

All Values or Unconstrained

Use this button to list all values, without limiting the values by any other filters that are associated with the analysis.

Match Case

Use this box to provide case-sensitivity for the members when working with multiple values for KPI dimension pinnings.

Search

Use this button to initiate the search and display the search results. When you search for members, the columns of the subject area are searched.

Notes

If the available list of values for a prompt or write back column is based on a SQL statement, then you cannot search for values.

Related Topics

"New Prompt dialog"

Select Variable dialog

Use this dialog to specify a variable to use to set one or more values for a KPI dimension. You set values of KPI dimensions, for example, when you add a KPI that is dimensioned to a KPI Watchlist or when you add a strategy map that contains one or more KPIs that are dimensioned to a dashboard.

For more information about variables, see "Using Variables."

> **Note:** You cannot pin multiple values for a KPI dimension when using session, repository, or global variables.

Components

Variable Type
Use this box to select the type of variable to use to set the value. Depending on the task you are performing, you can select one of these types: **Session**, **Repository**, or **Presentation**.

Variable Name
Use this field to enter the name of the variable to use to set the value, for example USER.

Select Web Service Operation dialog

Use this dialog to select the Web Service operation to be invoked by an Invoke a Web Service action.

For more information, see:

- "What Are Actions?"
- "What Action Types Are Available?"
- "Specifying the Settings for New Actions"

Components

Web Services

Use this list to select the Web Service operation to invoke.

Initially, this list displays the Web Services preconfigured by the administrator. You can display other Web Services by using the **WSDL URL** component.

WSDL URL

Displays the Web Services Description Language (WSDL) of the Web Service operation selected in the **Web Services** list.

To list Web Service operations available from a WSDL URL that was not preconfigured, use this field to enter the WSDL URL (for example, `http://<server>:8888/default/10?WSDL`) and then click **Open**.

Web Service

Displays the Web Service of the selected operation.

Operation

Displays the selected operation.

Restore the list of Web Services pre-configured by your Oracle BI Administrator

Use this button to display the list of Web Services that were initially displayed in the Web Services list, that is, the Web Services preconfigured by the administrator.

Refresh the selected folder

This button is available only when you have a folder selected. Use this button to refresh the selected folder.

Selected Columns pane

Use this pane to view, add, and modify the criteria that are selected for an analysis.

Selected columns are displayed in boxes in this pane. Each box has two sections. The upper section shows the name of the column's folder, for example, Customers. The lower section shows the name of the column, for example, Customer Name. If columns from the same folder are placed next to each other, then they are grouped in one folder section.

If a column selector view is in use, then you see the phrase "Column Group" instead of the column name. You also cannot edit the properties for the columns. See "Editing Column Selector Views" for information.

You can:

- Reorder the columns to arrange them in the way that they are to be displayed in the analysis results
- Combine the results of two or more analyses into a single result
- Remove all columns from the criteria

Other modifications that you can make to columns depend on the type of column:

- For attribute columns and measure columns, you can:
  - Specify the sort order of the column
  - Edit the formula for the column, including customizing the heading
  - Edit column properties to control the formatting and interaction of the column
  - Add new filters
  - Delete column
  - Save the column to the catalog
- For hierarchical columns, you can:
  - Specify the sort order of the column
  - Edit column properties to control the formatting and interaction of the column
  - Delete column
  - Save the column to the catalog
- For hierarchy levels, you can:
  - Edit properties to control the formatting and interaction of the hierarchy level

For more information, see "Specifying the Criteria for Analyses."

This pane is part of the "Analysis editor: Criteria tab."

Components

Drag Column
Use this button to reorder a single column or multiple columns that are grouped in a folder section. This button is located to the left of the column name or folder name. The following list describes how to use the **Drag Column** button, but you can reorder

by clicking anywhere in the column or folder area and dragging and dropping to the new location. Valid drop locations are indicated by a thick solid line.

To reorder:

- A single column in a folder section that contains only one column, click the **Drag Column** button in either the column section or the folder section and drag and drop the section to a new location.

- A single column in a folder section that contains multiple columns, click the **Drag Column** button in the column section and then drag and drop the section to a new location. A new folder section is created for the reordered column.

- All columns in a folder section, click the **Drag Column** button in the folder section and drag and drop the section to a new location.

Plus or Minus

This button is available only for hierarchical columns.

Use this button to expand or collapse the display of hierarchy levels in column.

Options

Use this button to select one of the following options:

- **Sort** — This option is available for attribute, measure, and hierarchical columns. It is not available for hierarchy levels. Displays the "Sorting Options Menu," where you select options for sorting values. For more information on sorting data, see "Sorting Data in Views."

- **Edit Formula** — This option is available only for attribute columns and measure columns. Use this option to display the "Edit Column Formula dialog," where you can customize headings and edit the formula for the column, such as adding a Rank or Percentile function. For more information, see "Editing the Formula for a Column."

- **Column Properties or Hierarchy Level Properties** — Use this option to display the "Column Properties dialog," where you can edit various format properties for the column or hierarchy level. For more information, see Chapter 8, "Formatting Analyses, Views, and Dashboard Pages."

- **Filter** — This option is available only for attribute columns and measure columns. Use this option to display the "New Filter dialog," where you can create a filter for the attribute or measure column. For more information on filters, see Chapter 6, "Filtering and Selecting Data for Analyses."

- **Delete** — This option is available for attribute, measure, and hierarchical columns. It is not available for hierarchy levels. Use this option to delete the column.

- **Save Column As** — (Available only if you have been granted the Save Column privilege by the administrator.) This option is not available for a column that has already been saved to the catalog. Use this option to display the "Save As dialog", where you can save the column to the catalog. For more information, see "Saving Columns to the Catalog."

Toolbar

The toolbar contains the following buttons:

- **Combine results based on union, intersection, and difference operations** — Use this button to combine columns from one or more subject areas using Set operations. The columns must have commonality to be combined.

Click the button to display the Select Subject Area menu, where you select a subject area that contains the data to combine with the columns that you have previously added. (The subject area can be the same as that from which you have previously selected columns, or a different subject area.) The Set Operations area is displayed, where you can use the following components:

– **Result Columns** and **Criteria "subject area"** links — Click these links to display the appropriate columns in this pane. For example, suppose that you have selected the D1 Office and D2 Department columns in the A-Sample Sales subject area. If you click **Criteria "subject area"**, then the D1 Office and D2 Department columns are shown so that you can perform tasks such as formatting those columns. If you have combined columns using Set operations, then click **Result Columns** to show those columns and perform tasks such as formatting them.

The result columns are those that are displayed in views after applying the set operation of the derived columns.

– **Union** button — Displays the following options:

* **Union** — Use this option to specify that only nonduplicate rows from all columns are to be returned.

* **Union All** — Use this option to specify that rows from all columns, including duplicate rows, are to be returned.

* **Intersect** — Use this option to specify that only rows common to all columns are to be returned.

* **Minus** — Use this option to specify that only rows from the first column that are not in the second column are to be returned.

– **More options** button — Click to cut, copy, or paste that subject area in the list of criteria.

– **Edit** button — Click to display additional options for working with the subject areas:

* **Create New Criteria** — Displays the Select Subject Area menu, where you select a subject area to add to the criteria.

* **Copy** and **Paste** — Creates a duplicate set of criteria on which you can perform set operations.

* **Cut** — Removes the current set of criteria from the pane.

* **Ungroup** — If you have created a duplicate set of criteria, then this option is available to move the set of criteria to the next highest level.

For more information, see "Combining Columns Using Set Operations".

■ **Remove all columns from criteria** — Use this button to remove all columns that have been included in the Selected Columns pane. Be aware that there is no confirmation message and no undo available for this operation.

Selection Steps pane

Use this pane to create and modify steps for selecting data. The steps in this pane apply to all views for the analysis. You do not have to display the editor for a particular view to edit its selection steps.

For more information, see "Working with Selections of Data."

This pane is part of the "Analysis editor: Criteria tab," the "Analysis editor: Results tab," and certain view editors. This pane is not visible on the Criteria tab until you click the toolbar button to display it. The contents of this pane are displayed slightly differently on the Criteria tab if a column selector view is in use. See "Editing Column Selector Views" for information.

Components

List

Use to select the columns or measures to view in the pane. You can view all columns and measures, just measures, or specific columns.

Column Area

Use to indicate the start of the list of steps for each column. For hierarchical columns, the name of the hierarchy is included with the column name. This area includes the following types of steps:

- Start With — Serves as the starting selection for a column. This step is populated automatically when you select columns or hierarchy levels from a subject area.

  - For every column that you select, an implicit "Start with All Members" step is added for that column, where "All" implies all the members for the column after filters are applied.

  - For every hierarchy level that you select, an implicit "Start with all *level-name*" step is added for that level, where "All" implies all the members for the level after filters are applied. For example, if you select the Fiscal Quarter hierarchy level, then a step is created with a name such as "Start with All Fiscal Quarter".

- Add — Adds the selected members to the selection.

- Keep only — Keeps only the selected members and remove all others.

- Remove — Removes the selected members from the selection.

Save Selection Steps

Click this button to display the "Save Selection Steps dialog" where you save the steps for the column or hierarchy level as a group. This button is available only when you have more than a single Start With step in the list for a column. This button is not available if you try to save a set of steps as a group and one of the steps includes a calculated item.

Then, New Step

Click this link to display the following options:

- **Select Members** — Displays the "New Select Members dialog" where you create a step of the specified members.

- **Add Groups or Calculated Items** — Displays a submenu with the following options:

  - **Select Existing Groups and Calculated Items** — Displays the "New Select Existing Groups and Calculated Items" where you select an existing group or calculated item.

  - **New Group** — Displays the "New Group dialog" where you add a new group.

