



BEA WebLogic Portal™®

Database Administration Guide

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About This Document

This document explains how to set up and administer a database for WebLogic Portal. It covers the following topics:

- [Chapter 1, “Introduction to Database Administration for WebLogic Portal”](#) provides an introduction to database administration issues for WebLogic Portal.
- [Chapter 3, “Using a Microsoft SQL Server Database”](#) provides information for setting up a SQL Server environment for WebLogic Portal, and instructions for switching from the PointBase database to SQL Server.
- [Chapter 4, “Using an Oracle Database”](#) provides information for setting up an Oracle environment for WebLogic Portal, and instructions for switching from the PointBase database to Oracle.
- [Chapter 7, “The Data Dictionary,”](#) provides a complete list of all of the database schemas and dictionaries.
- [Chapter 7, “XA Support”](#) describes XA support in WebLogic Portal 8.1.
- [Appendix A, “WebLogic Portal DDL Modules”](#) describes the file naming convention used for the WebLogic Portal DDL files.

Product Documentation on the dev2dev Web Site

BEA product documentation, along with other information about BEA software, is available from the BEA dev2dev Web site:

<http://dev2dev.bea.com>

To view the documentation for a particular product, select that product from the list on the dev2dev page; the home page for the specified product is displayed. From the menu on the left side of the screen, select Documentation for the appropriate release. The home page is displayed for the complete documentation set for the product and release you have selected.

Related Information

Readers of this document may find the following documentation and resources especially useful:

- For general information about Java applications, go to the Sun Microsystems, Inc. Java Web site at <http://java.sun.com>.
- For general information about XML, go to the O'Reilly & Associates, Inc. XML.com Web site at <http://www.xml.com>.

Contact Us!

Your feedback on the BEA WebLogic Portal documentation is important to us. Send us e-mail at **docsupport@bea.com** if you have questions or comments. Your comments will be reviewed directly by the BEA professionals who create and update the WebLogic Portal documentation.

In your e-mail message, please indicate that you are using the documentation for BEA WebLogic Portal 8.1.

If you have any questions about this version of BEA WebLogic Portal, or if you have problems installing and running BEA WebLogic Portal, contact BEA Customer Support at <http://support.bea.com>. You can also contact Customer Support by using the contact information provided on the quick reference sheet titled “BEA Customer Support,” which is included in the product package.

When contacting Customer Support, be prepared to provide the following information:

- Your name, e-mail address, phone number, and fax number
- Your company name and company address
- Your machine type and authorization codes
- The name and version of the product you are using
- A description of the problem and the content of pertinent error messages

Documentation Conventions

The following documentation conventions are used throughout this document.

Convention	Item
Ctrl+Tab	Indicates that you must press two or more keys simultaneously.
<i>italics</i>	Indicates emphasis or book titles.
monospace text	<p>Indicates <i>user input</i>, as shown in the following examples:</p> <ul style="list-style-type: none"> • Filenames: <code>config.xml</code> • Pathnames: <code>BEAHOME/config/examples</code> • Commands: <code>java -Dbea.home=BEA_HOME</code> • Code: <code>public TextMsg createTextMsg(</code> <hr/> <p>Indicates <i>computer output</i>, such as error messages, as shown in the following example:</p> <pre>Exception occurred during event dispatching:java.lang.ArrayIndexOutOfBoundsException: No such child: 0</pre>
monospace boldface text	<p>Identifies significant words in code.</p> <p><i>Example:</i></p> <pre>void commit ()</pre>
<i>monospace italic text</i>	<p>Identifies variables in code.</p> <p><i>Example:</i></p> <pre>String <i>expr</i></pre>
{ }	Indicates a set of choices in a syntax line. The braces themselves should never be typed.
[]	<p>Indicates optional items in a syntax line. The brackets themselves should never be typed.</p> <p><i>Example:</i></p> <pre>java utils.MulticastTest -n <i>name</i> [-p <i>portnumber</i>]</pre>
	<p>Separates mutually exclusive choices in a syntax line. The symbol itself should never be typed.</p> <p><i>Example:</i></p> <pre>java weblogic.deploy [list deploy update]</pre>

Convention	Item
...	<p>Indicates one of the following in a command line:</p> <ul style="list-style-type: none">• That an argument can be repeated several times in a command line• That the statement omits additional optional arguments• That you can enter additional parameters, values, or other information <p>The ellipsis itself should never be typed.</p> <p><i>Example:</i></p> <pre>buildobjclient [-v] [-o name] [-f "file1.cpp file2.cpp file3.cpp . . ."]</pre>
.	<p>Indicates the omission of items from a code example or from a syntax line. The vertical ellipsis itself should never be typed.</p>

Introduction to Database Administration for WebLogic Portal

This document helps you set up and start using a database management system (DBMS) with WebLogic Portal.

By default, you can run the code samples provided with WebLogic Portal with the PointBase DBMS. PointBase is a pure-Java relational database management system that BEA includes with WebLogic Platform to allow you to run code samples. It is supported only for the design, development, and verification of applications; it is not supported for production server deployment. For more information about PointBase, see [“Using PointBase” on page 2-1](#)

Overview of Database Configuration for WebLogic Portal

Configuring a database for use with WebLogic Portal involves preparing the vendor database with several configuration scripts before connecting it to WebLogic Portal. Depending on your environment, the process may be entirely manual or you can use the WebLogic Configuration Wizard for part of the process.

To configure databases for use with WebLogic Portal, use the following steps.

1. Review related documentation to ensure that your configuration is supported.
 - <http://edocs.bea.com/platform/suppconfigs/index.html>
 - <http://edocs.bea.com/platform/docs81/interm/relnotes.html>
2. Create your vendor database(s). If you want to use behavior event tracking in a production environment, consider using a separate database for behavior event tracking.

3. Prepare the database for use with WebLogic Portal. BEA provides several sample initialization scripts that need to be modified and run on the vendor database before using the database with WebLogic Portal.
4. After the database is configured, use the Configuration Wizard to create and load appropriate database objects and set JDBC driver settings at domain creation time. For more information about how to use the WebLogic Configuration Wizard, see <http://edocs.bea.com/platform/docs81/configwiz/index.html>.

This step may also be performed manually under certain conditions, see “[Manually Creating Database Objects and JDBC Settings](#)” on page 1-2.

Manually Creating Database Objects and JDBC Settings

In some cases, you may need to manually configure your database(s) without the use of the Configuration Wizard.

Manually creating database objects and JDBC settings may be used in the following cases:

- When setting up your production database.
 - If your desired database was not configured via the WebLogic Configuration Wizard.
 - If after running the Configuration Wizard you decide to have your domain point to a different database.
 - If you would like to refresh your database with the base configuration data that comes with the product.
- Note:** BEA’s database creation scripts first drop all database objects and then recreate them, which means all data added since your original installation will be lost. Upon completion of the database creation scripts, only the base configuration data that is needed for the product will exist.
- When you want to create only a subset of Portal database objects, for example to create only Behavior Tracking database objects for a particular database.

Using PointBase

PointBase is the default database that BEA provides. It is used for the BEA sample domains, and it is the default database used when you create a domain with the Configuration Wizard.

PointBase runs on its own server that must be running for your applications to access it. When you start WebLogic Portal server to run your applications, the PointBase server starts automatically.

PointBase Documentation

PointBase documentation, for the version of PointBase currently supported by WebLogic Server, is distributed with WebLogic Server in PDF form in the `WL_HOME\common\eval\pointbase\docs` directory. The PointBase documentation consists of the following three manuals.

- PointBase Console Guide
- PointBase System Guide
- PointBase Developer's Guide

PointBase JAR Files

Refer to the section titled “PointBase JAR Files” in the PointBase System Guide for information on the JAR files provided with WebLogic Server in the `WL_HOME\common\eval\pointbase\lib` directory.

PointBase Tools

Scripts for starting the PointBase server and the PointBase console are distributed with WebLogic Server in the `WL_HOME\common\eval\pointbase\tools` directory. Scripts are called by start scripts in the sample domains and start scripts contained in any domain created by the Configuration Wizard. These PointBase start scripts simplify starting the PointBase Server and Console within WebLogic domains.

WebLogic Portal PointBase Databases

PointBase stores all data in `.dbn` files and all log information in `.wal` files. Database properties are stored in `PointBase.ini` files. Data files for WebLogic Portal are named **workshop.dbn** and log files for WebLogic Portal are named **workshop\$1.wal**. Pre-built PointBase data, log and `PointBase.ini` files for WebLogic Portal samples are included in the following directory:

```
WL_HOME\samples\domains\portal
```

By default domains created via the Configuration Wizard with the Basic WebLogic Portal Domain template would create PointBase data and log files in the following directory:

```
BEA_HOME\user_projects\portalDomain
```

Administering the WebLogic Portal PointBase Database

You can administer the default database installed with WebLogic Portal using the PointBase administrative console, or any third party database visualization and management tool that can connect via JDBC.

The PointBase Console can be launched either from the Windows Start Menu or by executing the `startPointBaseConsole.cmd/.sh` script located in the domain directory.

Prior to launching the PointBase Console ensure that WebLogic Server for the domain is running. You will not be able to use the PointBase Console unless WebLogic Server is running.

To Launch PointBase Console from the Windows Start menu

Go to Start > Programs > BEA WebLogic Platform 8.1 > Examples > WebLogic Portal > PointBase Console.

To launch the PointBase Console for the Portal Examples, or, if you added Start menu options for a domain created by the Configuration Wizard, navigate to that domain's PointBase Console menu option.

To Launch PointBase Console from the startPointBaseConsole script

1. Change directories to WL_HOME\samples\domains\portal.
2. Execute the appropriate start script — startPointBaseConsole.cmd or startPointBaseConsole.sh — to launch the PointBase Console for the Portal Examples. For a domain created by the Configuration Wizard navigate to that domain's home directory and execute the startPointBaseConsole.cmd/.sh script.
3. When the PointBase Console starts, it prompts you to enter connection parameters to properly connect to the database. Enter the following connection information, which is also what you will need if you use a third-party product to access the PointBase database:
 - **Driver:** com.pointbase.jdbc.jdbcUniversalDriver
 - **URL:** jdbc:pointbase:server://localhost:9093/workshop
 - **User:** weblogic
 - **Password:** weblogic

Using PointBase

Using a Microsoft SQL Server Database

This section describes the steps necessary to use a Microsoft SQL Server database with WebLogic Portal 8.1, and includes information on the following subjects:

- [Configuring a Microsoft SQL Server Database](#)
- [Manually Creating Database Objects](#)
- [Manually Configuring Your Domain's JDBC Driver Settings](#)
- [Creating a Database for Behavior Tracking Events](#)

Review this entire chapter and any release notes before proceeding. The steps in this chapter should be performed by a database administrator

Configuring a Microsoft SQL Server Database

Before proceeding, be sure you have read [“Overview of Database Configuration for WebLogic Portal” on page 1-1](#).

To configure a SQL Server database:

1. Install the SQL Server client on the WebLogic Platform host and do the following:
 - a. Configure it for access to your SQL Server database.
 - b. Ensure that you can connect to your SQL Server database via the OSQL utility.
See your SQL Server documentation for details.

Note: If you plan to use the Configuration Wizard to create the database objects for a new domain, you will not need to install the SQL Server Client.

2. Verify that security authentication settings for the SQL Server are set to “SQL Server and Windows.”
 - a. From Enterprise Manager, right-click on the desired SQL Server.
 - b. Select Properties, then select the Security tab.
 - c. Under authentication, ensure that SQL Server and Windows is selected.
3. Prepare the SQL Server Database. The database creation scripts will install domain-specific tables. It is recommended that you work with a SQL Server system or database administrator to adjust the `SAMPLE` scripts and create database devices, databases, and database users for your SQL Server environment.

Notes: Multiple databases are required if you have multiple domains, or to run multiple environments using the same SQL Server instance (for example, if you want to run development and system test from a single SQL Server installation).

Be sure to back up your database(s) before installing any new database objects. See your database documentation for details.

- a. Review and modify the provided sample scripts to suit your environment. These scripts are available in: <WL_HOME>\portal\db\sql_server\2000\admin.

The following table lists the script names and the usage notes for each script.