  - **New Calculated Item** — Displays the "New Calculated Item dialog" where you add a new calculated item.

- **Apply a Condition** — Displays the "New Condition Step dialog," where you create a condition step.

- **Select Members Based on Hierarchy** — Displays the "New Hierarchy Selection Step dialog," which is available for hierarchical columns only.

Name of Group or Calculated Item

Click the link for a group or calculated item to display one of the following dialogs: "Edit Group dialog" or "Edit Calculated Item dialog."

Selection Step Toolbar

The selection step toolbar is the collection of buttons that displays when you hover over a selection step within the list of steps. It can include the following buttons:

- **Edit** — Displays the dialog where you can edit the step. For a "Start with" step, this is the only button available.

- **Move Up** — Moves this step one level up in the list of steps.

- **Move Down** — Moves this step one level down in the list of steps.

- **Delete** — Deletes this step from the list of steps.

Set User dialog

Use this dialog to search for and select a user. For example, in a Scorecard, you use this dialog to select the user to assign as a business owner to Scorecard objects such as KPIs, initiatives, and strategy objectives. In an agent, you use this dialog to select the user whose credentials you want to use to send the delivery content.

For more information, see:

- "Agent editor: General tab"

- "Creating Initiatives"

- "Creating Objectives"

- "KPI Watchlist editor: Details tab"

This dialog is also displayed as:

Business Owner dialog
Select Business Owner dialog
Select User dialog
Select User to Run Crawl As dialog
Select Key Resource User dialog

Components

Name

Use this field to enter your search criteria. For example, enter the user's first name to display a list of users with that first name.

Search

Use this button to display the accounts that satisfy the name search criteria that you entered.

Accounts

Displays the list of accounts that satisfy the name search criteria that you entered. You can then select the name that you want.

Settings dialog

Use this dialog to:

- Define the score thresholds and assessment ranges to be used for scoring scorecard objects
- Set up the controls for dimensions in the point of view area of a scorecard
- Customize watchlist styles used in the scorecard.

For more information, see:

- "Understanding Initiative or Objective Performance Assessment"
- "Defining Assessment Mappings for Scorecards"
- "About the Point of View Area"

Components

Assessment Mappings
Use the "Settings dialog: Assessment Mappings tab" to define the score thresholds and assessment ranges to be used for scoring scorecard objects.

Dimension Settings
Use the "Settings dialog: Dimension Settings tab" to set up the controls for dimensions in the point of view area of a scorecard.

Watchlist Styles
Use the "Settings dialog: Watchlist Styles tab" to customize and format watchlist styles used in scorecards.

Settings dialog: Assessment Mappings tab

Use this tab of the "Settings dialog" to define the score thresholds and assessment ranges to be used for scoring scorecard objects.

For more information, see:

- "Understanding Initiative or Objective Performance Assessment"
- "Defining Assessment Mappings for Scorecards"

Components

Score Threshold

Use this field to enter the numeric values that set the boundaries for the assessment ranges.

For example, you might enter 33 and 66 to set the boundaries for three assessment ranges — Critical, Warning, and OK. Any KPI score from 0 to 33 would fall in the Critical assessment range, any KPI score from 34 to 66 would fall in the Warning assessment range, and any KPI score from 66 to 100 would fall in the OK assessment range.

Assessment Range

Use this field to enter the name of each assessment range (for example, Acceptable).

Icon

Use this button to display the "Replace Icon dialog," where you select the icon to represent each assessment range.

Color

Use this button to display the color dialog, where you select the color to represent each assessment range.

Threshold Menu

Displays the following options:

- **Remove Range** — Use this option to remove a score threshold and its corresponding assessment range.
- **Add Above** — Use this option to add a score threshold and its corresponding assessment range above the current score threshold.
- **Add Below** — Use this option to add a score threshold and its corresponding assessment range below the current score threshold.

Add Threshold

Use this button to add a score threshold and assessment range below the last score threshold.

Score Decimal Places

Use this box to specify the number of decimal places to include in scores. (Note that when a score is displayed in a gauge, the decimal places are not included.)

Settings dialog: Dimension Settings tab

Use this tab of the "Settings dialog" to set up the controls for dimensions in the point of view area of a scorecard.

For more information, see:

- "About the Point of View Area"
- "Setting Up the Point of View Controls"

Components

Dimensions Settings

Displays all the dimensions that are referenced by KPIs in a scorecard and shows their current settings. Use this area to set up the controls for the dimensions.

To set up the control for a dimension, select the dimension and then click the **Edit Row** button to display the "Edit Dimension Settings dialog."

Settings dialog: Watchlist Styles tab

Use this tab of the "Settings dialog" to customize and format watchlist styles scorecard.

For more information, see:

- "About the Point of View Area"
- "Setting Up the Point of View Controls"

Components

Preset Styles

Use the drop down list to choose from various preset styles that is compatible with the organization's color schemes.

Show Object Type Icon

Check this box to display the node type icon (KPI, Objective, or Initiative icon) in front of the node name in the Label field.

Enable Alternate Row Styling

Check this box to enable alternate row styling.

View

Use the drop down list to show more columns or change column labels.

Editing Icons

Use the following editing icons to customize the rows or cells in the watchlist:

- Edit Styles
- Paste Styles From ....
- Paste Styles to Entire Row

> **Note:** After you click on Paste Styles From… icon for a cell, you must then click on a different cell in the styles table to choose the cell whose styles you wish to copy.

Cell Types

Use the editing icons to customize the following cell (row or column) types:

- Summary - Information displayed above watchlist table

  Only the Edit Styles and Paste Styles From ... icons are available for the Summary type

- Header rows
- Body rows
- Alternate body rows- If the Enable Alternate Row Styling box is checked.
- Selected (clicked on) row- Only the Edit Styles and Paste Styles From ... icons are available

Settings pane

Use this pane to set the thresholds that are to be displayed in a funnel graph or gauge.

Each threshold has a high and a low and is associated with a color in which the range identified by the threshold is displayed in the gauge, such as green for acceptable, yellow for warning, and red for critical.

For more information, see:

- "Results tab: Funnel editor"
- "Results tab: Gauge editor"

This pane is part of the "Results tab: Funnel editor" and the "Results tab: Gauge editor."

Components

High values are desirable

Use this box to specify whether the high values are the desirable goal. Selecting this box lists the statuses in order from the most desirable indicator (for example, Excellent) at the top to the least desirable indicator (for example, Warning) at the bottom.

Low values are desirable

Use this box to specify whether the low values are the desirable goal. Selecting this box lists the statuses in order from the least desirable indicator (for example, Warning) at the top to the most desirable indicator (for example, Excellent) at the bottom.

Threshold

Use this list to specify the data values in a gauge that highlight a particular range of values. The values must be between the minimum and the maximum values set for the gauge limits. The range identified by a threshold is filled with a color that is different from the color of other ranges.

To specify a data value, you can either:

- Enter a static value directly in a Threshold field.
- Click the **Threshold Options** button to set the value based on a measure column, a variable expression, or the results of a SQL query.

Threshold Options

Displays these options to set a threshold:

- *Measure column* — Use this option to use the measure column.
- **Dynamic** — Use this option to let the system determine the threshold value.
- **Custom Value** — Use this option to enter a specific value.

  If you select this option and then:

  – Click elsewhere on the pane without entering a value, the value of the **Threshold** field reverts to the previous value

  – Enter an invalid value in **Threshold** field, the value is cleared so that you can enter a new value

- **Variable Expression** — Use this option to display the "Enter Expression dialog," where you specify a variable expression.

- **SQL Query** — Use this option to display the "Enter Expression dialog," where you specify a SQL query.

- **Remove** — Use this option to remove the threshold.

- **Add Above** — Use this option to add a threshold row above the current row.

- **Add Below** — Use this option to add a threshold row below the current row.

Status

Use this list to specify the label for each range identified by a threshold and the color in which the range is to be displayed in the gauge. Use the **Status Options** button to specify a label and the **Color** button to specify a color for each range.

Status Options

Displays the following options:

- **Threshold Values** — Use this option to use the current threshold values as the label for the range. The **Status** box is disabled when you select this option.

- **Specify Label** — Use this option use text that you specify as the label for the range, for example **Excellent**. After selecting this option, enter the text in the **Status** box.

Color

Displays the Color Selector dialog, where you select the color for the range that is identified by the threshold.

First Stage x final stage target value

This field is available only for last-stage only funnel graphs.

Use this box to enter the factor required to meet the target. In a last-stage only funnel graph, the target value of all the stages before the last are calculated based on the last stage target value and this target factor.

Add Threshold

Use this button to add a new threshold row.

Delete Threshold

Use this button to delete a threshold row.

Show More Columns dialog

Use this dialog to add or remove columns that display data such as the status, trend, target, and variance of KPIs on a KPI Watchlist, perspective, initiative, or objective. This enables you to customize the KPI data displayed by specifying visible columns.

For information about KPIs, see:

- "KPI Watchlist editor: Performance tab"
- "Analytics pane"
- "Scorecard editor: Perspective tab"

Components

Available Columns

Displays all of the columns that you can select to present a wide variety of data for the KPIs that evaluate the initiative. Table D–7 describes some of the commonly used columns.

To display additional columns to present more KPI data on the initiative, select the columns individually or as groups by pressing Shift or Ctrl, and then click **Move**. To display all KPI data available, click **Move All**.

Visible Columns

Displays the columns that are currently visible. To remove columns, select them individually or in groups by pressing Shift or Ctrl, and click **Remove**. To remove all KPI data displayed, click **Remove All**.

Move

Use this button to display a column that you select in the **Available Columns** pane.

Move All

Use this button to display all available columns.

Remove

Use this button to hide a column that you select in the **Visible Columns** pane.

Remove All

Use this button to not display any KPI data on the initiative.