Script Name	Description
<code>create_database.sql</code>	<p>Create the WEBLOGIC database and WEBLOGIC database owner user login. An alias is created to make WEBLOGIC dbo in the database. Make the WebLogic database the default database for the WebLogic user.</p> <p>Usage Notes: You need to change database names, database owner user and password.</p> <p>The default names are the following:</p> <ul style="list-style-type: none"> • database name: WEBLOGIC • database owner user: WEBLOGIC • password: WEBLOGIC <p>You also need to edit the script to reflect valid disk locations for DATA and the LOG devices, or to adjust file sizes. DATA and LOG files should be placed on separate physical disks and away from any system database files.</p>
<code>statistics.sql</code>	<p>Runs <code>sp_updatestats</code> to compute database statistics needed for the database optimizer. Database statistics should be run updated periodically. That is, by default, for SQL Server databases with the <code>AUTO_UPDATE_STATISTICS</code> database option.</p>

<code>install_report.sql</code>	Builds an informational installation report about the database objects created in the WEBLOGIC schema.
<code>bt_create_database.sql</code>	<p>Create the WEBLOGIC_EVENT database and WEBLOGIC_EVENT database owner user login. An alias is created to make WEBLOGIC_EVENT dbo in the database.</p> <p>Usage Notes: You need to change database names, database owner user and password.</p> <p>The default names are the following:</p> <ul style="list-style-type: none">• database name: WEBLOGIC_EVENT• database owner user: WEBLOGIC_EVENT• password: WEBLOGIC_EVENT <p>You also need to edit the script to reflect valid disk locations for DATA and the LOG devices, or to adjust file sizes. DATA and LOG files should be placed on separate physical disks and away from any system database files.</p>

- b. Run `create_database.sql` via OSQL as a user with System Administrator privileges (i.e. the sa user). For example:

```
osql -Usa -SSQLSERVER -e -icreate_database.sql -ocreate_database.log
```

The output from running `create_database.sql` is written to `create_database.log`. Verify that there are no errors in the log file before proceeding.

Manually Creating Database Objects

You can either manually create database objects or use the Configuration Wizard, see “[Manually Creating Database Objects and JDBC Settings](#)” on page 1-2 for more information.

Note: If you choose to use the WebLogic Configuration Wizard to configure and connect to the database that you will use to support WebLogic Portal, see <http://edocs.bea.com/platform/docs81/configwiz/index.html>.

The scripts to create Microsoft SQL Server database objects were designed to run in a Windows environment (they use the OSQL utility to create Microsoft SQL Server database objects). If you are using UNIX version of WebLogic Server with a Microsoft SQL Server database and do not have WebLogic products also installed on Windows contact BEA support for assistance.

To manually create WebLogic Portal database objects, use the following steps:

1. Verify that you can connect to the target database server with a valid user ID and password.
For example:

```
osql -SSQLSERVER -U<userid> -P<password>
```

2. Open your domain's `db_settings.properties` file for edit and comment out the database settings for PointBase.
3. Uncomment the database settings for SQL Server and update the following settings for your database:

```
- server=
- dblogin=
- password=
```

4. Initialize the database with the new settings.
 - a. For Windows, navigate to the `<BEA_HOME>\user_projects\domains\portalDomain` directory and double-click on the `create_db.cmd` file.
 - b. Verify the results in the `create_db.log` file.

Note: If you are using the sample domain, run the `create_db.cmd` file from the following directory: `<BEA_HOME>\weblogic81\samples\domains\portal`.

5. Follow the steps in [“Manually Configuring Your Domain's JDBC Driver Settings” on page 3-5](#).

Manually Configuring Your Domain's JDBC Driver Settings

You can either manually configure your domains JDBC driver settings using the WebLogic Server Console, or use the Configuration Wizard, see [“Manually Creating Database Objects and JDBC Settings” on page 1-2](#) for more information.

To manually configure your JDBC Driver settings using WebLogic Server Console, :

1. Start the WebLogic Server for your domain.
2. Login to the WebLogic Server Console.
3. Configure your new connection pools.
 - a. Go to Services -> JDBC -> Connection Pools.
 - b. Click Configure a new Connection Pool.

- c. Select the appropriate Database Type and Non-XA Database Driver from the drop down list boxes and click Continue. For more information, see the Supported Configuration documentation for JDBC drivers supported by WebLogic Portal, http://edocs.bea.com/platform/docs81/support/supp_plat.html#1085671.

Note: For an XA configuration, see “Creating XA Domains Using Configuration Templates” in the “Creating WebLogic Configurations Using the Configuration Wizard documentation, <http://edocs.bea.com/platform/docs81/configwiz/index.html> .

- d. Choose a name for the new Connection Pool (For example: cgPoolN) and fill in the blanks for your vendor database. Click Continue.
- e. Test your connection to verify that you can successfully connect to your database.
- f. Create and deploy your new Connection Pool.

Note: A one-to-one mapping of JDBCTxDataSource to JDBC Connection Pool needs to be maintained in the domain’s configuration (as managed in the config.xml file). Create one new JDBC Connection Pool for each JDBCTxDataSource and another JDBC Connection Pool for the domain’s JDBCDataSources.

4. Update your data sources.
 - a. From Services -> JDBC -> Data Sources, click on each data source and switch each to the newly created connection pool. Be sure to apply each change.
 - b. Verify that each Data Source is changed by clicking on Data Sources and then verifying that Pool Name has been set to the new Connection Pool for each.
5. From Services -> JMS -> Stores -> cgJMSStore, switch cgJMSStore to use the new Connection Pool.
6. Stop your domain’s WebLogic Server, then restart it.
7. In the WebLogic Server Console, delete the original connection pools.
 - a. Go to Services -> JDBC -> Connection Pools.
 - b. Right-click each connection pool and select Delete.

Creating a Database for Behavior Tracking Events

You may want to store behavior tracking events in a different location than other WebLogic Portal database objects for increased performance. For more information about behavior tracking, see http://e-docs.bea.com/wlp/docs81/adminportal/help/SA_BehavTrackServ.html.

Note: By default, behavior tracking database objects are created in the same database as other WebLogic Portal database objects. You only need to follow these steps if you are configuring a separate database for behavior tracking events.

1. Verify that you can connect to the target database, see [step 1. in “Configuring a Microsoft SQL Server Database”](#).
2. Run `bt_create_database.sql` via OSQL as a user with system administrator privileges (i.e. the sa user). For example:

```
osql -Usa -SSQLSERVER -e -ibt_create_database.sql
    -obt_create_database.log
```

The output from running `bt_create_database.sql` is written to `bt_create_database.log`. Verify that there are no errors in the log file before proceeding.

3. Open your domain's `db_settings.properties` file for edit.
 - a. Within the `db_settings.properties` file, uncomment the database settings for SQL Server database and update the following settings for your database:
4. Within the `db_settings.properties` file, find the `p13n_modules`, `portal_modules` and `netuix_modules` lines at the top of the file.

```
- server=<SERVER_NAME>
- dblogin=WEBLOGIC_EVENT
- password=WEBLOGIC_EVENT
```

- b. Copy these 3 lines and comment out the original settings by adding a `#` sign.
- c. Replace the original settings as follows:

```
- Replace p13n_modules=p13n au bt ds with p13n_modules=bt
- Replace portal_modules=cm wlcs wps collaboration sample_cm with
  portal_modules=
- Replace netuix_modules=pf with netuix_modules=
```

When you are finished, the section should look like this:

```
#p13n_modules=p13n au bt ds
#portal_modules=cm wlcs wps collaboration sample_cm
#netuix_modules=pf
p13n_modules=bt
portal_modules=
netuix_modules=
```

d. Save the changes to the `db_settings.properties` file.

5. Initialize the database with the new settings.

- a. Navigate to the `<BEA_HOME>\user_projects\domains\portalDomain` directory, and double-click on the `create_db.cmd` file.
- b. Verify the results in the `create_db.log` file.

Note: If you are using the sample domain, run the `create_db.cmd` file from the following directory: `<BEA_HOME>\weblogic81\samples\domains\portal`.

6. Configure a connection pool to access your behavior tracking database and associate the `p13n_tracking` JDBC Data Source with that connection pool. Follow the steps in [“Manually Configuring Your Domain’s JDBC Driver Settings” on page 3-5](#).

Using an Oracle Database

This section describes the steps necessary to use an Oracle database with WebLogic Portal 8.1, and includes information on the following subjects:

- [Configuring an Oracle Database](#)
- [Manually Creating Database Objects](#)
- [Manually Configure Your Domain's JDBC Driver Settings](#)
- [Creating a Database for Behavior Tracking Events](#)

Review this entire chapter and any release notes before proceeding. Typically, the steps described in this chapter should be performed by an Oracle system administrator or a database administrator.

Configuring an Oracle Database

Before proceeding, be sure you have read [“Overview of Database Configuration for WebLogic Portal” on page 1-1](#).

Note the following when defining your Oracle instance and databases.

- Be sure that you are using a supported version, see http://edocs.bea.com/platform/docs81/support/supp_plat.html#1085671.
 - Define a blocksize of at least 8K for increased performance.
1. Install the Oracle client software on the WebLogic Platform host.

- a. Configure a Local Net Service to access the target Oracle instance.
- b. Be sure that Oracle environment variables are defined, and that the Oracle bin directory is included in the `$PATH` variable.
- c. Verify that you can connect to the target Oracle database schema via SQLPlus.

Note: If you plan to use the Configuration Wizard to create the database objects for a new domain, you do not need to install the Oracle Client.

2. Prepare the Oracle database and schema. The database creation scripts will install domain-specific tables for each. It is recommended that you work with a database administrator to adjust the `SAMPLE` scripts, and to create the database schema owner users and tablespaces needed for your environment.

Notes: Multiple databases are required if you have multiple domains, or to run multiple environments using the same Oracle instance (for example, if you want to run development and system test from a single Oracle installation).

Be sure to back up your database(s) and schema(s) before installing any new database objects. See your database documentation for details.

- a. Edit the `SAMPLE` scripts provided in: `<WL_HOME>/portal/db/oracle/817/admin` to suit your environment.

The database creation scripts will install domain-specific tables for each. It is recommended that you work with a database administrator to adjust the `SAMPLE` scripts, and to create the database schema owner users and tablespaces needed for your environment.

b. Review the Description and Usage Notes for each script.

Script Name	Description
<code>create_tablespaces.sql</code>	<p>Creates data and index tablespaces.</p> <p>Usage Notes: Edits are required to modify the pathnames for the DATA_PATHNAME and INDEX_PATHNAME variables to match your local directory path structures. For example, on a UNIX system, if two disks are mounted as /usr1 and /usr2 and the Oracle SID is PROD, use the following pathnames:</p> <pre>DEFINE DATA_PATHNAME=/usr1/oradata/PROD DEFINE INDEX_PATHNAME=/usr2/oradata/PROD</pre> <p>Edits are also required if you want to change the tablespace names. The following defaults are used:</p> <ul style="list-style-type: none"> • WEBLOGIC_DATA: tables for WebLogic Portal and/or WebLogic Platform • WEBLOGIC_INDEX: indexes for WebLogic Portal and/or WebLogic Platform
<code>create_users.sql</code>	<p>Creates a WEBLOGIC schema owner user, establishes the users password, default and temporary tablespaces and grants privileges to that user.</p> <p>Usage Notes: Edits are required to change the schema owner user name, password and tablespace names. The following defaults are used:</p> <ul style="list-style-type: none"> • database user = WEBLOGIC • database password = WEBLOIGIC • default tablespace = WEBLOGIC_DATA • temporary tablespace = TEMP
<code>rebuild_indexes.sql</code>	Rebuilds WEBLOGIC (schema user) indexes to move them from the WEBLOGIC_DATA tablespace to the WEBLOGIC_INDEX tablespace.
<code>statistics.sql</code>	Runs analyze_schema to compute database statistics needed for the Oracle optimizer. Analyze schema should be run whenever any significant changes in database data occur. Your database administrator will typically schedule analyze_schema to run periodically in your environment.
<code>install_report.sql</code>	Builds an informational installation report about the database objects created in the schema.
<code>db_size.sql</code>	Builds a report showing free space in database tablespaces.

Script Name	Description
bt_create_tablespaces.sql	<p>Creates the tablespace for behavior event tracking.</p> <p>Usage Notes: Edits are required to modify the pathnames for the EVT_DATA_PATHNAME and INDEX_PATHNAME variables to match your local directory path structures.</p> <ul style="list-style-type: none"> • WEBLOGIC_DATA: tables for WebLogic Portal and/or WebLogic Platform • WEBLOGIC_INDEX: indexes for WebLogic Portal and/or WebLogic Platform
bt_create_users.sql	<p>Creates a behavior event tracking user, establishes the user's password, default and temporary tablespaces and grants privileges to that user.</p> <p>Usage Notes: Edits are required to change the schema owner user name, password and tablespace names. Edits are required to change file sizes and device names.</p> <p>The following defaults are used:</p> <ul style="list-style-type: none"> • database user: WEBLOGIC_EVENT • password: WEBLOGIC_EVENT

- c. To run these scripts from a shell, change directories to:
`WL_HOME/portal/db/oracle/817/admin`
 - d. Start SQL*Plus as the system user. For example:
`sqlplus system/manager@MYDB`
 - e. From SQL*Plus, execute the create_tablespaces.sql script. using the @ sign. For example:
`@create_tablespaces.sql`
 - f. From SQL*Plus, execute the create_users.sql script using the @ sign. For example,
`@create_users.sql`
3. Follow the steps in [“Manually Creating Database Objects” on page 4-5.](#)

Manually Creating Database Objects

You can either manually create database objects or use the Configuration Wizard, see “[Manually Creating Database Objects and JDBC Settings](#)” on page 1-2 for more information.

Note: If you choose to use the WebLogic Configuration Wizard to configure and connect to the database that you will use to support WebLogic Portal, see <http://edocs.bea.com/platform/docs81/configwiz/index.html>.

To manually create WebLogic Portal database objects, use the following steps:

1. Use the following command to verify that you can connect to the target database server with a valid user ID and password:

```
sqlplus user_ID/password@DB_SID
```

2. Open your domains db_settings.properties file for edit and comment out the database settings for PointBase.
3. Uncomment the database settings for Oracle and update the following settings for your database:
 - server=
 - dblogin=
 - password=
4. Initialize the database with the new settings.
 - a. For Windows, navigate to the <BEA_HOME>\user_projects\domains\portalDomain directory, and double-click on the create_db.cmd file.
 - b. For UNIX, navigate to the <BEA_HOME>\user_projects\domains\portalDomain directory, run create_db.sh.
 - c. Verify the results in the create_db.log file.

Note: If you are using the sample domain, run the create_db.cmd/sh file from the following directory: <BEA_HOME>\weblogic81\samples\domains\portal.

5. Follow the steps in “[Manually Configure Your Domain’s JDBC Driver Settings](#)” on page 4-6.

Manually Configure Your Domain's JDBC Driver Settings

You can either manually configure your domains JDBC driver settings using the WebLogic Server Console, or use the Configuration Wizard, see “[Manually Creating Database Objects and JDBC Settings](#)” on page 1-2 for more information.

To manually configure your JDBC Driver settings using WebLogic Server Console,

1. Start the WebLogic Server for your domain.
2. Login to the WebLogic Server Console.
3. Configure your new connection pools.
 - a. Go to Services -> JDBC -> Connection Pools.
 - b. Click Configure a new Connection Pool.
 - c. Select the appropriate Database Type and Non-XA Database Driver from the drop down list boxes and click Continue. For more information, see the Supported Configuration documentation for JDBC drivers supported by WebLogic Portal, http://edocs.bea.com/platform/docs81/support/supp_plat.html#1085671.
Note: For an XA configuration, see “Creating XA Domains Using Configuration Templates” in the “Creating WebLogic Configurations Using the Configuration Wizard” documentation, <http://edocs.bea.com/platform/docs81/configwiz/index.html>.
 - d. Choose a name for the new Connection Pool (For example: cgPoolN) and fill in the blanks for your vendor database. Click Continue.
 - e. Test your connection to verify that you can successfully connect to your database.
 - f. Create and deploy your new Connection Pool.
Note: A one-to-one mapping of JDBCTxDataSource to JDBC Connection Pool needs to be maintained in the domain's configuration (as managed in the config.xml file). Create one new JDBC Connection Pool for each JDBCTxDataSource and another JDBC Connection Pool for the domain's JDBCDataSources.
4. Update your data sources.
 - a. From Services -> JDBC -> Data Sources, click on each data source and switch each to the newly created connection pool. Be sure to apply each change.
 - b. Verify that each Data Source is changed by clicking on Data Sources and then verifying that Pool Name has been set to the new Connection Pool for each.

5. From Services -> JMS -> Stores -> cgJMSSStore, switch cgJMSSStore to use the new Connection Pool.
6. Stop your domain's WebLogic Server, then restart it.
7. In the WebLogic Server Console, delete the original connection pools.
 - a. Go to Services -> JDBC -> Connection Pools.
 - b. Right-click each connection pool and select Delete.
8. Move indexes to the WEBLOGIC_INDEX tablespace by executing rebuild_indexes.sql from SQLPLUS. This should be done while WebLogic Server is not running, and is recommended for performance.

Creating a Database for Behavior Tracking Events

You may want to store behavior tracking events in a different location than other WebLogic Portal database objects for increased performance. For more information about behavior tracking, see http://e-docs.bea.com/wlp/docs81/adminportal/help/SA_BehavTrackServ.html.

Note: By default, behavior tracking database objects are created in the same database as other WebLogic Portal database objects. You only need to following these steps if you are configuring a separate database for behavior tracking events.

1. Verify that you can connect to the target instance, see [step 1. in “Configuring an Oracle Database”](#).

2. From SQL*Plus, execute the `bt_create_tablespaces.sql` script. using the `@` sign. For example:

```
@bt_create_tablespaces.sql
```

3. From SQL*Plus, execute the `bt_create_users.sql` script using the `@` sign. For example,

```
@bt_create_users.sql
```

4. Open your domain's `db_settings.properties` file for edit.

- a. Within the `db_settings.properties` file, uncomment the database settings for Oracle and update the following settings:

```
- server=<SERVER_NAME>
- dblogin=WEBLOGIC_EVENT
- password=WEBLOGIC_EVENT
```

- b. Within the `db_settings.properties` file, find the `p13n_modules`, `portal_modules` and `netuix_modules` lines at the top of the file.

- c. Copy these 3 lines and comment out the original settings by adding a `#` sign.

- d. Replace the original settings as follows:

```
- Replace p13n_modules=p13n au bt ds with p13n_modules=bt
- Replace portal_modules=cm wlcs wps collaboration sample_cm with
  portal_modules=
- Replace netuix_modules=pf with netuix_modules=
```

When you are finished, the section should look like this:

```
#p13n_modules=p13n au bt ds
```

```
#portal_modules=cm wlcs wps collaboration sample_cm
#netuix_modules=pf
p13n_modules=bt
portal_modules=
netuix_modules=
```

- e. Save the changes to the `db_settings.properties` file.
5. Initialize the database schema with the new settings.
 - a. For Windows, navigate to the `\\bea\user_projects\domains\portalDomain` directory, and double-click on the `create_db.cmd` file.
 - b. For UNIX, navigate to the `\\bea\user_projects\domains\portalDomain` directory, run `create_db.sh`.
 - c. Verify the results in the `db.log` file.
- Note:** If you are using the sample domain, run the `create_db.cmd/sh` file from the following directory: `\\bea\weblogic81\samples\domains\portal`.
6. Configure a connection pool to access your behavior tracking database and associate the `p13n_tracking` JDBC Data Source with that connection pool. Follow the steps in [“Manually Configure Your Domain’s JDBC Driver Settings”](#) on page 4-6.

Using an Oracle Database

Using a Sybase Database

This section describes the steps necessary to use a Sybase database with WebLogic Portal 8.1, and includes information on the following subjects:

- [Configuring a Sybase Database](#)
- [Manually Creating Database Objects](#)
- [Manually Configuring Your Domain's JDBC Driver Settings](#)
- [Creating a Database for Behavior Tracking Events](#)

Review this entire chapter and any release notes before proceeding. The steps in this chapter should be performed by a database administrator

Configuring a Sybase Database

Before proceeding, be sure you have read “[Overview of Database Configuration for WebLogic Portal](#)” on page 1-1.

Note the following when defining your Sybase instance.

- Be sure that you are using a supported version, see http://edocs.bea.com/platform/docs81/support/supp_plat.html#1085671.
- Define a pagesize of at least 8K to support WebLogic Portal’s use of wide tables, wide columns, and larger indexes.

If your Sybase instance uses 2k or 4k pages, create a new Sybase instance with an 8K page size. Sybase provides a migration utility to migrate data between servers of different page

sizes. A technical white paper on the Sybase migration process can be found at:

<http://www.sybase.com/detail/printthis/1,6907,1021203,00.html>.

- For WebLogic Portal 7.0 users who are upgrading to version 8.1, ensure that the following WebLogic Portal 7.0 script has been run:

```
bea\weblogic700\portal\db\sybase\125\migrate\migrate_to_125.sql
```

1. Install the Sybase client software on the WebLogic Platform host and do the following:
 - a. Configure it connect to the target Sybase instance.
 - b. Verify that you can connect to the target instance via isql. For example,

```
isql -Usa -Ppassword -SMysybase
```

2. Prepare the Sybase database. The database creation scripts install domain-specific tables. You should work with your database administrator to adjust the `SAMPLE` scripts, and to create the database schema owner users and tablespaces needed for your environment.

Notes: Multiple databases are required if you have multiple domains, or to run multiple environments using the same Sybase instance (for example, if you want to run development and system test from a single Sybase installation).

Be sure to back up your database(s) before installing any new database objects. See your database documentation for details.

- a. Review and modify the provided sample scripts to suit your environment. These scripts are provided in WL_HOME/portal/db/sybase/125/admin.

Script Name	Description
create_devices.sql	<p>Create database devices.</p> <p>Usage Notes: Database devices must be created by a user with system administrator privileges (normally the 'sa' user). "D:\DATAFILE" and "E:\LOGFILE" specifications in this script must be changed to reflect valid disk locations for your environment. Optimally, data and log devices would be placed on separate physical disks, which reside on separate controllers. Edits are required to change file sizes and device names.</p> <p>The following default names are used:</p> <ul style="list-style-type: none"> • data device: WEBLOGIC_DATA • log device: WEBLOGIC_LOG
create_database.sql	<p>Create the database and login. An alias is added to the dbo (database owner user) of the database. The devices created by create_devices.sql are used.</p> <p>Usage Notes: Edits are required to reflect name or size changes from create_devices.sql. Edits are required to change the default database name and/or database owner user.</p> <p>The following defaults are used:</p> <ul style="list-style-type: none"> • data device: WEBLOGIC_DATA • log device: WEBLOGIC_LOG • database name: WEBLOGIC • database owner user: WEBLOGIC • password: WEBLOGIC <p>If the database you are creating is a development database your database administrator may want to uncomment and set the "truncate log on checkpoint" database option.</p> <p>If your application will use WebLogic Workshop page flows or RowSet controls uncomment and set the 'DDL in transaction' to true option to true to allow database table create commands to work properly.</p>

Script Name	Description
statistics_build.sql	Builds statistics.sql to update table and index statistics for the database optimizer. Statistics should be should be updated whenever any significant changes in database data occurs. Your database administrator should schedule update statistics to run periodically in your environment.
install_report_build.sql install_report_static.sql	Builds an informational installation report about the database objects created by the WEBLOGIC user.
bt_create_devices.sql	<p>Creates behavior tracking database devices.</p> <p>Usage Notes: Database devices must be created by a user with system administrator privileges (normally the 'sa' user). "D:\DATAFILE" and "E:\LOGFILE" specifications in this script must be changed to reflect valid disk locations for your environment. Optimally, data and log devices would be placed on separate physical disks, which reside on separate controllers. Edits are required to change file sizes and device names.</p> <p>The following default names are used:</p> <ul style="list-style-type: none"> • data device: WEBLOGIC_EVENT_DATA • log device: WEBLOGIC_EVENT_LOG
bt_create_database.sql	<p>Create the WEBLOGIC_EVENT database and WEBLOGIC_EVENT database owner user login. An alias is created to make WEBLOGIC_EVENT dbo (database owner user) in the database.</p> <p>Usage Notes: Edits are required to change database names, database owner user and password. Edits are required to reflect valid disk locations for DATA and the LOG devices, or to adjust file sizes. DATA and LOG files should be placed on separate physical disks and away from any system database files.</p> <p>The following defaults are used:</p> <ul style="list-style-type: none"> • data device: WEBLOGIC_EVENT_DATA • log device: WEBLOGIC_EVENT_LOG • database name: WEBLOGIC • database owner user: WEBLOGIC • password: WEBLOGIC

- b. Run `create_devices.sql` as a user with system administrator privileges. For example,


```
isql -Usa -SMYSYBASE -e -icreate_devices.sql -ocreate_devices.log
```
- c. Run `create_database.sql` via `isql` as a user with System Administrator privileges (i.e. the `sa` user).

```
isql -Usa -SMYSYBASE -e -icreate_database.sql -ocreate_database.log
```

Output from the above is written to the file specified after the `"-o"` parameter. The log file is stored in the same directory that the script resides. Verify that each log file contains no errors for database object creation.