Notes

Table D–7 lists and describes the some of the commonly used KPI data columns.

Table D–7   Commonly Used KPI Data Columns

Column	Description
Change	If you enabled trending, displays the amount by which the KPI's current actual value differs from the actual value of the previous period.
	For example, if the actual value of KPI for "Annual Number of Sales" is 2000 and was 1850 last year, the change is 150.

Table D–7   (Cont.) Commonly Used KPI Data Columns

Column	Description
% Change	If you enabled trending, displays the percent by which the KPI's current actual value differs from the actual value of the previous period.
	For example, if the actual value of KPI for "Annual Number of Sales" is 2000 and was 1850 last year, the change percent is 7.5%.
Data Type	Displays the data type of the KPI values that are stored in the database, for example, integer or percentage.
Formatting	Displays the KPI's raw actual and target values in the formatting for the unit that quantifies the values, such as dollars or days.
Label of Node	Displays the KPI's descriptive name that was specified in the "Add KPI dialog."
Last Run	Displays the date on which KPI value calculations were performed by the backup server.
Score	Displays the KPI value after it was converted from its original scale (a value between 1 and 50, for example) to a standard scale (values between 1 and 100) so that you can compare it with other KPI values.
	For example, assume that you want to use a scale of 0-100 to assess two KPIs. The first KPI is expected to have a value between 0 and 10. It collects a value of 3. The second KPI is expected to have a value between 0 and 1000. It collects a value of 800. To evaluate this data as x% or 100, the Score feature converts the KPI values to one between 1 and 100. Accordingly, the first KPI is multiplied by 10 (30) and that of the second KPI is divided by 10 (80).
Owner	Displays the user ID of the person responsible for managing the KPI.
Status	Indicates the performance level of the KPI determined by comparing its actual value with its target.
	If you own the KPI, you can right-click to override its status.
Target	Displays the KPI's desired value.
Target (Unformatted)	Displays the KPI's raw target value. For example a target value of 134500 dollars would be formatted as $134,500.00.
Trend	Indicates whether KPI performance has improved or declined, is good or bad, or has remained the same. Trend is a separate calculation that involves both the point of view and the **Compare to Prior** time grain setting (for example quarter, month, or year). The actual value is determined by the point of view. The trend calculation looks at the actual value for point of view time and compares it with the previous time period at the **Compare to Prior** time grain defined in the "KPI editor: General Properties page." For example, if the **Compare to Prior** time grain is set to quarter and if you choose 4Q2011 (fourth quarter of 2011) in the point of view, then that KPI's trend would look at the difference between 4Q2011 and 3Q2011, to determine the appropriate symbol (for example, a green up arrow or a red down arrow) to display for trend. See "Trend" for trend symbols and their descriptions.
Value	Displays the KPI's current value.
Value (Unformatted)	Displays the raw KPI value. For example a value of 450019 dollars would be formatted as $4,500.19.

Table D–7   (Cont.) Commonly Used KPI Data Columns

Column	Description
Variance	Displays the value by which the KPI's actual value differs from its target value. For example if the actual value for a Net Profit KPI is 600,000 and its target is 650,000, then the variance is -50,000.
% Variance	Displays the percent by which the KPI's actual value differs from its target value. For example if the actual value for a Net Profit KPI is 600,000 and its target is 650,000, then the variance as a percent is -7.7%
Weight	If you evaluate initiative performance by assigning weights to individual KPIs, then this displays these individual weights. If you do not enter weights that add to 100% Oracle Scorecard and Strategy Management does it for you. The weight for each KPI is used with its normalized assessment value to determine the performance of the objective or initiative.The normalized assessment value is compared against the assessment ranges in the "Settings dialog: Assessment Mappings tab." The range that contains the normalized assessment value is found and that determines the objective's status.

Sign In page

Use this page to sign in to Oracle Business Intelligence. You might not be prompted to enter values in all fields of this page, if you have already signed on using single sign-on (SSO).

For more information, see:

■ "Signing In to Oracle BI Enterprise Edition"

■ "Signing Out of Oracle BI Enterprise Edition"

■ "Introduction to Oracle BI Enterprise Edition"

Components

User ID
Use this field to enter your user ID.

Password
Use this field to enter your password.

Sign In
Use this button to sign in to Oracle Business Intelligence with the credentials you have entered.

Accessibility Mode
Use this box to specify whether content for Oracle BI EE is rendered in a browser in a way that facilitates the use of a screen reader.

If you select this box, then:

■ The "BI Composer wizard" in accessibility mode will be used as the analysis editor (rather than the "Analysis editor"). For more information on BI Composer, see "Using BI Composer to Work with Analyses." For more information on the Analysis editor, see "What Is the Analysis Editor?"

■ This setting overrides the setting for accessibility mode in the "My Account dialog: Preferences tab" for the current session, only.

For information, see Appendix B, "Accessibility Features."

Language
Use this box to select the language in which you want to display the user interface. The language that you choose overrides the language preference that you specified in the "My Account dialog: Preferences tab" for the current session, only. Note that changing the language for the current session does not change the locale for the session.

Smart Watchlist Properties dialog

Use this dialog to specify:

- How the Filter pane in a smart watchlist is to be displayed

- The amount of indentation, in pixels, for hierarchical objects that are listed in a smart watchlist

  Indentation is used in the Label column of a smart watchlist to indicate hierarchies where it makes sense based on the filter criteria. Indentation does not make sense and is not used if, for example, the filter criteria is to show the top 10 KPIs based on best performance (% variance).

  Objects in the smart watchlist are shown in hierarchical order with indentation only if there is no sort column in effect and if, on the "Filter pane: Performance tab," you have selected **All** based on **Status** or **Score**.

  Indentation does not show the exact levels of descendants because some levels may be excluded, depending on the filter criteria. For example, you may see something like this:

```
Patriarch
    Son
        Great-great-grandson
Matriarch
    Great-great-granddaughter
```

For more information, see:

- "Scorecard editor: Smart Watchlist tab"

- "What Are Smart Watchlists?"

Components

Filter Criteria Display

Displays the following options that allow you to specify how the Filter pane on the smart watchlist is to be displayed:

- **Control Panel** — Use this option to display the Filter pane as a tabbed control that includes the Relationship, Type, Perspective, Performance, and Ownership tabs.

- **Text Summary** — Use this option to display the Filter pane as a read-only summary of the current filter criteria.

- **None** — Use this option to hide the Filter pane.

Hierarchical Node Indent

Use this field to specify the amount of indentation, in pixels, for hierarchical objects that are listed in the smart watchlist.

Sort dialog

Use this dialog to specify the sort order of data within a graph, heat matrix, pivot table, table, or trellis view. This dialog is displayed after selecting the **Sort** interaction from the right-click menu. The interactions that are available in the Sort dialog depend on the type of data view (for example, graph or table), and the location in which you right-click from within the view. For graph views, the interactions are further dependent upon the graph type, such as bar, line, or pie.

> **Note:** You cannot sort on data markers for scatter or bubble graphs. Additionally, you cannot sort on bars, lines, or group labels within a pareto graph.
>
> The graph must contain at least one dimension column on which to sort.

For more information, see:

- "Click Interactions in Views"
- "Right-Click Menu for Data Views"
- "Sorting Data in Views"

Components

Sort Colors

Use this area to sort the values in area, bubble, and scatter graphs by color (for example, sort by revenue for the year 2008).

Sort Columns

Use this area to sort the values in heat matrix, pivot table, and trellis views on criteria columns.

Sort Groups

Use this area to sort the values in bar, line, area, line-bar, time series, and pareto graphs by groups (for example, sort by revenue for the Americas).

Sort Prompts

Use this area to sort on the column prompt for graph, heat matrix, pivot table, table, treemap, and trellis views.

Sort Radar Sections

Use this area to sort the values in radar graphs by the radar section.

Sort Rows

Use this area to sort the values in heat matrix, pivot table, and trellis views on row edges.

Sort Sections

Use this area to sort on the column section for graph, heat matrix, pivot table, table, treemap, and trellis view types.

Sort Slices

Use this area to sort the values in pie graphs by the pie slice.

Sort by Column

Use this list to select an initial column on which to sort member data.

then by Column

Use this list to select a secondary or tertiary column on which to sort member data.

Sort Order

Use this list to specify how member data is sequenced. Depending on the view, one or more of the following options is displayed.

- **A to Z** — Use this button to sort the values in attribute or hierarchical columns in ascending sequence.

- **Z to A** — Use this button to sort the values in attribute or hierarchical columns in descending sequence.

- **Low to High** — Use this button to sort the values in measure columns from the lowest to the highest values.

- **High to Low** — Use this button to sort the values in measure columns from the highest to the lowest values.

- **Earliest to Latest** — Use this button to sort the values in date columns from the earliest to the latest dates.

- **Latest to Earliest** — Use this button to sort the values in date columns from the latest to the earliest dates.

Toolbar

This toolbar contains the following buttons:

- **Add Sort** — Use this button to add a sort value to the view.

- **Move Up** — Use this button to move a sort value up in a list for a view.

- **Move Down** — Use this button to move a sort value down in a list for a view.

- **Clear Sort** — Use this button to remove the selected sort value from a view.

- **Clear All Sorts in Edge** — Use this button to remove all sort values from the area (for example, **Sort Colors**) for the view. Each area must be cleared separately to remove all sorts.

Status Override dialog

Use this dialog to:

- Override the status of an initiative, objective, or KPI for the current point of view. (See "About the Point of View Area" for additional information on the point of view.)

- Cancel an override

For more information, see:

"About Status Overrides"
"Working with Status Overrides"

Components

New Status
Use this box to select the new status to apply or to select **Cancel Override** to cancel an override.

Reason
Use this box to enter the reason for the override or the cancellation of the override.