- d. Statistics and install report scripts will be run automatically by the `create_db.cmd/.sh` scripts. Ensure that your database administrator schedules update statistics to be run periodically for your WebLogic Portal database.
3. Follow the steps in [“Manually Creating Database Objects” on page 5-5](#).

Manually Creating Database Objects

You can either manually create database objects or use the Configuration Wizard, see [“Manually Creating Database Objects and JDBC Settings” on page 1-2](#) for more information.

Note: If you choose to use the WebLogic Configuration Wizard to configure and connect to the database that you will use to support WebLogic Portal, see <http://edocs.bea.com/platform/docs81/configwiz/index.html>.

To manually create WebLogic Portal database objects, use the following steps:

1. Verify that you can connect to the target database. Use the following command syntax to verify that you can connect to the target database server using the default schema owner user created by running `create_database.sql`.


```
isql -UWEBLOGIC -SMYSYBASE
```
2. Open your domain's `db_settings.properties` file for edit and comment out the database setting for PointBase.
3. Uncomment the database settings for your new target database and update the following settings for your database:
 - server=
 - dblogin=
 - password=
4. Initialize the database with the new settings.

- a. Navigate to the <BEA_HOME>\user_projects\domains\portalDomain directory, and double-click on the create_db.cmd file.
- b. Verify the results in the create_db.log file.

Note: If you are using the sample domain, run the create_db.cmd/sh file from the following directory: <WL_HOME>\samples\domains\portal.

5. Follow the steps in “[Manually Configuring Your Domain's JDBC Driver Settings](#)” on [page 5-6](#).

Manually Configuring Your Domain's JDBC Driver Settings

You can either manually configure your domains JDBC driver settings using the WebLogic Server Console, or use the Configuration Wizard, see “[Manually Creating Database Objects and JDBC Settings](#)” on [page 1-2](#) for more information.

To manually configure your JDBC Driver settings using WebLogic Server Console,

1. Start the WebLogic Server for your domain.
2. Log on to the WebLogic Server Console.
3. Configure your new connection pools.
 - a. Go to Services -> JDBC -> Connection Pools.
 - b. Click Configure a new Connection Pool.
 - c. Select the appropriate Database Type and Non-XA Database Driver from the drop down list boxes and click Continue. For more information, see the Supported Configuration documentation for JDBC drivers supported by WebLogic Portal, http://edocs.bea.com/platform/docs81/support/supp_plat.html#1085671.

Note: For an XA configuration, see “Creating XA Domains Using Configuration Templates” in the “Creating WebLogic Configurations Using the Configuration Wizard documentation, <http://edocs.bea.com/platform/docs81/configwiz/index.html> .
 - d. Choose a name for the new Connection Pool (For example: cgPoolN) and fill in the blanks for your vendor database. Click Continue.
 - e. Test your connection to verify that you can successfully connect to your database.
 - f. Create and deploy your new Connection Pool.

Note: A one-to-one mapping of JDBCDataSource to JDBC Connection Pool needs to be maintained in the domain's configuration (as managed in the config.xml file). Create one new JDBC Connection Pool for each JDBCDataSource and another JDBC Connection Pool for the domain's JDBCDataSources.

4. Update your data sources.
 - a. From Services -> JDBC -> Data Sources, click on each data source and switch each to the newly created connection pool. Be sure to apply each change.
 - b. Verify that each Data Source is changed by clicking on Data Sources and then verifying that Pool Name has been set to the new Connection Pool for each.
5. From Services -> JMS -> Stores -> cgJMSStore, switch cgJMSStore to use the new Connection Pool.
6. Stop your domain's WebLogic Server, then restart it.
7. In the WebLogic Server Console, delete the original connection pools.
 - a. Go to Services -> JDBC -> Connection Pools.
 - b. Right-click each connection pool and select Delete.

Creating a Database for Behavior Tracking Events

You may want to store behavior tracking events in a different location than other WebLogic Portal database objects for increased performance. For more information about behavior tracking, see http://e-docs.bea.com/wlp/docs81/adminportal/help/SA_BehavTrackServ.html.

Note: By default, behavior tracking database objects are created in the same database as other WebLogic Portal database objects. You only need to following these steps if you are configuring a separate database for behavior tracking events.

1. Verify that you can connect to the target Sybase instance, see [step 1. in “Configuring a Sybase Database”](#).
2. Run `bt_create_devices.sql` via `isql` as a user with system administrator privileges. For example,


```
isql -Usa -SMYSYBASE -e -ibt_create_devices.sql
-obt_create_devices.log
```
3. Run `bt_create_database.sql` via `isql` as a user with system administrator privileges (i.e. the sa user).

```
isql -Usa -SMYSYBASE -e -ibt_create_database.sql  
-obt_create_database.log
```

4. Open your domain's `db_settings.properties` file for edit.
 - a. Within the `db_settings.properties` file, uncomment the database settings for Sybase and update the following settings:
 - `server=<SERVER_NAME>`
 - `dblogin=WEBLOGIC_EVENT`
 - `password=WEBLOGIC_EVENT`
 5. Within the `db_settings.properties` file, find the `p13n_modules`, `portal_modules` and `netuix_modules` lines at the top of the file.
 - b. Copy these 3 lines and comment out the original settings by adding a # sign.
 - c. Replace the original settings as follows:
 - Replace `p13n_modules=p13n au bt ds` with `p13n_modules=bt`
 - Replace `portal_modules=cm wlcs wps collaboration sample_cm` with `portal_modules=`
 - Replace `netuix_modules=pf` with `netuix_modules=`When you are finished, the section should look like this:

```
#p13n_modules=p13n au bt ds  
#portal_modules=cm wlcs wps collaboration sample_cm  
#netuix_modules=pf  
  
p13n_modules=bt  
portal_modules=  
netuix_modules=
```
 - d. Save the changes to the `db_settings.properties` file.
6. Initialize the database with the new settings.
 - a. Navigate to the `\\<BEA_HOME>\user_projects\domains\portalDomain` directory, and double-click on the `create_db.cmd` file.
 - b. Verify the results in the `db.log` file.

Note: If you are using the sample domain, run the create_db.cmd file from the following directory: \\<WL_HOME>\samples\domains\portal.

7. Configure a connection pool to access your behavior tracking database and associate the p13n_tracking JDBC Data Source with that connection pool. Follow the steps in [“Manually Configuring Your Domain's JDBC Driver Settings”](#) on page 5-6.

Using a Sybase Database

Using a DB2 Database

This section describes the steps necessary to use a DB2 database with WebLogic Portal 8.1, and includes information on the following subjects:

- [Configuring a DB2 Database](#)
- [Manually Creating Database Objects](#)
- [Manually Configuring Your Domain's JDBC Driver Settings](#)
- [Creating a Database for Behavior Tracking Events](#)

Typically, the steps in this chapter should be performed by a database administrator.

Note: Review this entire chapter and any release notes before proceeding.

Configuring a DB2 Database

Before proceeding, be sure you have read [“Overview of Database Configuration for WebLogic Portal” on page 1-1](#).

1. Install the DB2 client software and configure it to connect to the target DB2 database. See your DB2 documentation for more information.
2. Verify that you can connect to the target database through the Command Line Processor (CLP).

3. Prepare the DB2 database. The database creation scripts will install domain-specific tables for each. It is recommended that you work with a database administrator to adjust the SAMPLE scripts, and to create the database objects (users, passwords, tablespaces, etc.) needed for your environment.

Notes: Multiple databases are required if you have multiple domains, or to run multiple environments using the same DB2 instance (for example, if you want to run development and system test from a single DB2 installation).

Be sure to back up your database schemas before installing any new database objects. See your database documentation for details.

DB2 Configuration Parameters Minimum Settings for DB2

To ensure the Portal application can successfully run on DB2 there are some minimum configuration parameters that need to be set. Without the minimum settings, heavy Portal activity may exceed database capacity.

Configure you DB2 database with the following configure parameter as guidelines for minimums:

- Dynamic Sections:20,000
- applheapsz: 24,000
- pckcachesz: 2500

- a. Review and modify the provided sample scripts to suit your environment. The scripts are located in `<WL_HOME>/portal/db/db/db2/8/admin`.

The following table lists the script names and the usage notes for each script.

Script Name	Description
<code>create_user.sql</code>	<p>Grant createtab, bindadd and connect DB2 privileges to the WEBLOGIC schema owner user.</p> <p>Usage Notes: Because IBM DB2 databases authenticate users via the operating system (OS), you need to create an OS user that will own database schema objects. Edits are required to change the schema owner user name.</p> <p>The default schema owner user name and password are the following:</p> <ul style="list-style-type: none"> • schema owner user: WEBLOGIC • schema owner user password: WEBLOGIC
<code>create_bufferpool.sql</code>	<p>Create an 8K bufferpool, if one does not already exist.</p> <p>Usage Notes: DB2 must be stopped and restarted to utilize new bufferpools. Edits are required to change the 8K bufferpool name.</p> <p>The default bufferpool is BP8K.</p>
<code>create_tablespace.sql</code>	<p>Creates a 4K and 8K regular tablespaces.</p> <p>The default tablespace names are the following:</p> <p>WEBLOGIC_DATA_4K: Tables for WebLogic Portal and/or WebLogic Platform with rowsize smaller than 4K.</p> <p>WEBLOGIC_DATA_8K: Tables for WebLogic Portal and/or WebLogic Platform with rowsize larger than 4K and smaller than 8K.</p> <p>Usage Notes: Edits are required to specify valid physical disk locations for your environment (d:\db2\data\data4k), for a database user other than WEBLOGIC and to change buffer pool names.</p>
<code>create_temp_tablespace.sql</code>	<p>Create an 8K temporary tablespace.</p> <p>The default tablespace name is TEMPSPACE_8K.</p> <p>Usage Notes: Edits are required to specify valid physical disk locations for your environment (d:\db2\data\data4k), for a database user other than WEBLOGIC and to change buffer pool names.</p>

Script Name	Description
statistics_build.sql	Builds a file of "runstats" commands for each table that will compute database statistics needed for the database optimizer. Runstats should be run whenever any significant changes in database data occur. Your database administrator will typically schedule "runstats to run periodically in your environment.
install_report.sql	Builds an informational installation report about the database objects created in the WEBLOGIC schema.
bt_create_tablespace.sql	Creates the WEBLOGIC_EVENT_DATA tablespace. Usage Notes: Edits are required to specify valid physical disk locations for your environment (<event_container>), and to use a buffer pool other than the IBM default buffer pool.
bt_create_users.sql	Creates the WEBLOGIC_EVENT schema owner user, establishes the user's password, default and temporary tablespaces and grants privileges to that user. Usage Notes: Edits are required to change the schema owner user name, password and tablespace names. The default schema owner user name and password are the following: <ul style="list-style-type: none"> • schema owner user: WEBLOGIC • schema owner user password: WEBLOGIC

- b. Start the CLP DB2 tool from the directory that contains the scripts.
- c. From CLP, connect to the database you want to work with. For example, type:

```
Db2 connect to <DATABASE> user <USER_NAME> password <PASSWORD>
```
- d. From CLP, run `create_bufferpool.sql`, if needed. You may not need to create a new 8K bufferpool if you already have one to utilize. For example, type:

```
Db2 -tf create_bufferpool.sql -v
```
- e. Restart your database instance.
- f. From CLP, run `create_temp_tablespaces.sql`. For example, type:

```
Db2 -tf create_temp_tablespaces.sql -v
```
- g. From CLP, run `create_tablespaces.sql`. For example, type:

```
Db2 -tf create_tablespaces.sql -v
```

- h. From CLP, run `create_user.sql`. For example, type:
`Db2 -tf create_user.sql -v`
4. Follow the steps in [“Manually Creating Database Objects” on page 6-5](#).

Manually Creating Database Objects

You can either manually create database objects or use the Configuration Wizard, see [“Manually Creating Database Objects and JDBC Settings” on page 1-2](#) for more information.

Note: If you choose to use the WebLogic Configuration Wizard to configure and connect to the database that you will use to support WebLogic Portal, see <http://edocs.bea.com/platform/docs81/configwiz/index.html>.

To manually create BEA Portal database objects, use the following steps:

1. From DB2-CLP, use the following command to verify that you can connect to the target database server with a valid user ID and password:
`db2 connect to <DATABASE> user <USERNAME> password <PASSWORD>`
 2. Open your domain's `db_settings.properties` file for edit and comment out the database settings for PointBase.
 3. In the `db_settings.properties` file for your domain, uncomment the database settings for your new target database and update the following settings for your database:
 - server=
 - dblogin=
 - password=
 4. Create the database.
 - a. For Windows, navigate to the `<BEA_HOME>\user_projects\domains\portalDomain` directory, and double-click on the `create_db.cmd` file.
 - b. For UNIX, navigate to the `<BEA_HOME>\user_projects\domains\portalDomain` directory, run `create_db.sh`.
 - c. Verify the results in the `create_db.log` file.
- Note:** If you are using the sample domain, run the `create_db.cmd/sh` file from the following directory: `<BEA_HOME>\weblogic81\samples\domains\portal`.
5. Follow the steps in [“Manually Configuring Your Domain's JDBC Driver Settings” on page 6-6](#).

Manually Configuring Your Domain's JDBC Driver Settings

You can either manually configure your domains JDBC driver settings using the WebLogic Server Console, or use the Configuration Wizard, see “[Manually Creating Database Objects and JDBC Settings](#)” on page 1-2 for more information.

To manually configure your JDBC Driver settings using WebLogic Server Console,

1. Start the WebLogic Server for your domain.
2. Login to the WebLogic Server Console.
3. Configure your new connection pools.
 - a. Go to Services -> JDBC -> Connection Pools.
 - b. Click Configure a new Connection Pool.
 - c. Select the appropriate Database Type and Non-XA Database Driver from the drop down list boxes and click Continue. For more information, see the Supported Configuration documentation for JDBC drivers supported by WebLogic Portal, http://edocs.bea.com/platform/docs81/support/supp_plat.html#1085671.
Note: For an XA configuration, see “Creating XA Domains Using Configuration Templates” in the “Creating WebLogic Configurations Using the Configuration Wizard documentation, <http://edocs.bea.com/platform/docs81/configwiz/index.html> .
 - d. Choose a name for the new Connection Pool (For example: cgPoolN) and fill in the blanks for your vendor database. Click Continue.
 - e. Test your connection to verify that you can successfully connect to your database.
 - f. Create and deploy your new Connection Pool.
Note: A one-to-one mapping of JDBCDataSource to JDBC Connection Pool needs to be maintained in the domain’s configuration (as managed in the config.xml file). Create one new JDBC Connection Pool for each JDBCDataSource and another JDBC Connection Pool for the domain’s JDBCDataSources.
4. Update your data sources.
 - a. From Services -> JDBC -> Data Sources, click on each data source and switch each to the newly created connection pool. Be sure to apply each change.
 - b. Verify that each Data Source is changed by clicking on Data Sources and then verifying that Pool Name has been set to the new Connection Pool for each.

5. From Services -> JMS -> Stores -> cgJMSSStore, switch cgJMSSStore to use the new Connection Pool.
6. Stop your domain's WebLogic Server, then restart it.
7. In the WebLogic Server Console, delete the original connection pools.
 - a. Go to Services -> JDBC -> Connection Pools.
 - b. Right-click each connection pool and select Delete.

Creating a Database for Behavior Tracking Events

You may want to store behavior tracking events in a different location than other WebLogic Portal database objects for increased performance. For more information about behavior tracking, see http://e-docs.bea.com/wlp/docs81/adminportal/help/SA_BehavTrackServ.html.

Note: By default, behavior tracking database objects are created in the same database as other WebLogic Portal database objects. You only need to following these steps if you are configuring a separate database for behavior tracking events.

1. Verify that you can connect to the target database, see [step 1. in “Configuring a DB2 Database”](#).
 2. From CLP, run the `bt_create_temp_tablespace.sql` script. For example, type,

```
Db2 -tf bt_reate_temp_tablespace.sql -v
```
 3. From CLP, run `bt_create_user.sql`. For example, type,

```
Db2 -tf bt_create_user.sql -v
```
 4. Open your domain's `db_settings.properties` file for edit.
 - a. Within the `db_settings.properties` file, uncomment the database settings for DB2 and update the following settings:
 - `server=<SERVER_NAME>`
 - `dblogin=WEBLOGIC_EVENT`
 - `password=WEBLOGIC_EVENT`
 - b. Within the `db_settings.properties` file, find the `p13n_modules`, `portal_modules` and `netuix_modules` lines at the top of the file.
 - c. Copy these 3 lines and comment out the original settings by adding a `#` sign.
 - d. Replace the original settings as follows:
 - Replace `p13n_modules=p13n au bt ds` with `p13n_modules=bt`
 - Replace `portal_modules=cm wlcs wps collaboration sample_cm` with `portal_modules=`
 - Replace `netuix_modules=pf` with `netuix_modules=`
- When you are finished, the section should look like this:
- ```
#p13n_modules=p13n au bt ds
```

```
#portal_modules=cm wlcs wps collaboration sample_cm
#netuix_modules=pf
p13n_modules=bt
portal_modules=
netuix_modules=
```

- e. Save the changes to the `db_settings.properties` file. Save the changes to the `db_settings.properties` file.
5. Initialize the database schema with the new settings.
    - a. For Windows, navigate to the `\\bea\user_projects\domains\portalDomain` directory, and double-click on the `create_db.cmd` file.
    - b. For UNIX, navigate to the `\\bea\user_projects\domains\portalDomain` directory, run `create_db.sh`.
    - c. Verify the results in the `db.log` file.
- Note:** If you are using the sample domain, run the `create_db.cmd/sh` file from the following directory: `\\bea\weblogic81\samples\domains\portal`.
6. Configure a connection pool to access your behavior tracking database and associate the `p13n_tracking` JDBC Data Source with that connection pool. Follow the steps in [“Manually Configuring Your Domain's JDBC Driver Settings”](#) on page 6-6.

## Using a DB2 Database

# The Data Dictionary

This section describes the database objects for each component of WebLogic Portal. The information in this section is collectively known as the data dictionary.

## Information Provided

For each component of WebLogic Portal, the following information is provided:

- An entity-relationship diagram
- A detailed description of each database table, including:

Table Name

The predefined name for the Table

Table Description

A detailed description of the contents and purpose for the table in WebLogic Portal database schema.

Column Name

The predefined name for the column

Data Type

The predefined characteristics for the column.

**Note:** Data types vary slightly by DBMS. For instance, Columns defined as BLOB data types in Oracle, DB2, and PointBase would be defined as TEXT columns in Microsoft SQL Server and Sybase.

**Null Value**

Whether or not null values are allowed to be stored for the column.

**Column Description**

A detailed description of the contents and purpose for the column including Primary Key (PK-) and Foreign Key (FK-) designations.

## Portal Database Components Covered

This section includes information on the following subjects:

- [Behavior Tracking Database Objects](#)
- [Commerce Services Database Objects](#)
- [Product Catalog Database Tables](#)
- [Order and Discount Database Objects](#)
- [Personalization Database Objects](#)
- [Data Synchronization Database Objects](#)
- [WebLogic Portal Services Database Objects](#)
- [Portal Framework Database Objects](#)
  - [WSRP \(Web Services for Remote Portlets\) Objects](#)
- [Content Management Database Objects](#)
- [Content Management Virtual Database Objects](#)
- [Tracked Anonymous User Database Objects](#)

**Note:** [Appendix A, “WebLogic Portal DDL Modules”](#) identifies the filenames and location of DDL (database definition language) files for each set of Portal Database objects.

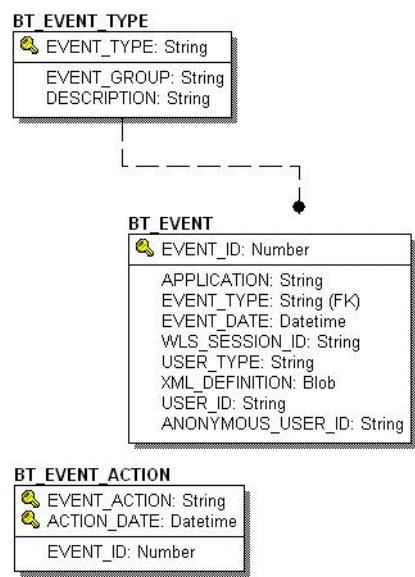
## Behavior Tracking Database Objects

To record how online visitors are interacting with your Web site, you can record event information to a database. These kinds of events are called Behavior Tracking events. Analytics Marketing systems can then analyze these events offline to evaluate visitor behavior and transactional data. You can use the knowledge gained from analysis to create and optimize personalization rules, set up product offers, and develop interactive marketing campaigns. This

section describes the requirements and database objects needed to log event data for analytical use.

Three tables are provided for the Behavior Tracking data. The BT\_EVENT table stores all event data. The BT\_EVENT\_ACTION table logs actions used by third-party vendors against the recorded event data, and the BT\_EVENT\_TYPE table references event types and categories in the EVENT table. Figure 7-1 shows an entity-relation diagram for the WebLogic Portal Behavior Tracking Database objects.

Figure 7-1 Entity-Relation Diagram for the Behavior Tracking Database



## The BT\_EVENT\_TYPE Database Table

This table references event types and categories in the BT\_EVENT table. This table is static.

Table 7-1 BT\_EVENT\_TYPE Table Metadata

| Column Name | Data Type    | Null Value | Description                                                   |
|-------------|--------------|------------|---------------------------------------------------------------|
| EVENT_TYPE  | VARCHAR (30) | Not Null   | PK - A unique, system-generated number used as the record ID. |

**Table 7-1 BT\_EVENT\_TYPE Table Metadata (Continued)**

| Column Name | Data Type    | Null Value | Description                                              |
|-------------|--------------|------------|----------------------------------------------------------|
| EVENT_GROUP | VARCHAR (10) | Not Null   | The event category group associated with the event type. |
| DESCRIPTION | VARCHAR (50) | Null       | A description of the EVENT_TYPE.                         |

To record custom events, you must create an entry in this table. If a custom event does not have a record in this table, you cannot persist it to the BT\_EVENT table.

## The BT\_EVENT Database Table

This table stores all Behavior Tracking event data.

**Table 7-2 The BT EVENT Table Metadata**

| Column Name    | Data Type     | Null Value | Description                                                                                                                                                        |
|----------------|---------------|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EVENT_ID       | NUMBER        | Not Null   | PK - A unique, system-generated number used as the record ID.                                                                                                      |
| APPLICATION    | VARCHAR (30)  | Not Null   | The application that created the event.                                                                                                                            |
| EVENT_TYPE     | VARCHAR (30)  | Not Null   | FK - Set to BT_EVENT_TYPE. A string identifier showing which event was fired.                                                                                      |
| EVENT_DATE     | DATE          | Not Null   | The date and time of the event.                                                                                                                                    |
| WLS_SESSION_ID | VARCHAR (254) | Not Null   | A unique, WebLogic Server-generated number assigned to the session.                                                                                                |
| XML_DEFINITION | CLOB          | Null       | An XML document that contains the specific event information for each event type. It is stored as a CLOB (Character Large Object). See <a href="#">Table 7-3</a> . |
| USER_ID        | VARCHAR (50)  | Null       | The user ID associated with the session and event. If the user has not logged in this column will be null.                                                         |

As shown in [Table 7-2](#), the BT\_EVENT table has six columns; each column corresponds to a specific event element. Five of the EVENT table's columns contain data common to every event

type. The `XML_DEFINITION` column contains all information from these five columns plus event data that is unique to each event type. An XML document is created specifically for each event type. The data elements corresponding to each event type are captured in the `XML_DEFINITION` column of the `EVENT` table. These elements are listed in [Table 7-3](#).