History
Displays any overrides that previously have been applied to the initiative, objective, or KPI for the current point of view as well as any cancellations.

To expand or collapse the History area, click the **Expand All** or **Collapse All** button.

Strategy Map tab: Details tab

Use this tab of the "Scorecard editor: Strategy Map tab" to specify supporting information for the strategy map.

For more information, see:

- "What Are Strategy Maps?"
- "Creating Strategy Maps"

Components

Name
Displays the name of the strategy map.

Description
Use this field to enter a description of the strategy map.

Business Owner
Displays the user ID of the person responsible for managing the strategy map. To specify the business owner, click the **Set User** button to display the "Business Owner dialog," where you can search for and select the business owner.

Objectives and KPIs
Use this watchlist to view and manage the objectives and KPIs that are displayed in the strategy map.

See "Watchlists" for additional information.

Related Documents
Use the "Related Documents area" to view and manage documents that provide supporting information to the strategy map.

Strategy Map tab: Diagram tab

Use this tab of the "Scorecard editor: Strategy Map tab" to create a diagram that shows how objectives that have been defined for a scorecard and the KPIs that measure their progress are aligned by perspectives. It also shows cause and effect relationships between objectives.

For more information, see:

- "What Are Strategy Maps?"

- "Creating Strategy Maps"

Components

Diagram

Use this area to drag and drop objectives and KPIs to show how they are aligned by perspectives.

Each node (that is, the representation of an objective or KPI) on the diagram shows the status of the objective or KPI by displaying the icon and color that represents the assessment range. A KPI node also displays the actual value of the KPI and the percent variance from the target.

If a cause and effect relationship exists between two objectives, a line connects the two objectives to indicate the relationship.

To:

- Display options that allow you to work with a node, click the **Options** button (on the right side of the node) to display the "Node Options Menu."

- Edit a causal linkage, right-click the linkage line and select **Edit Causal Linkage**. The "Causal Linkage dialog" is displayed.

- Delete a causal linkage, right-click the linkage line and select **Delete Causal Linkage**.

- Display additional performance data for the KPI, such as target value or variance, click the down arrow at the bottom center of the representation. To collapse this data, click the up arrow.

- Zoom in and out of the diagram or to add a cause and effect relationship between two objectives, use the toolbar buttons on the "Scorecard editor: Strategy Map tab."

- Work with comments (if any), click the **Comment** button in the upper-right corner of a node to display the "Status window," where you can read the comments that previously have been added, add another comment, or reply to a comment. See "About Comments" for additional information.

- Work with status overrides (if any), click the red asterisk in a node to display the "Status window," where you can view the overrides that previously have been applied or apply another override. See "About Status Overrides"or additional information.

- View a KPI contribution wheel diagram, right-click a KPI and select **View KPI Contribution Wheel**. See "About KPI Contribution Wheel Diagrams" for additional information.

Legend

Use the "Legend pane" to view the legend for the strategy map.

Strategy pane

Use this pane to create and manage the objectives that form your corporate strategy

For more information, see:

- "What Are Objectives?"
- "Creating Objectives"
- "What Are Strategy Trees?"
- "What Are Cause & Effect Maps?"

This pane is part of the "Scorecard editor."

Components

Strategy Tree

Displays the objectives that have been defined for the scorecard and the KPIs that measure their progress and performance hierarchically. It also shows the statuses of objectives and KPIs using the appropriate colors and symbols that you specified for assessment mappings. See "Defining Assessment Mappings for Scorecards" for additional information on assessment mappings.

Toolbar

This toolbar contains the following buttons:

- **Create Objective** — Use this button to display the "Scorecard editor: Objective Details tab," where you create an objective as a child of the selected objective.

- **Open** — Use this button to open the selected object for editing or viewing, depending on the current mode.

- **Delete** — Use this button to delete the selected object and all of its descendants (if any), if you have the appropriate permission.

- **View Strategy Tree** — Use this button to display the strategy tree for the selected object.

- **View Cause & Effect Map** — Use this button to display the cause & effect map for the selected object.

Right-Click Menu for an Object

Displays options for working with an object. See "Right-Click Menu for Objects in the Initiatives Pane and Strategy Pane" for additional information.

Strategy Tree tab: Details tab

Use this tab of the "Scorecard editor: Strategy Tree tab" to specify supporting information for the strategy tree.

For more information, see:

- "What Are Strategy Trees?"
- "Creating Strategy Trees"

Components

Name
Displays the name of the strategy tree.

Description
Use this field to enter a description of the strategy tree.

Business Owner
Displays the user ID of the person responsible for managing the strategy tree. To specify the business owner, click the **Set User** button to display the "Business Owner dialog," where you can search for and select the business owner.

Objectives and KPIs
Use this watchlist to view and manage the objectives and KPIs that are displayed in the strategy tree.

See "Watchlists" for additional information.

Related Documents
Use the "Related Documents area" to view and manage documents that provide supporting information to the strategy tree.

Strategy Tree tab: Diagram tab

Use this tab of the "Scorecard editor: Strategy Tree tab" to view an objective and its supporting child objectives and KPIs hierarchically in one of the following types of diagram:

- Strategy tree diagram

- Strategy contribution wheel diagram

For more information, see:

- "What Are Strategy Trees?"

- "Understanding a Strategy Tree Diagram"

- "Understanding a Strategy Contribution Wheel Diagram"

- "Creating Strategy Trees"

Components for the Strategy Tree Diagram

Diagram
Displays a tree diagram for the objective.

To:

- Display options that allow you to work with a node, click the **Options** button (on the right side of the node) to display the "Node Options Menu."

- Display additional performance data for a KPI, such as target value or variance, click the down arrow at the bottom center of the node. To collapse this data, click the up arrow.

- Expand or collapse a node, click the plus (+) or minus (-) icon beneath the node.

- Zoom in and out of the diagram, use the toolbar buttons on the "Scorecard editor: Strategy Tree tab."

- Work with comments (if any), click the **Comment** button in the upper-right corner of a node to display the "Status window," where you can read the comments that previously have been added, add another comment, or reply to a comment. See "About Comments"for additional information.

- Work with status overrides (if any), click the red asterisk in a node to display the "Status window," where you can view the overrides that previously have been applied or apply another override. See "About Status Overrides"for additional information.

- Change the type of diagram to a strategy contribution wheel diagram, right-click in the background outside the tree and select **View as Wheel Diagram** or click the **Wheel Diagram Type** toolbar button in the "Scorecard editor: Strategy Tree tab."

- View a KPI contribution wheel diagram, right-click the KPI and select **View KPI Contribution Wheel** from the context menu (see "About KPI Contribution Wheel Diagrams" for additional information). Note that you can also click the **Options** button on the right side of the node and select **View KPI Contribution Wheel** from the "Node Options Menu."

Bird's-eye View

Displays an overhead view of the tree diagram. The white box focuses on the nodes that are currently in view in the diagram area.

If (and only if) all of the nodes do not fit in the content pane, then you can drag the white box to scroll the diagram.

Components for a Strategy Contribution Wheel Diagram

Information Pane

Displays information about the current node (that is, the node over which the mouse pointer is hovered or, if the mouse pointer is not hovering over a node, the selected node, which has a dark outline).

To change the location of the Information Pane, drag it to the desired location. This location is only temporary and will not be saved.

Diagram

Displays a strategy contribution wheel diagram for the objective.

To:

- Display information specific to a node (such as the weight assigned to it in its parent's assessment rule), hover the mouse pointer over the node.

- Display options that allow you to work with a node, right-click the node to display the "Node Options Menu." For example, you can change the focus of the wheel using the **Focus on** *Node* and **Focus up to** *Node* options.

- Change the focus of the wheel down to a descendant, double-click the descendant node.

- Zoom in and out of the diagram or set properties for the strategy tree, use the toolbar buttons on the "Scorecard editor: Strategy Tree tab."

- Drill to the next level or collapse a level, hover the mouse pointer over the concentric rings on the outer border of the wheel and click the **Drill to next level** or **Collapse Level** triangle.

- Expand or collapse a node or group of nodes that appear as slivers (that is, appear very thin) in the diagram, click the **Expand Section** triangle or the **Collapse Section** triangle that displays when you hover over it.

- Work with comments (if any), click the **Comment** button in a node to display the "Status window," where you can read the comments that previously have been added, add another comment, or reply to a comment. See "About Comments" for additional information.

- Work with status overrides (if any), click the white dashed line around the border of a node to display the "Status window," where you can view the overrides that previously have been applied or apply another override. See "About Status Overrides" for additional information.

- Change the type of diagram to a strategy tree diagram, right-click in the background outside the wheel and select **View as Tree Diagram** or click the **Tree Diagram Type** toolbar button in the "Scorecard editor: Strategy Tree tab."

- View a KPI contribution wheel diagram, right-click a KPI and select **View KPI Contribution Wheel**. See "About KPI Contribution Wheel Diagrams" for additional information.

Focus trail

Displays a group of small circles that represent the node in the center of the strategy contribution wheel and any of its ancestors that are included in the diagram.

Use the focus trail to change the focus of the strategy contribution wheel up to an ancestor by double clicking the circle that represents the desired ancestor.

Node Options Menu

The Node Options menu is displayed from the Options button on a node (that is, a representation of an objective or KPI) in a view diagram. The options that are available depend on the type of view and can include the following:

- **Action Links** — Displays the action links that are available for the current status of the objective or KPI. Click a link to execute the action.

- **Add Comment** — Use this option to display the "New Comment dialog," where you add a comment to the objective or KPI.

- **Add Related Strategy Nodes** — Use this option to add to the diagram objectives that are related to this objective (that is, are linked by cause or effect).

- **Analyze** — This option is available only for a KPI. Use this option to create an analysis based on the KPI. The analysis is automatically saved in the catalog in the My Folders/Drills folder.