**Table 7-3 XML\_DEFINITION Data Elements**

| Event                     | Data Element                                                                                                                                       |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| AddToCartEvent            | application<br>event-date<br>event-type<br>session-id<br>user-id<br>sku<br>quantity<br>unit-list-price<br>currency<br>application-name             |
| BuyEvent                  | application<br>event-date<br>event-type<br>session-id<br>user-id<br>sku<br>quantity<br>unit-price<br>currency<br>application-name<br>order-line-id |
| CampaignUserActivityEvent | application<br>event-date<br>event-type<br>session-id<br>user-id<br>campaign-id<br>scenario-id                                                     |

**Table 7-3 XML\_DEFINITION Data Elements (Continued)**

| <b>Event</b>         | <b>Data Element</b>                                                                                                                                                  |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ClickCampaignEvent   | application<br>event-date<br>event-type<br>session-id<br>user-id<br>document-type<br>document-id<br>campaign-id<br>scenario-id<br>application-name<br>placeholder-id |
| ClickContentEvent    | application<br>event-date<br>event-type<br>session-id<br>user-id<br>document-type<br>document-id                                                                     |
| ClickProductEvent    | application<br>event-date<br>event-type<br>session-id<br>user-id<br>document-type<br>document-id<br>sku<br>category-id<br>application-name                           |
| DisplayCampaignEvent | application<br>event-date<br>event-type<br>session-id<br>user-id<br>document-type<br>document-id<br>campaign-id<br>scenario-id<br>application-name<br>placeholder-id |

**Table 7-3 XML\_DEFINITION Data Elements (Continued)**

| <b>Event</b>        | <b>Data Element</b>                                                                                                                        |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| DisplayContentEvent | application<br>event-date<br>event-type<br>session-id<br>user-id<br>document-type<br>document-id                                           |
| DisplayProductEvent | application<br>event-date<br>event-type<br>session-id<br>user-id<br>document-type<br>document-id<br>sku<br>category-id<br>application-name |
| PurchaseCartEvent   | application<br>event-date<br>event-type<br>session-id<br>user-id<br>total-price<br>order-id<br>currency<br>application-name                |
| RemoveFromCartEvent | application<br>event-date<br>event-type<br>session-id<br>user-id<br>sku<br>quantity<br>unit-price<br>currency<br>application-name          |

**Table 7-3 XML\_DEFINITION Data Elements (Continued)**

| Event                 | Data Element |
|-----------------------|--------------|
| RuleEvent             | application  |
|                       | event-date   |
|                       | event-type   |
|                       | session-id   |
|                       | user-id      |
|                       | ruleset-name |
|                       | rule-name    |
| SessionBeginEvent     | application  |
|                       | event-date   |
|                       | event-type   |
|                       | session-id   |
|                       | user-id      |
| SessionEndEvent       | application  |
|                       | event-date   |
|                       | event-type   |
|                       | session-id   |
|                       | user-id      |
| SessionLoginEvent     | application  |
|                       | event-date   |
|                       | event-type   |
|                       | session-id   |
|                       | user-id      |
| UserRegistrationEvent | application  |
|                       | event-date   |
|                       | event-type   |
|                       | session-id   |
|                       | user-id      |

**The BT\_EVENT\_ACTION Database Table**

This table logs actions used by third-party vendors against the recorded event data.

**Table 7-4 BT\_EVENT\_ACTION Table Metadata**

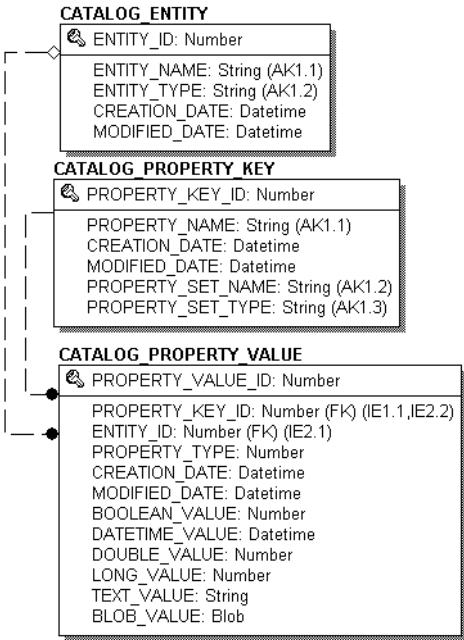
| Column Name  | Data Type    | Null Value | Description                                                                                               |
|--------------|--------------|------------|-----------------------------------------------------------------------------------------------------------|
| EVENT_ACTION | VARCHAR (30) | Not Null   | The event action taken such as BEGIN EXPORT or END EXPORT. This field is one of the table's primary keys. |
| ACTION_DATE  | DATE         | Not Null   | The date and time of the event. This field is one of the table's primary keys.                            |
| EVENT_ID     | NUMBER       | Null       | The ID of the event that corresponds with the event action taken.                                         |

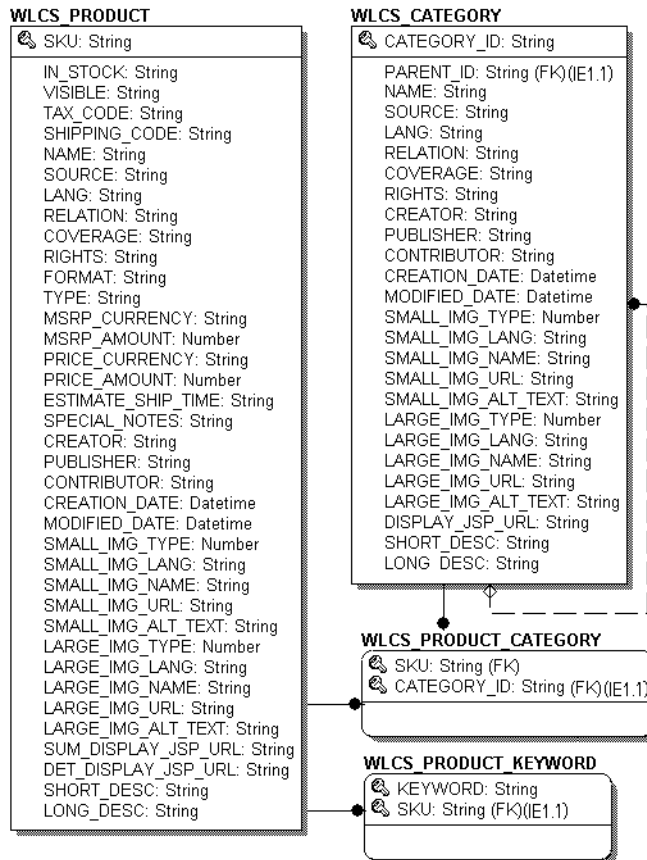
## Commerce Services Database Objects

The metadata for items in Commerce services Product Catalog are based on the Dublin Core Metadata Open Standard. This standard offers a number of advantages for a Web-based catalog. For more information about the Dublin Core Metadata Open Standard, please see <http://purl.org/dc>.

Figure 7-2 and Figure 7-3 show the Entity-Relation for the WebLogic Portal Commerce services core Product Catalog database objects.

Figure 7-2 Entity-Relation Diagram for the Core Product Catalog Tables



**Figure 7-3 Entity-Relation Diagram for the Core Product Catalog Tables - continued**

## Product Catalog Database Tables

The following tables compose the product catalog database.

- [The CATALOG\\_ENTITY Database Table](#)
- [The CATALOG\\_PROPERTY\\_KEY Database Table](#)
- [The CATALOG\\_PROPERTY\\_VALUE Database Table](#)
- [The WLCS\\_CATEGORY Database Table](#)

- [The WLCS\\_PRODUCT Database Table](#)
- [The WLCS\\_PRODUCT\\_CATEGORY Database Table](#)
- [The WLCS\\_PRODUCT\\_KEYWORD Database Table](#)

## The CATALOG\_ENTITY Database Table

Some objects in WebLogic Portal implement a Java interface called ConfigurableEntity. Any ConfigurableEntity within the system will have an entry in this table.

**Table 7-5 CATALOG\_ENTITY Table Metadata**

| Column Name   | Data Type     | Null Value | Description                                                       |
|---------------|---------------|------------|-------------------------------------------------------------------|
| ENTITY_ID     | NUMBER (15)   | Not Null   | PK—a unique, system-generated number used as a record identifier. |
| ENTITY_NAME   | VARCHAR (200) | Not Null   | The name of the entity.                                           |
| ENTITY_TYPE   | VARCHAR (100) | Not Null   | The type of entity (e.g., User, Group, etc.)                      |
| CREATION_DATE | DATE          | Not Null   | The time and date the record was created.                         |
| MODIFIED_DATE | DATE          | Not Null   | The time and date the record was last modified.                   |

## The CATALOG\_PROPERTY\_KEY Database Table

Scoped property names that are associated with configurable entities. Any property assigned to a ConfigurableEntity has a unique PROPERTY\_ID. This identifier and associated information is stored here.

**Table 7-6 CATALOG\_PROPERTY\_KEY Table Metadata**

| Column Name     | Data Type     | Null Value | Description                                                                    |
|-----------------|---------------|------------|--------------------------------------------------------------------------------|
| PROPERTY_KEY_ID | NUMBER (15)   | Not Null   | PK—a unique, system-generated number used as a record identifier.              |
| PROPERTY_NAME   | VARCHAR (100) | Not Null   | The name of the property (formerly PROPERTY_NAME from the WLCS_PROP_ID table). |

**Table 7-6 CATALOG\_PROPERTY\_KEY Table Metadata (Continued)**

| Column Name       | Data Type     | Null Value | Description                                                               |
|-------------------|---------------|------------|---------------------------------------------------------------------------|
| CREATION_DATE     | DATE          | Not Null   | The time and date the record was created.                                 |
| MODIFIED_DATE     | DATE          | Not Null   | The time and date the record was last modified.                           |
| PROPERTY_SET_NAME | VARCHAR (100) | Null       | The name of the property set (formerly the SCOPE_NAME from WLCS_PROP_ID). |
| PROPERTY_SET_TYPE | VARCHAR (100) | Null       | The type of property set (for example, USER)                              |

## The CATALOG\_PROPERTY\_VALUE Database Table

Boolean, timestamp, float, integer, text, and user-defined (object) property values that are associated with configurable entities.

**Table 7-7 CATALOG\_PROPERTY\_VALUE Table Metadata**

| Column Name       | Data Type   | Null Value | Description                                                                                         |
|-------------------|-------------|------------|-----------------------------------------------------------------------------------------------------|
| PROPERTY_VALUE_ID | NUMBER (15) | Not Null   | PK—a unique, system-generated number used as a record identifier.                                   |
| PROPERTY_KEY_ID   | NUMBER (15) | Not Null   | FK - A system-generated value and foreign key to the PROPERTY_KEY column.                           |
| ENTITY_ID         | NUMBER (15) | Not Null   | FK - A system-generated value and foreign key to the ENTITY column.                                 |
| PROPERTY_TYPE     | NUMBER (1)  | Not Null   | Valid entries are:<br>0=Boolean, 1=Integer, 2=Float, 3=Text, 4=Date and Time, 5=User-Defined (BLOB) |
| CREATION_DATE     | DATE        | Not Null   | The time and date the record was created.                                                           |
| MODIFIED_DATE     | DATE        | Not Null   | The time and date the record was last modified.                                                     |
| BOOLEAN_VALUE     | NUMBER (1)  | Null       | The value for each boolean property identifier.                                                     |

**Table 7-7 CATALOG\_PROPERTY\_VALUE Table Metadata (Continued)**

| Column Name     | Data Type     | Null Value | Description                                               |
|-----------------|---------------|------------|-----------------------------------------------------------|
| DATE_TIME_VALUE | DATE          | Null       | The value for each date and time property identifier.     |
| DOUBLE_VALUE    | NUMBER        | Null       | The value associated with each float property identifier. |
| LONG_VALUE      | NUMBER (20)   | Null       | The value associated with the integer property.           |
| TEXT_VALUE      | VARCHAR (254) | Null       | The value associated with the text property.              |
| BLOB_VALUE      | BLOB          | Null       | The value associated with the user-defined property.      |

## The WLCS\_CATEGORY Database Table

Categories in the Commerce database. The descriptions shown in the table reflect the “recommended best practice” for the use of that field by the Dublin Core standard.

**Table 7-8 WLCS\_CATEGORY Table Metadata**

| Column Name | Data Type    | Null Value | Descriptions                                                                                                                                                                                                              |
|-------------|--------------|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CATEGORY_ID | VARCHAR (20) | Not Null   | PK - A unique identifier for a category; the primary key for this table. This field cannot be NULL. All other fields in the WLCS_CATEGORY table can be NULL.                                                              |
| PARENT_ID   | VARCHAR (20) | Null       | The value of the CATEGORY_ID of the parent category in the hierarchy of categories that comprise your product catalog. If this is a top-level user-defined category, the PARENT_ID will be <code>com.beasys.ROOT</code> . |
| NAME        | VARCHAR (50) | Null       | The name of the category in the product catalog.                                                                                                                                                                          |
| SOURCE      | VARCHAR (30) | Null       | A reference to a category from which the present category is derived.                                                                                                                                                     |

**Table 7-8 WLCS\_CATEGORY Table Metadata (Continued)**

| Column Name   | Data Type    | Null Value | Descriptions                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------------|--------------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LANG          | VARCHAR (30) | Null       | A language of the intellectual content of the category. The recommended best practice for the values of the language element is defined by RFC 1766, which includes a two-letter Language Code (taken from the ISO 639 standard), such as: en for English; fr for French, or de for German. The language code can, optionally, be followed by a two-letter Country Code (taken from the ISO 3166 standard [ISO3166]). For example, en-uk for English used in the United Kingdom. |
| RELATION      | VARCHAR (30) | Null       | A reference to a related category.                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| COVERAGE      | VARCHAR (30) | Null       | The extent or scope of the content of the category.                                                                                                                                                                                                                                                                                                                                                                                                                              |
| RIGHTS        | VARCHAR (30) | Null       | Information about rights held in and over the category.                                                                                                                                                                                                                                                                                                                                                                                                                          |
| CREATOR       | VARCHAR (50) | Null       | An entity primarily responsible for making the content of the category.                                                                                                                                                                                                                                                                                                                                                                                                          |
| PUBLISHER     | VARCHAR (50) | Null       | An entity responsible for making the category available.                                                                                                                                                                                                                                                                                                                                                                                                                         |
| CONTRIBUTOR   | VARCHAR (50) | Null       | An entity responsible for making contributions to the content of the category.                                                                                                                                                                                                                                                                                                                                                                                                   |
| CREATION_DATE | DATE         | Null       | A date associated with an event in the life cycle of the category. Recommended best practice for encoding the date value is defined in a profile of ISO 8601 and follows the YYYY-MM-DD format.                                                                                                                                                                                                                                                                                  |

**Table 7-8 WLCS\_CATEGORY Table Metadata (Continued)**

| Column Name        | Data Type     | Null Value | Descriptions                                                                                                                                                                                                                                                                                         |
|--------------------|---------------|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MODIFIED_DATE      | DATE          | Null       | A date associated with an event in the life cycle of the category, such as an update or insert by the DBLoader program that is provided with the Commerce services. The recommended best practice for encoding the date value is defined in a profile of ISO 8601 and follows the YYYY-MM-DD format. |
| SMALL_IMG_TYPE     | NUMBER (3)    | Null       | A type field of your own design that relates to the graphic. For example, you can implement your own numbering scheme, such as:<br><br>0 = display a low resolution graphic for users with low bandwidth.<br><br>1 = display a high resolution graphic for users with high bandwidth.                |
| SMALL_IMG_LANG     | VARCHAR (30)  | Null       | The language of the thumbnail image for the category. For related information, see the description of the LANG column.                                                                                                                                                                               |
| SMALL_IMG_NAME     | VARCHAR (50)  | Null       | The name of the thumbnail image for the category.                                                                                                                                                                                                                                                    |
| SMALL_IMG_URL      | VARCHAR (254) | Null       | The URL of the thumbnail image for the category.                                                                                                                                                                                                                                                     |
| SMALL_IMG_ALT_TEXT | VARCHAR (254) | Null       | The alternate text to display when the user has their cursor over the thumbnail image for the category, or if they have disabled the display of graphics in their browser settings.                                                                                                                  |

**Table 7-8 WLCS\_CATEGORY Table Metadata (Continued)**

| Column Name        | Data Type     | Null Value | Descriptions                                                                                                                                                                                                                                                                                 |
|--------------------|---------------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LARGE_IMG_TYPE     | NUMBER (3)    | Null       | <p>A type field of your own design that relates to the graphic. For example, you can implement your own numbering scheme, such as:</p> <p>0 = display a low resolution graphic for users with low bandwidth.</p> <p>1 = display a high resolution graphic for users with high bandwidth.</p> |
| LARGE_IMG_LANG     | VARCHAR (30)  | Null       | The language of the full-size image for the category. For related information, see the description of the LANG column.                                                                                                                                                                       |
| LARGE_IMG_NAME     | VARCHAR (50)  | Null       | The name of the full-size image for the category.                                                                                                                                                                                                                                            |
| LARGE_IMG_URL      | VARCHAR (254) | Null       | The URL of the full-size image for the category.                                                                                                                                                                                                                                             |
| LARGE_IMG_ALT_TEXT | VARCHAR (254) | Null       | The alternate text to display when the user has their cursor over the full-size image for the category, or if they have disabled the display of graphics in their browser settings.                                                                                                          |
| DISPLAY_JSP_URL    | VARCHAR (254) | Null       | <p>The URL to the JSP used to display the category. For example:</p> <p>/commerce/catalog/includes/<br/>category.jsp</p>                                                                                                                                                                     |
| SHORT_DESC         | VARCHAR (50)  | Null       | A short description of the content of the category.                                                                                                                                                                                                                                          |
| LONG_DESC          | VARCHAR (254) | Null       | A long description of the content of the category.                                                                                                                                                                                                                                           |

## The WLCS\_PRODUCT Database Table

Item records in the Commerce database.

**Table 7-9 WLCS\_PRODUCT Table Metadata**

| Column Name   | Data Type     | Null Value | Description                                                                                                                                                                                       |
|---------------|---------------|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SKU           | VARCHAR (40)  | Not Null   | PK - A unique identifier (the “Stock Keeping Unit,” or SKU) for a product item. This field is the table’s primary key and cannot be NULL. All other fields in the WLCS_PRODUCT table can be NULL. |
| IN_STOCK      | VARCHAR (1)   | Null       | A flag to indicate whether the product item is in stock. 0 equates to false, 1 equates to true.                                                                                                   |
| VISIBLE       | VARCHAR (1)   | Null       | Indicates whether the item should be displayed to the user. Enter 1 if visible or 0 if not visible. If not specified in the database, the default is 1.                                           |
| TAX_CODE      | VARCHAR (10)  | Null       | The code used by the TAXWARE system to identify the specific tax category to which this item belongs.                                                                                             |
| SHIPPING_CODE | VARCHAR (10)  | Null       | The code used by the shipping company for this item.                                                                                                                                              |
| NAME          | VARCHAR (100) | Null       | A name given to the product item.                                                                                                                                                                 |
| SOURCE        | VARCHAR (30)  | Null       | A reference to another product item from which the present item is derived.                                                                                                                       |

**Table 7-9 WLCS\_PRODUCT Table Metadata (Continued)**

| Column Name        | Data Type     | Null Value | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------------|---------------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LANG               | VARCHAR (30)  | Null       | A language of the intellectual content of the category. The recommended best practice for the values of the language element is defined by RFC 1766, which includes a two-letter Language Code (taken from the ISO 639 standard), such as: en for English; fr for French, or de for German. The language code can, optionally, be followed by a two-letter Country Code (taken from the ISO 3166 standard [ISO3166]). For example, en-uk for English used in the United Kingdom. |
| RELATION           | VARCHAR (30)  | Null       | A reference to a related product item.                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| COVERAGE           | VARCHAR (30)  | Null       | The extent or scope of the content of the product item.                                                                                                                                                                                                                                                                                                                                                                                                                          |
| RIGHTS             | VARCHAR (30)  | Null       | Information about rights held in and over the item.                                                                                                                                                                                                                                                                                                                                                                                                                              |
| FORMAT             | VARCHAR (30)  | Null       | The physical or digital manifestation of the item.                                                                                                                                                                                                                                                                                                                                                                                                                               |
| TYPE               | VARCHAR (30)  | Null       | The nature or genre of the content of the item.                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| MSRP_CURRENCY      | VARCHAR (30)  | Null       | The currency type of the manufacturer's recommended price.                                                                                                                                                                                                                                                                                                                                                                                                                       |
| MSRP_AMOUNT        | NUMBER (16,4) | Null       | The manufacturer's recommended price.                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| PRICE_CURRENCY     | VARCHAR (30)  | Null       | The currency type of our catalog price for this item.                                                                                                                                                                                                                                                                                                                                                                                                                            |
| PRICE_AMOUNT       | NUMBER (16,4) | Null       | Our current price for this item in the catalog.                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| ESTIMATE_SHIP_TIME | VARCHAR (100) | Null       | Inventory: number of days/weeks before the item can be shipped.                                                                                                                                                                                                                                                                                                                                                                                                                  |
| SPECIAL_NOTES      | VARCHAR (100) | Null       | Inventory related message to display with the item.                                                                                                                                                                                                                                                                                                                                                                                                                              |

**Table 7-9 WLCS\_PRODUCT Table Metadata (Continued)**

| Column Name    | Data Type    | Null Value | Description                                                                                                                                                                                                                                                                                      |
|----------------|--------------|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CREATOR        | VARCHAR (50) | Null       | An entity primarily responsible for making the content of the product item.                                                                                                                                                                                                                      |
| PUBLISHER      | VARCHAR (50) | Null       | An entity responsible for making the product item available.                                                                                                                                                                                                                                     |
| CONTRIBUTOR    | VARCHAR (50) | Null       | An entity responsible for making contributions to the content of the product item.                                                                                                                                                                                                               |
| CREATION_DATE  | DATE         | Null       | A date associated with an event in the life cycle of the product item. Recommended best practice for encoding the date value is defined in a profile of ISO 8601 and follows the YYYY-MM-DD format.                                                                                              |
| MODIFIED_DATE  | DATE         | Null       | A date associated with an event in the life cycle of the item, such as an update or insert by the DBLoader program that is provided with the Commerce services. The recommended best practice for encoding the date value is defined in a profile of ISO 8601 and follows the YYYY-MM-DD format. |
| SMALL_IMG_TYPE | NUMBER (3)   | Null       | <p>A type field of your own design that relates to the graphic. For example, you can implement your own numbering scheme, such as:</p> <p>0 = display a low resolution graphic for users with low bandwidth.</p> <p>1 = display a high resolution graphic for users with high bandwidth.</p>     |
| SMALL_IMG_LANG | VARCHAR (30) | Null       | The language of the thumbnail image for the item. For related information, see the description of the LANG column.                                                                                                                                                                               |
| SMALL_IMG_NAME | VARCHAR (50) | Null       | The name of the thumbnail image for the item.                                                                                                                                                                                                                                                    |

**Table 7-9 WLCS\_PRODUCT Table Metadata (Continued)**

| Column Name         | Data Type     | Null Value | Description                                                                                                                                                                                                                                                                                  |
|---------------------|---------------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SMALL_IMG_URL       | VARCHAR (254) | Null       | The URL of the thumbnail image for the category.                                                                                                                                                                                                                                             |
| SMALL_IMG_ALT_TEXT  | VARCHAR (254) | Null       | The alternate text to display when the user has their cursor over the thumbnail image for the item, or if they have disabled the display of graphics in their browser settings.                                                                                                              |
| LARGE_IMG_TYPE      | NUMBER (3)    | Null       | <p>A type field of your own design that relates to the graphic. For example, you can implement your own numbering scheme, such as:</p> <p>0 = display a low resolution graphic for users with low bandwidth.</p> <p>1 = display a high resolution graphic for users with high bandwidth.</p> |
| LARGE_IMG_LANG      | VARCHAR (30)  | Null       | The language of the full-size image for the item. For related information, see the description of the LANG column.                                                                                                                                                                           |
| LARGE_IMG_NAME      | VARCHAR (50)  | Null       | The name of the full-size image for the item.                                                                                                                                                                                                                                                |
| LARGE_IMG_URL       | VARCHAR (254) | Null       | The URL of the full-size image for the item.                                                                                                                                                                                                                                                 |
| LARGE_IMG_ALT_TEXT  | VARCHAR (254) | Null       | The alternate text to display when the user has their cursor over the full-size image of the item, or if they have disabled the display of graphics in their browser settings.                                                                                                               |
| SUM_DISPLAY_JSP_URL | VARCHAR (254) | Null       | <p>The URL to the JSP used to display the item in summary form. For example:</p> <p>/commerce/catalog/includes/<br/>itemsummary.jsp</p>                                                                                                                                                      |

**Table 7-9 WLCS\_PRODUCT Table Metadata (Continued)**

| Column Name         | Data Type      | Null Value | Description                                                                                                                  |
|---------------------|----------------|------------|------------------------------------------------------------------------------------------------------------------------------|
| DET_DISPLAY_JSP_URL | VARCHAR (254)  | Null       | The URL to the JSP used to display the item in detailed form. For example:<br><br>/commerce/catalog/includes/itemdetails.jsp |
| SHORT_DESC          | VARCHAR (254)  | Null       | A short description of the content of the product item.                                                                      |
| LONG_DESC           | VARCHAR (2000) | Null       | A long description of the content of the product item.                                                                       |

## The WLCS\_PRODUCT\_CATEGORY Database Table

Shows which product items are associated with product categories.