  > **Note:** Because the My Folders/Drills folder is used for temporary storage, the analysis might not persist after the Oracle Business Intelligence session ends. To preserve the analysis, copy it to another directory. For example, to preserve an analysis that you plan to use in a shared dashboard, copy it to a folder in /Shared Folders.

- **Contact Owner** — Use this option to display the "Contact Owner dialog," where you can contact the business owner of the objective or KPI.

- **Drill Down** — This option is available only in strategy tree diagrams. Use this option to move the focus on this node and expand the node to show its children.

- **Drill Up** — This option is available only in strategy tree diagrams. Use this option to collapse the node and move the focus to the parent node.

- **Focus on** *Node* — This option is available in strategy contribution wheel diagrams and strategy trees. Use this option to change the focus (that is, the center node) of the strategy contribution wheel or the strategy tree to the *Node* identified in the option. For example, right-clicking a node that represents the Broaden Sales Channels objective and selecting **Focus on Broaden Sales Channels** changes the center node to the Broaden Sales Channels objective.

- **Focus up to** *Node* — This option is available in strategy contribution wheel diagrams and strategy trees. Use this option to change the focus of the strategy contribution wheel or strategy tree up to the *Node* identified in the option (that is, to an ancestor of the current node). For example, if the center node represents the Broaden Sales Channels objective, right-clicking the center node and selecting **Focus up to Expand Market Share** changes the center node to the Expand Market Share objective (an ancestor of the Broaden Sales Channels objective).

- **Hide** — This option is available only for cause & effect maps. Use this option to hide the node on the diagram.

  You might, for example, want to hide some nodes so that you can view only the nodes for which you are the business owner.

  To hide multiple nodes at one time, click the **Cause and Effect Map Preferences button** on the cause & effect map toolbar to display the "Cause & Effect Map Preferences dialog: Hidden Nodes tab."

- **Open** — Use this option to display the objective or KPI for editing or viewing, depending on the current mode.

- **Override Status** — Use this option to display the "Status Override dialog," where you override the status of the objective or KPI.

- **Pin to** *Value* **and Explore** *Dimension* — This option is available only for KPI contribution wheels. Use this option to change the focus of the KPI contribution wheel to a different dimension's node identified in the option (that is, a different dimension than that of the current node).

- **Remove From Diagram** — Use this option to remove the objective or KPI from the diagram.

- **Show Hidden Causes** — This option is available only for cause & effect maps. Use this option to show any causes that were hidden on the diagram.

  To show multiple hidden nodes at one time, click the **Cause and Effect Map Preferences button** on the cause & effect map toolbar to display the "Cause & Effect Map Preferences dialog: Hidden Nodes tab."

- **View KPI Contribution Wheel** — This option is available in any scorecard view that contains a KPI node, such as strategy tree diagrams, strategy contribution wheel diagrams, smart watchlists, and KPI watchlists. Use this option to view a KPI contribution wheel. See "About KPI Contribution Wheel Diagrams" for additional information.

The right-click menu of an objective and KPI also contains these options. See "Right-Click Menu" for specific information regarding context menu options for a KPI contribution wheel.

Strategy Tree View Properties dialog

Use this dialog to set properties that control the appearance of the diagrams for a strategy tree.

For more information, see:

- "Strategy Tree tab: Diagram tab"
- "What Are Strategy Trees?"
- "Creating Strategy Trees"

Components

Size Diagram to Fit

Use this box to specify whether to resize the strategy tree diagram automatically to fit the available space (for example, when the window is resized).

Use Drop Shadows on Node Labels

Use this box to specify whether to use drop shadows on node labels. Drop shadows are dark shadows around the label text that help to distinguish the text from its background.

Use Gradient for Background Color

Use this box to specify whether the background color is to gradually fade (starting at the top of the diagram) to the specified gradient color.

Background Color

Use this box to specify the background color of the diagram.

Gradient Color

This box is available only if **Use Gradient for Background Color** is selected.

Use this box to specify the color to which the specified background color is to fade.

Node Label Color

Use this box to specify the color to be used for the node labels.

Fill Sectors with Status Color

Use this box to specify whether sectors in a strategy contribution wheel diagram are to be filled with the status color or whether only the outer sector edge is to be filled with the status color.

Show Information Pane

Use this box to specify whether the Information pane in a strategy contribution wheel diagram is to be displayed.

Show Focus Trail

Use this box to specify when the focus trail is to be displayed in a strategy contribution wheel diagram. The options are:

- **Always** — Select this option to always show the focus trail.

- **If Focus Down** — Select this option to specify that the focus trail is to be shown only when the focus of the strategy contribution wheel is moved down to a descendant.

- **Never** — Select this option to never show the focus trail.

Behind the Wheel Color

Use this box to specify the color for the area of the strategy contribution wheel behind the sectors.

Style and Conditional Formatting dialog

Use this dialog to format the elements of a graph, such as bars and lines.

For more information, see:

- "Formatting the Visual Appearance of Graphs"

Components

Positional
Use the "Style and Conditional Formatting dialog: Style Formatting tab" to format a graph based on the position of graph elements.

Conditional
Use the "Style and Conditional Formatting dialog: Conditional Formatting tab" to format a graph based on conditions applied to columns.

Style and Conditional Formatting dialog: Conditional Formatting tab

Use this tab of the "Style and Conditional Formatting dialog" to format a graph based on conditions applied to columns.

For more information, see:

- "Formatting the Visual Appearance of Graphs"

Components

Column tabs

Displays tabs for each column to which you can add conditions. Click a column tab to display the conditions that are currently defined for the column. You can modify a condition using its Condition toolbar.

Add Condition Format

Use this button to add a condition. This button first displays a list of the columns to which you can apply conditional formatting and then, when you select a column, the "New Condition dialog," where you define the condition to add.

Clear All

Use this button to delete all conditions on the current column tab.

Condition Toolbar

The condition toolbar is the collection of components that displays to the right of a condition. It includes the following components:

- **Edit**— Use this button to display the New Condition dialog, where you edit the condition.

- **Color** — Use this box to display the Color Selector dialog, where you select the color to be applied to the column values that meet the condition.

- **Delete**— Use this button to delete the condition.

Style and Conditional Formatting dialog: Style Formatting tab

Use this tab of the "Style and Conditional Formatting dialog" to format a graph based on the position of graph elements.

For more information, see:

- "Formatting the Visual Appearance of Graphs"

Components

Graph Element Tabs

Displays tabs for each graph element to which you can apply formatting. Click a column tab to display the positions that are currently formatted.

Custom Formatted Positions

Displays the positions that have been formatted for the element.

To specify a color for a position, click the down arrow in color box to display the Color Selector dialog.

> **Note:** If you specify 0 for the width of a line, then the legend marker changes from the default line marker to symbol markers for the line and for other lines in the graph (for example, the symbol markers are shown as the legend markers for all the lines in the graph).

Add new position

Use this button to add a new position entry to the Custom Formatted Positions table.

Remove selected position

Use this button to remove the selected position entry in the Custom Formatted Positions table. To select an entry, click the first column in the entry row.

Styles pane

Use this pane to:

- Select the size of a performance tile.

- Select a theme.

For more information, see:

- "Editing Performance Tile Views"

Components

Tile Size Options

- **Small** — Use this option button to specify a small size performance tile.

- **Medium** — Use this option button to specify a medium size performance tile.

- **Large** — Use this option button to specify a large size performance tile.

- **Custom** — This option button is selected if you have explicitly entered a size by using the "Performance Tile Properties dialog."

> **Note:** You can further customize the tile by defining a background or border color by using the "Performance Tile Properties dialog." Only one custom style can exist for each discrete tile.

Themed Tile

Select a themed tile to apply that style to your performance tile.

Subject Areas pane

Use this pane to:

- Select the columns and members to add to an analysis.

- Select the column to use when you create or edit a named filter.

- Initiate a search within the subject areas that are displayed in the Subject Areas pane.

- Change the sort order of subject area folders and objects within the subject area folders.

- Add or remove subject areas that are related to the primary subject area that you have selected. You select a primary subject area when you create an analysis or a new named filter. (Only related subject areas that you have permission to access are available for you to add.)

- Refresh the columns that display in the subject area or refresh the subject area's metadata after the administrator made changes to the columns in the repository.

- View the metadata dictionary information for a selected subject area, folder, column, or hierarchy level.

For more information, see:

- "What Are Subject Areas and Columns?"

- "Specifying the Criteria for Analyses"

- "Creating Column Filters"

- "Viewing Metadata Information from the Subject Areas Pane"

This pane is part of all the tabs of the "Analysis editor" and part of the "Filter editor."

Components

Subject Area Tree

Displays the primary subject area and any related subject areas that you have added.

Use this tree to:

- Expand and collapse a folder to show the folder's columns.

  In addition, when the Subject Areas pane is displayed in the:

  - "Analysis editor: Criteria tab," you can expand a hierarchical column to show its levels.

  - "Analysis editor: Results tab," you can expand a column to show its members. (You cannot show its members in the Criteria tab.)

  If tooltips have been configured in the Oracle BI Presentation Services Administration page, then you can hover over a column name and see its description.

- Select the columns and members to add to an analysis. You can add a column or a member to an analysis in one of two ways:

  - Double-click the column to display it in the "Selected Columns pane" or the Results tab.

- Drag and drop the column to the Selected Columns pane.

  For tasks that allow you to select more than one column, you can press Ctrl+Click to select multiple columns or Shift+Click to select a range of columns and then drag and drop those multiple columns at once.

  You cannot select levels of a hierarchical column; you can select only the entire column.

- Select the column to use when you create or edit a named filter. To do so, double-click the column to display the "New Filter dialog," where you create the filter based on the selected column.

Toolbar

The toolbar contains the following buttons:

- **Search** — Use this button to display the *Search* field, where you can initiate a search within the subject areas that are displayed in the Subject Areas pane. The results of the search include subject areas, columns, and folders. For example, if you enter time, the search results show all subject areas, columns, and folders that include "time" in their name.

  You can use:

  - The percent sign (%) as a wildcard.

  - The **Sort Subject Area** toolbar button to sort the results.

  - The **Refresh** toolbar button to clear the results.

  - The tooltip to see which subject area a column or folder belongs.

- **Sort Subject Area** — Use this button to sort the subject areas and objects within the subject areas for this analysis. See "Changing the Sort Order of Subject Areas and Subject Area Folders," for additional information. To change the subject area sort order for all analyses, select an option from the Subject Area Sort Order list in the "My Account dialog: Preferences tab."

- **Add/Remove Subject Areas** — This button is available only if one or more related subject areas are available and you have permission to access them. Use this button to display the "Add/Remove Subject Areas dialog," from which you can add or remove related subject areas.

- **Refresh** — Clicking this button executes the default behavior of **Refresh Display**. Clicking the arrow beside the button enables you to select one of the following options:

  - **Refresh Display** — Use this option to refresh the subject area view without refreshing the Oracle BI EE server cache. Use this option when the subject area does not contain the columns that you expect to see. If you use this option and the expected columns still do not display, then use the **Reload Server Metadata** option.

  - **Reload Server Metadata** — Use this option to reload the subject area's metadata when you know that the administrator has built new metadata in the repository or if after you use the **Refresh Display** option and the subject area display still does not contain the columns that you expect to see in the subject area. For example, if the administrator added a new measure column to the repository metadata, then you would not see it in the subject area until after you reloaded the metadata. The administrator cannot force a reload of the subject area's metadata. Reloading the metadata also refreshes the subject area's display.

Reloading metadata clears the metadata cache that is used by all users within the server instance, and after the metadata is reloaded, the metadata cache is re-built as user queries are run. This process of re-building the cache can slow system performance slightly.

■ **View Metadata Dictionary** — This button is available only when the Subject Areas pane is displayed in the Criteria tab or the Results tab of the Analysis editor and only if the administrator has configured for the display of metadata dictionary information. This button is not available if you select column values or members. Click this button to display the metadata dictionary page for the selected subject area, folder, column, or hierarchy level.

For more information, see "Viewing Metadata Information from the Subject Areas Pane."

Notes

See "Columns in the Excluded Drop Target" for information on how adding columns to a view using the Subject Areas pane can place them in the Excluded drop target.

Table Properties dialog

Use this dialog to edit the properties of a table or pivot table.

For more information, see "Editing Table and Pivot Table Views."

Components

Style

Use the "Table Properties dialog: Style tab" to specify formatting preferences for tables and pivot tables.

Writeback

Use the "Table Properties dialog: Write Back tab" to set up for users to modify values in columns in tables.

Table Properties dialog: Style tab

Use this tab of the "Table Properties dialog" to specify formatting preferences for tables and pivot tables.

For more information, see "Editing Table and Pivot Table Views."

This dialog is also displayed as:

Pivot Table Properties dialog

Components

Data Viewing

Use this area to specify the method to use to browse data:

- **Fixed headers with scrolling content** — Use this option to use scrolling as the method to browse data.

    When you select this option, the **Maximum Width** and **Maximum Height** fields are displayed in this dialog.

    A table or pivot table that uses this method:

    - Keeps headers of rows and columns visible at all times.

    - Includes horizontal and vertical scroll bars.

    - May include **Get more rows** and **Get more columns** links to fetch more rows and columns of data, when the table or pivot table has a large amount of data and the user scrolls to the bottom of the table or pivot table.

- **Content paging** — Use this option to use paging controls as the method to browse data.

    When you select this option, the **Paging Controls** box and the **Rows per Page** field are displayed in this dialog.

Maximum Width

This field is available only if **Fixed headers with scrolling content** is selected.

Use this field to specify the maximum width of the table or pivot table in pixels.

Maximum Height

This field is available only if **Fixed headers with scrolling content** is selected.

Use this field to specify the maximum height of the table or pivot table in pixels.

Paging Controls

This box is available only if **Content paging** is selected.

Use this box to specify where the paging controls are displayed for the view. The paging controls include **First 25 Rows** and **Next 25 Rows**. You can select either the top or bottom of the view or you can select to hide the controls. For information on the paging control buttons, see "Results tab: Data View editor."

Rows per Page

This field is available only if **Content paging** is selected.

Use this field to enter the number of rows to display per page for the view. This setting affects the number of rows that are displayed with the **First**, **Next**, and **Previous** paging control buttons.

Display Column & Folder Headings

Use this box to specify whether to display headings for the columns and the view. You can select from the following:

- **Only column headings** — Displays only the column headings, not the view headings.

- **As separate rows** — Displays the column and view headings as individual rows in the view.

- **As Folder.Column** — Displays the column names with the lowest-level folder name from the Subject Area. For example, suppose that you have a column called Color in the Products folder. With this option, the column heading displays as Products.Color, rather than simply Color.

- **As Folder.Column (where needed)** — Displays the column names with the folder name from the Subject Area but only when the column names are not unique. This option is available only for tables.

Enable alternate styling

Use this box to specify whether to add "green bar" styling to the view. Green bar styling shows alternating rows or columns in a light green color. (Light green is the default color, which you can change. For how, see "Applying Formatting to Tables and Pivot Tables.") Select this box to add green bar styling. Deselect it to omit green bar styling.

Alternate

This field is enabled only if you select the **Enable alternate styling** box and you are applying formatting to a pivot table.

Use this box to select one of the following options for green bar styling for pivot tables:

- **Innermost Column** — Applies green bar styling only to the column that is closest to the data.

- **All Columns** — Applies green bar styling to all columns.

Repeat Cell Values

Use this box to indicate that all cells that span rows are repeated. For example, suppose that you have a table that has Year and Month values. When this box is not selected, Year is displayed once for Month values. When this box is selected, Year is repeated for all Month values. This box is available only for tables.

Set Alternate Format

Use this button to display the "Edit Format dialog," where you add cosmetic formatting for the green bar styling of the view. See "Applying Formatting to Tables and Pivot Tables."

Listen to Master-Detail Events

Use this box to specify whether a table or pivot table is to act as a detail view in a master-detail relationship and listen for master-detail events. If you select this box, then complete the **Event Channels** field.

For information on master-detail relationships, see "What Is Master-Detail Linking of Views?"

Event Channels

This field is enabled only if you select the **Listen to Master-Detail Events** box.

Use this field to enter one or more channels on which the table or pivot table is to listen for master-detail events raised by one or more master views. The channel name is case sensitive and must match exactly the channel name specified in the master view. Separate channels with commas, for example, channel a, channel b.

The remaining components of this dialog are described in "Column Properties dialog: Style tab."

Null Values

Use these check boxes to override null suppression set at the analysis level.

Include rows with only Null Values — Use this check box to include null values in a table or pivot table view when the entire row contains all null values. When selected, null values are not suppressed for rows for the table or pivot table.

Include columns with only Null Values — This check box is available only for pivot table views. Use this check box to include null values in a pivot table view when the entire column contains all null values. When selected, null values are not suppressed for columns in the pivot table.

See "Understanding Null Suppression" for additional information.

Notes

- When a column is on the section edge, the table or pivot table shows all sections and does not allow scrolling per section. Thus, both the **Data Viewing** and the **Rows per Page** components are ignored.

Table Properties dialog: Write Back tab

Use this tab of the "Table Properties dialog" to configure the view for users to modify values in columns.

For more information, see "Modifying Values and Performing Write Back" and "Column Properties dialog: Write Back tab."

Components

Enable Write Back

Use this box to allow users to modify values in the view, if one or more columns in the analysis has been enabled for write back. Deselect the box to prevent write back on the view, even if one or more columns have been enabled for write back.

Template Name

Use this field to enter the name of the template to employ for writing back values. The template includes SQL statements that write values back to the data source.

Check with the administrator for the appropriate template name. (The template name is specified in the WebMessage element in the write-back template, for example, `<WebMessage name="SetQuotaUseID".`)

Toggle Table Mode

Use this box to enable the toggling of modes for writing to the view. Click the box to allow the view to be toggled from View mode to Edit mode so that users can write back values. Deselect the box to prevent the view from being toggled from View mode to Edit mode; rather, the view is always in Edit mode.

Apply Button

Use this field to enter the text to be displayed on the button that users click to apply the values that they have entered; that is, to write the values back to the data source. The default value for this button is **Apply**.

Revert Button

Use this field to enter the text to be displayed on the button that users click to clear the values that have just entered for write back. The default value for this button is **Revert**.

Done Button

Use this field to enter the text to be displayed on the button that users click to indicate that they have finished entering values for write back. Any values that have not yet been written back to the data source are written back. The default value for this button is **Done**.

Button Position

Use this list to select the position of the buttons on the view, such as Right or Left.

Tasks pane

Use this pane to perform object-specific tasks. The tasks that you can perform depend on the object's type, the object's permissions, and your privileges.

For more information, see:

- "What is the Oracle BI Presentation Catalog?"
- "Who Uses the Catalog?"
- "Object-Specific Tasks"

This pane is part of the "Catalog page."

Tasks Options

- **Add to Briefing Book** — Use to add the selected object to a briefing book. After you select this option, the "Save Briefing Book Content dialog" displays. For more information about briefing books, see "Working with Briefing Books."

- **Add to Favorites** — Use to add the selected object to your Favorites list. A favorite object's icon appears with a gold star overlay. For more information about Favorites, see "Adding Objects to Favorites."

- **Archive** — Use to pack or bundle the contents of a a folder or multi-component object (a scorecard, for example) that you unpack in another directory. This enables you to transfer data between environments (development to test, for example).

- **Copy** — Use to duplicate a folder or object and paste it in another directory.

- **Create Agent** — (This option is available only when you select a KPI.) Use this option to display the "Create New Agent dialog," where you create an agent from the KPI.

- **Create Link** — Use to display a folder or object if the directory in which it resides is very large, requiring scrolling. For example, to quickly access the components of a Sales and Marketing scorecard in a corporate directory that contains thirty scorecards, create a link to the Sales and Marketing scorecard.

- **Create Shortcut**— Use to create a shortcut to the object or folder. When you create a shortcut, Oracle BI EE adds the shortcut to the current folder. You can then move this shortcut to another location within the catalog.

- **Delete** — Use this button to remove a folder or object from the catalog. If you delete shared folders or objects, then other users who have added those objects to their personal dashboards lose access.

- **Disable** — Use this option to temporarily disable an agent. See "Disabling and Enabling Agents' Schedules."

- **Edit** — Use this button to modify objects using the associated Editor or Builder. For example, select a KPI and click this button to modify the KPI in the KPI editor.

- **Enable** — Use this option to cause an agent to run on schedule again. See "Disabling and Enabling Agents' Schedules."

- **Expand** — Use this button to display the contents of a selected folder. For example, select a Dashboards folder and click this button to display all available dashboards. If you select a scorecard, all associated objects such as (mission statements, perspectives, objectives, and so on) are displayed.

- **Execute** — Use to run a script, URL, or web service action. See "Working with Actions."

- **Export** — Use to export an analysis, a dashboard, or a dashboard page. For more information, see:

  - "About Exporting Results"

  - "About Exporting Dashboards and Dashboard Pages"

- **Open** — Use to view an object or expand folder contents.

- **Permissions** — Use to enable users to view folders and objects. To grant specific privileges that determine the tasks that users can perform with these objects, see "Managing Presentation Services Privileges" in *Security Guide for Oracle Business Intelligence Enterprise Edition*.

- **Print** — Use to print an analysis, a dashboard, or a dashboard page. For more information, see:

  - "Printing Views"

  - "Printing Dashboard Pages"

- **Properties** — Use to view or modify the selected object's properties. When you select this option, the "Properties dialog" displays.

- **Remove from Favorites** — Use to remove the item from your Favorites list. Selecting this option removes the object from every Favorites category that contains the object. After you remove an object from your favorites list, the object's icon changes from an icon with a gold star to the object's standard icon. For more information about Favorites, see "Removing Objects From Favorites."

- **Rename** — Use to change the name of a folder or object.

- **Subscribe** — Use this option to subscribe to an agent that the owner has made available to you for subscription. See "Subscribing to Agents."

- **Unsubscribe** — Use this option to unsubscribe from an agent to which you are currently subscribed. See "Unsubscribing from Agents."

- **View KPI Contribution Wheel** — (This option is available only when you select a KPI.) Use this option to display a KPI contribution wheel for a KPI in a browser window. See "About KPI Contribution Wheel Diagrams" for additional information.

Text Properties dialog

Use this dialog to specify properties for a text object that you are adding to a dashboard page. If you have the appropriate privileges, then you can enter HTML tags into the object.

For more information, see "Adding Content to Dashboards."

Components

Bold, Italic, Underline

Use these buttons to apply Bold, Italic, or Underline to characters in the text object.

Line Break

Use this button to insert a line break between characters in the text object.

Contains HTML Markup

Use this option to work with HTML code, as described in "Working with HTML Markup."

Text

Use this field to enter the text to include on the dashboard.

The name that you assign in the Dashboard editor is the name that is used for the text object in the Oracle BI Presentation Catalog.

You can reference variables in this field. For the syntax to use, see "What Is the Syntax for Referencing Variables?" For more information on variables, see "Using Variables."

Preview

Use this button to view how the text is formatted on the dashboard in the Preview area box. If you make any changes, then you can click **Preview** again to see the results.

Treemap Properties dialog

Use this dialog to edit the properties of a treemap.

For more information, see "Editing Treemap Views."

Components

General

Use the "Treemap Properties dialog: General tab" to specify the physical size of the treemap and to show or hide the legend.

Style

Use the "Treemap Properties dialog: Style tab" to specify formatting preferences for treemaps.

Treemap Properties dialog: General tab

Use this dialog to set the height and width of a treemap view and to show or hide the treemap view legend.

For more information, see:

- "Editing Treemap Views"
- "Additional Components Common to Treemap Views"

Components

Size

Use this section to set the physical size of the treemap view.

Width

Use this text field to enter the width of the treemap view in pixels. Default is 640 pixels.

Height

Use this text field to enter the height of the treemap view in pixels. Default is 480 pixels.

Show legend

Use this check box to specify whether a legend is to be displayed to show the continuous color variations or binning for the treemap tiles. See "Additional Components Common to Treemap Views" for detailed information on binning properties.

Treemap Properties dialog: Style tab

Use this dialog to set the background colors for the legend and the borders for the groups and tiles in a treemap view. Additionally you can show or hide the treemap legend.

For more information, see:

- "Editing Treemap Views"

Components

Background
Use this section to select the background color and fill of the legend for the treemap.

Fill
Use this list to select the color of the legend fill.

Border
Use this list to select the color of the legend border.

Treemap Borders
Use this section to select the border colors of the groups and tiles for the treemap. There are two options:

- **Group** — Use this list to select the border color of the group (header area).

- **Tile** — Use this list to select the border color of the tile.

Labels
Use this section to show or hide the legend for the treemap view and to format the tile labels. There are two options:

- **Group** — Click the **Edit format** button to display the "Edit Format dialog," in which you specify formatting for the text that displays as the group name.

- **Tile** — Click the **Edit format** button to display the "Edit Format dialog," in which you specify formatting for the text that displays as the tile name.

Show
Use this check box to show or hide the Group or Tile label.

> **Note:** If you deselect the **Show** check box for Group, the border will not display. Additionally, no tooltip will display when the mouse is hovered over the Group label on the treemap view.

Trellis Properties dialog

Use this dialog to edit the properties of a trellis.

For more information, see:

- "Editing Trellis Views"

Components

General

Use the "Trellis Properties dialog: General tab" to set properties related to the grid canvas, such as legend location and visualization size.

Style

Use the "Trellis Properties dialog: Style tab" to set properties that control the appearance of the trellis, such as the style.

Scale

Use the "Trellis Properties dialog: Scale tab" to set properties for axis limits and tick marks.

Titles and Labels

Use the "Trellis Properties dialog: Titles and Labels tab" to set properties that control the display of titles and labels for the trellis.

Trellis Properties dialog: General tab

Use this tab of the "Trellis Properties dialog" to set properties related to the trellis canvas, such as legend location.

For more information, see:

- "Editing Trellis Views"

Components

> **Note:** The components available in this tab depend on the type of trellis (simple or advanced) and the type of visualization with which you are working.

Data Viewing

Use this area to specify the method to use to browse data:

- **Fixed headers with scrolling content** — Use this option to use scrolling as the method to browse data.

  When you select this option, the **Maximum Width** and **Maximum Height** fields are displayed in this dialog.

  A trellis that uses this method:

  - Keeps headers of rows and columns visible at all times.

  - Includes horizontal and vertical scroll bars.

  - May include **Get more rows** and **Get more columns** links to fetch more rows and columns of data, when the trellis has a large amount of data and the user scrolls to the bottom of the trellis.

- **Content paging** — Use this option to use paging controls as the method to browse data.

  When you select this option, the **Paging Controls** box and the **Rows per Page** field are displayed in this dialog.

Maximum Width

This field is available only if **Fixed headers with scrolling content** is selected.

Use this field to specify the maximum width of the trellis in pixels.

Maximum Height

This field is available only if **Fixed headers with scrolling content** is selected.

Use this field to specify the maximum height of the trellis in pixels.

Legend Location

Use this box to specify whether a legend is to be displayed and its location. Select one of the following options:

- **None** — Use this option to specify that no legend is to be displayed.

- **Top** — Use this option to display the legend at the top of the trellis canvas.

- **Right** — Use this option to display the legend to the right of the trellis canvas.

- **Bottom** — Use this option to display the legend at the bottom of the trellis canvas.

- **Left** — Use this option to display the legend to the left of the trellis canvas.

- **Based on number of values** — Use this option to specify that the legend is to be placed in the best position (left, right, top, or bottom) based on the number of values in the column and the space available.

Rows per Page
For an advanced trellis, this field is available only if **Content paging** is selected.

Use this field to enter the number of rows to display per page for the trellis. This setting affects the number of rows that are displayed with the **First**, **Next**, and **Previous** paging control buttons.

Listen to Master-Detail Events
Use this box to specify whether the trellis is to act as a detail view in a master-detail relationship and listen for master-detail events. If you select this box, then complete the **Event Channels** field.

For more information on master-detail relationships, see"What Is Master-Detail Linking of Views?"

Event Channels
This field is enabled only if you select the **Listen to Master-Detail Events** box.

Use this field to enter one or more channels on which the trellis is to listen for master-detail events raised by one or more master views. The channel name is case sensitive and must match exactly the channel name specified in the master view. Separate channels with commas, for example, channel a, channel b.

Visualization: Measure Tabs
Displays tabs that correspond to the measures (for example, Revenue and Billed Quantity) used in an advanced trellis. Click the tab of the measure for which you want to set visualization properties.

Graph Size
Use this box to set the size of the graph. Select one of the following options:

- **Default** (available for an advanced trellis only)

- **Small** (available for a simple trellis only)

- **Medium** (available for a simple trellis only)

- **Large** (available for a simple trellis only)

- **Custom**

  If you select this options, specify the size using the **Width** and **Height** fields.

Width
Use this field to enter the width of the graph in pixels.

Height
Use this field to enter the height of the graph in pixels.

Null Values

Include rows with only Null Values — Use this check box to include null values in a trellis when the entire row contains all null values. When selected, null values are not suppressed for rows in the trellis.

Use these check boxes to override null suppression set at the analysis level.

Include columns with only Null Values — Use this check box to include null values in a trellis when the entire column contains all null values. When selected, null values are not suppressed for columns in the trellis.

See "Understanding Null Suppression" for additional information.

Notes

- When a column is on the section edge, the trellis shows all sections and does not allow scrolling per section. Thus, both the **Data Viewing** and the **Rows per Page** components are ignored.

Trellis Properties dialog: Style tab

Use this tab of the "Trellis Properties dialog" to set properties that control the appearance of the visualization, such as the style.

Components

Note: The components available in this tab depend on the type of trellis (simple or advanced) and the type of visualization with which you are working.

Sections Formatting

Use this button to display the "Sections Formatting dialog," where you specify how to break pages for printing and exporting and how to format sections in a trellis.

Style

Use this box to select the style for the visualization. The options depend on the type of graph chosen for the visualization. For more information on available graph styles, see "What Types of Graphs Are Available?"

Style and Conditional Formatting

Use this button to display the "Style and Conditional Formatting dialog," where you specify formatting.

3D

Use this check box to specify whether the graph is to be three-dimensional

Visualization: Measure Tabs

Displays tabs that correspond to the measures (for example, Revenue and Billed Quantity) used in an advanced trellis. Click the tab of the measure for which you want to set visualization properties.

Bars

Use this box to display the Color Selector dialog, where you select the color for all the data points in a spark graph for which no other specific color is selected (for example, in the **Start** box).

Start

Use this box to display the Color Selector dialog, where you select the color for the first data point in a spark graph.

Max

Use this box to display the Color Selector dialog, where you select the color for the largest data point in a spark graph.

End

Use this box to display the Color Selector dialog, where you select the color for the last data point in a spark graph.

Min

Use this box to display the Color Selector dialog, where you select the color for the smallest data point in a spark graph.

Plot Area

Use this box to display the Color Selector dialog, where you select the color for the plot area background.

Gridlines

Use these boxes to specify whether to display the default gridlines or gridlines that you specify.

If you select the **Specify** option, then, for the major grid and for the minor grid, specify the gridlines that you want and their color using the following boxes:

- **Horizontal Line** — Use this box to display a horizontal gridline.

- **Vertical Line** — Use this box to display a vertical gridline.

- **Color** — Displays the Color Selector dialog, where you select the color for the horizontal and vertical gridlines. This color also is applied to the major and minor tick marks, which you specify on the "Graph Properties dialog: Scale tab."

If you select the **Specify** option only and do not select any check boxes for the major and minor grid, no gridlines (not even the ones shown by default) are displayed.

Value Formatting

Use this button to display the "Values Formatting dialog," where you specify formatting for the values in a visualization whose type is Numbers.

Background

Use this button to display the Color Selector dialog, where you select the color for the legend background.

Transparent

Use this check box to specify whether the legend is transparent (that is, has no background color).

Legend: Border

Use this button to display the Color Selector dialog, where you select the color for the border around the legend.

Trellis Properties dialog: Titles and Labels tab

> **Note:** The components available in this tab depend on the type of trellis (simple or advanced) and the type of visualization with which you are working.

Use this tab of the "Trellis Properties dialog" to set properties that control the display of titles and labels for the trellis.

Components

Vertical Axis Title

Use this field to enter a title for the vertical axis.

Use measure name as axis title

Use this check box to specify whether to use the column name or names as the horizontal axis title.

Horizontal Axis Title

Use this field to enter a title for the horizontal axis.

Use column name as axis title

Use this check box to specify whether to use the column name as the vertical axis title.

Label Format

Use this box to select the format to be applied to the labels for prompts, rows, columns, sections, or any combination of these four. The options are:

- **Only column headings** — Displays only the column headings.
- **As Folder.Column** — Displays the column names with the lowest-level folder name from the Subject Area. For example, suppose that you have a column called Color in the Products folder. With this option, the column heading displays as Products.Color, rather than simply Color.

Prompt Labels, Row Labels, Column Labels, or Section Labels

Use this box to specify whether the label is shown. The options are:

- **On** — Use this option to show the label.
- **Off**— Use this option to hide the label.
- **On Rollover** — Available only for rows and columns. Use this option to show the label but only when the mouse pointer is rolled over the column or column label.

Format Title

Use this button (which is displayed next to each Title field) to display the "Font Format: Item dialog," where you can format the title.

Legend Labels: Format Label

Use this button to display the "Font Format: Item dialog," where you can format the legend labels.

Visualization: Measure Tabs

Displays tabs that correspond to the measures (for example, Revenue and Billed Quantity) used in an advanced trellis. Click the tab of the measure for which you want to set visualization properties.

Horizontal Axis Labels, Vertical Axis Labels, or Data Labels: Format Label

Use this button to display the "Format: Item dialog," where you can format the horizontal axis labels vertical axis labels, or data labels.

Unarchive dialog

Use this dialog to find and specify how you want to upload the archive file to the Presentation Catalog. For more information, see "What is Archiving?"

Components

Archive File

Use this field to enter or browse for the name and location of the archive file. Archive files are named according to the following convention: <name of the presentation services folder>.catalog. For example, sales_dashboards.catalog.

Replace

Use to specify if and how to replace an existing folder or object with the same name. Note the following options:

- All — Select this option to replace any existing folders or objects with the same names as folders or objects included in the archive file that you are uploading.

- Old — Select this option to replace folders or objects except those folders or objects that exist, unless they are older than the source.

- None — Select this option to add any new folders or objects, but preserve any existing folders or objects.

- Force — Select this option to add and replace all folders or objects.

ACL

Use to specify how the folders or objects are assigned permissions using Access Control Lists (ACLs) when unarchived. Note the following options:

- **Inherit** — Inherits the folder or object's permissions (ACL) from its new parent folder.

- **Preserve** — Preserves the folder or object's permissions (ACL) as it was in the original, mapping accounts as necessary.

- **Create** — Preserves the folder or object's permissions (ACL) as it was in the original, creating and mapping accounts as necessary.

See "Working with Objects in Catalog Manager" in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition* for information on ACL entries.

View Group: *Group* dialog

Depending on the link that you clicked, use this dialog to view the members of the group, the members of the calculated item, or the custom formula used for the calculated item.

For more information, see:

- "Working with Groups and Calculated Items"
- "Working with Selections of Data"

This dialog is also displayed as:

View Calculated Item: *Item* dialog

Components

Function

This component displays for a calculated item or a custom formula link. It displays the function used for the calculation.

List Area

Displays the members of the group or calculated item. If you clicked a custom formula calculated item link, this area shows the formula used to determine the members.

You cannot modify the list displayed in this dialog. To modify the list, you must close the Selection Steps View editor and within the Analysis editor: Results tab, go to the "Selection Steps pane."

Note: If a selection step was created by using the right-click interaction menu, then you must use the right-click interaction menu to remove the selection step. See "Working with Selections of Data" for additional information.

View Group: *Group* dialog: Results tab

Use this tab of the "View Group: Group dialog" to view the list of members.

For more information, see "Saving Selection Steps as a Group Object."

Components

List Area

Displays the members of the group resulting from Oracle BI EE applying the selection steps displayed in the "View Group: Group dialog: Selection Steps tab."

You cannot modify the list displayed in this dialog. To modify the selection steps and list, you must close the Selection Steps View editor and within the Analysis editor: Results tab, go to the "Selection Steps pane."

View Group: *Group* dialog: Selection Steps tab

Use this tab of the "View Group: Group dialog" to view the group's selection steps.

For more information, see "Saving Selection Steps as a Group Object."

Components

Selection Steps Area

Displays the components of the selection steps saved as a group. Note that if the selection steps contain a group or calculated item that no hyperlinks are provided for them.

You cannot modify the selection steps displayed in this dialog. To modify the selection steps, you must close the Selection Steps View editor and within the Analysis editor: Results tab, go to the "Selection Steps pane.".

Views pane

Use this pane to:

- Add new views to an analysis
- Add views that have been added to the analysis to compound layouts
- Edit views added to an analysis
- Remove views from the analysis

For more information, see:

- "Displaying the Results of Analyses"

This pane is part of the "Analysis editor: Results tab."

Components

Views List

Displays the views that have been added to the analysis. For a list of available view types, see "What Types of Views Are Available?"

Toolbar

This toolbar contains the following buttons:

- **Add View** — Use this button to add a view to a compound layout. First make the compound layout to which you want to add the view the current layout. Next, in the **Views List**, select the view to add, then click **Add View.**

- **New View** — Use this button to add a new view to the analysis and to access the recommended visualizations feature. Click **New View** and then select the type of view to add. You can select the **Recommended Visualization for** option to see a sub-menu of visualization specialties, such as **Analyzing Trends** or **Comparing Percentages**. Click on a visualization specialty to access the Select Visualization list, where you then choose from a ranking of recommended view types.

  You can edit and save the view, which is added to the **Views List**. You can then add it to a compound layout using the **Add View** button.

  For information on recommended visualizations, see "What Is the Recommended Visualizations Feature?"

- **Edit View** — Use this button to edit a view. In the **Views List** select the view to edit, then click **Edit View**. The view's editor is displayed.

- **Duplicate View** — Use this button to create a copy of the view that you have selected.

- **Remove View from Analysis** — Use this button to remove a view from the analysis. In the **Views List**, select the view to remove, then click **Remove View from Analysis**. The view is removed from the analysis and from any compound layout to which it had been added.

- **Rename View** — Use this button to display the "Rename View dialog," where you specify a new name for the view that you have selected.