**Table 7-10 WLCS\_PRODUCT\_CATEGORY Table Metadata**

| Column Name | Data Type    | Null Value | Description                                                                                  |
|-------------|--------------|------------|----------------------------------------------------------------------------------------------|
| SKU         | VARCHAR (40) | Not Null   | PK - A unique identifier (the “Stock Keeping Unit,” or SKU) for an item. FK to WLCS_PRODUCT. |
| CATEGORY_ID | VARCHAR (20) | Not Null   | PK - A unique identifier for a category. FK to WLCS_CATEGORY.                                |

## The WLCS\_PRODUCT\_KEYWORD Database Table

Keywords that you associate with each product item. The keywords enable rapid retrieval of item records via the search functions on the Web site’s pages or Administration pages.

**Table 7-11 WLCS\_PRODUCT\_KEYWORD Table Metadata**

| Column Name | Data Type    | Null Value | Description                                                                                                                                                                                                                                   |
|-------------|--------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| KEYWORD     | VARCHAR (30) | Not Null   | PK - Contains a keyword that you associate with the product item assigned to the unique SKU.<br><br>Recommendation—for a given item, select a value from a controlled vocabulary or formal classification scheme implemented in your company. |
| SKU         | VARCHAR (40) | Not Null   | PK - A unique identifier (the “Stock Keeping Unit,” or SKU) for an item. FK to WLCS_PRODUCT.                                                                                                                                                  |

# Order and Discount Database Objects

Figure 7-4 and Figure 7-5 show the Entity-Relation diagram for the WebLogic Portal order and discount objects.

Figure 7-4 Entity-Relation Diagram for the Commerce Tables

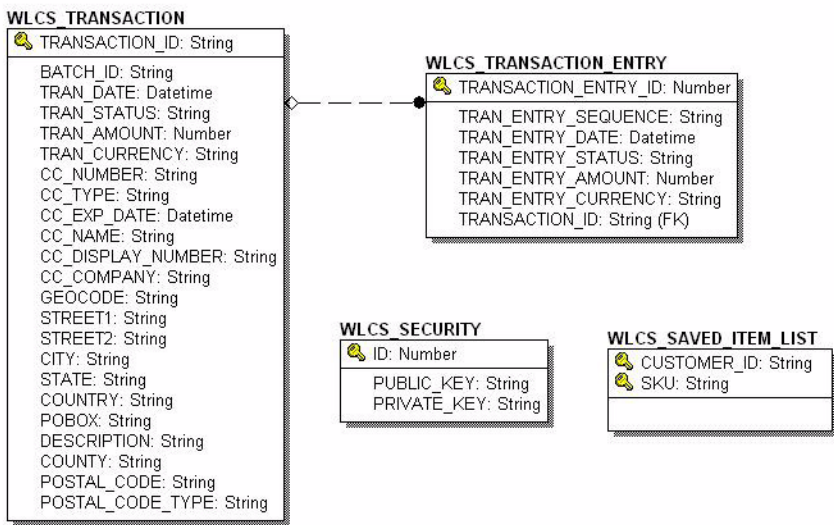
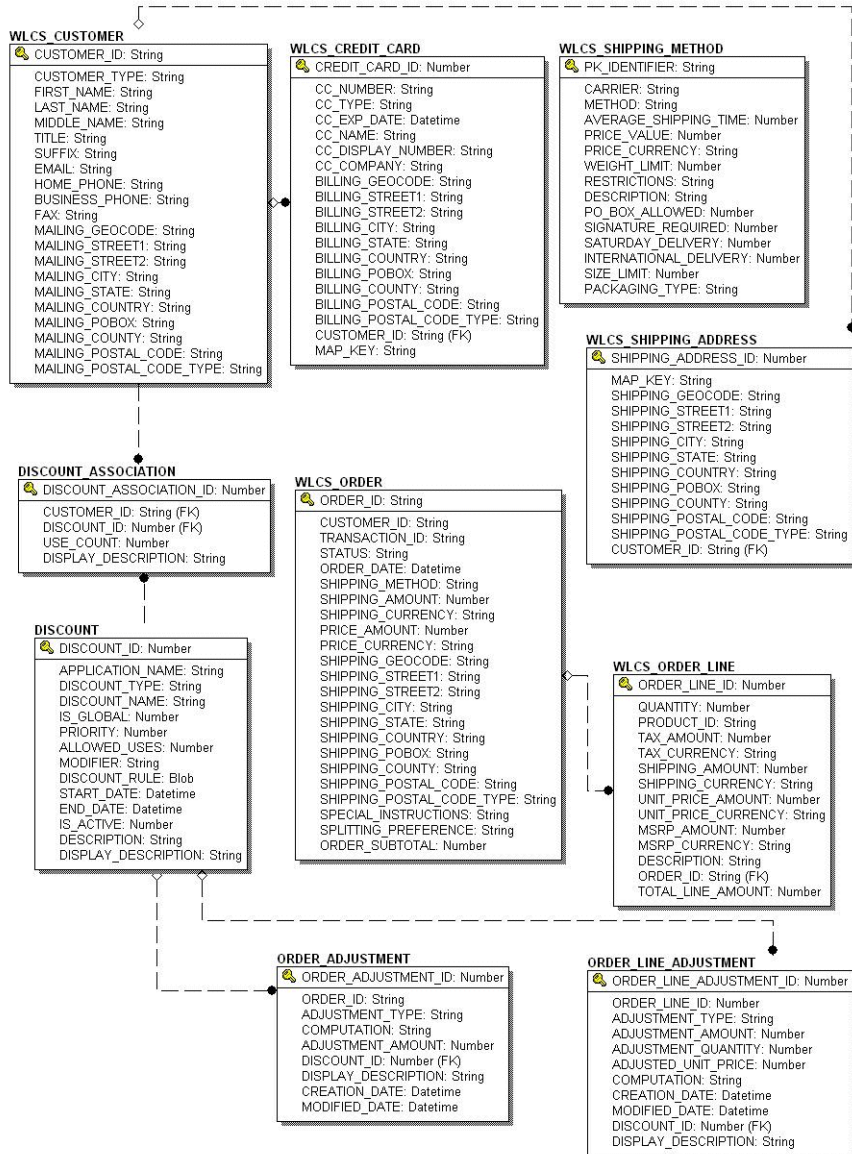


Figure 7-5 Entity-Relation Diagram for the Commerce Tables - continued



# The Order Processing Data Dictionary Tables

The Commerce services order management system has the following tables:

- [The DISCOUNT Database Table](#)
- [The DISCOUNT\\_ASSOCIATION Database Table](#)
- [The ORDER\\_ADJUSTMENT Database Table](#)
- [The ORDER\\_LINE\\_ADJUSTMENT Database Table](#)
- [The WLCS\\_CREDIT\\_CARD Database Table](#)
- [The WLCS\\_CUSTOMER Database Table](#)
- [The WLCS\\_ORDER Database Table](#)
- [The WLCS\\_ORDER\\_LINE Database Table](#)
- [The WLCS\\_SAVED\\_ITEM\\_LIST Database Table](#)
- [The WLCS\\_SECURITY Database Table](#)
- [The WLCS\\_SHIPPING\\_ADDRESS Database Table](#)
- [The WLCS\\_SHIPPING\\_METHOD Database Table](#)
- [The WLCS\\_TRANSACTION Database Table](#)
- [The WLCS\\_TRANSACTION\\_ENTRY Database Table](#)

## The DISCOUNT Database Table

One or more discount records for every DISCOUNT\_SET record.

Table 7-12 DISCOUNT

| Column Name      | Data Type     | Null Value | Description                                                       |
|------------------|---------------|------------|-------------------------------------------------------------------|
| DISCOUNT_ID      | NUMBER (15)   | Not Null   | PK—a unique, system-generated number to be used as the record ID. |
| APPLICATION_NAME | VARCHAR (100) | Not Null   | FK—foreign key to the DISCOUNT_SET table.                         |

**Table 7-12 DISCOUNT (Continued)**

| Column Name         | Data Type     | Null Value | Description                                                                                     |
|---------------------|---------------|------------|-------------------------------------------------------------------------------------------------|
| DISCOUNT_TYPE       | VARCHAR (10)  | Not Null   | The type of discount offered. It is used for an <i>order</i> or for an <i>order line item</i> . |
| DISCOUNT_NAME       | VARCHAR (254) | Not Null   | The name of the discount.                                                                       |
| IS_GLOBAL           | NUMBER (1)    | Not Null   | A flag showing whether or not this discount can be used globally.                               |
| PRIORITY            | NUMBER (3)    | Not Null   | The level of priority this discount has over other discounts.                                   |
| ALLOWED_USERS       | NUMBER (10)   | Not Null   | The number of times the discount may be used.                                                   |
| MODIFIER            | VARCHAR (254) | Not Null   | Describes the actual discount to be applied. This is XML.                                       |
| DISCOUNT_RULE       | CLOB          | Not Null   | The method used to select items for discount. This is XML.                                      |
| START_DATE          | DATE          | Not Null   | The starting date and time of the discount                                                      |
| END_DATE            | DATE          | Not Null   | The ending date and time of the discount.                                                       |
| IS_ACTIVE           | NUMBER (1)    | Not Null   | A flag that determines whether the discount is active or not. Active=1, Not active=0            |
| DESCRIPTION         | VARCHAR (254) | Null       | The discount description.                                                                       |
| DISPLAY_DESCRIPTION | VARCHAR (254) | Null       | The discount description used for display purposes only.                                        |

## The DISCOUNT\_ASSOCIATION Database Table

Associates each customer with a discount and maintains information regarding the times the customer has used each discount.

**Table 7-13 DISCOUNT\_ASSOCIATION**

| Column Name             | Data Type     | Null Value | Description                                                       |
|-------------------------|---------------|------------|-------------------------------------------------------------------|
| DISCOUNT_ASSOCIATION_ID | NUMBER (15)   | Not Null   | PK—a unique, system-generated number to be used as the record ID. |
| CUSTOMER_ID             | VARCHAR (20)  | Not Null   | FK—foreign key to the DISCOUNT_SET table.                         |
| DISCOUNT_ID             | NUMBER (15)   | Not Null   | FK—foreign key to the DISCOUNT_SET table.                         |
| USE_COUNT               | NUMBER (10)   | Not Null   | The number of times the discount has been used.                   |
| DISPLAY_DESCRIPTION     | VARCHAR (254) | Null       | The discount description used for display purposes only.          |

## The ORDER\_ADJUSTMENT Database Table

Information about a discount taken at the order level (for example, \$20.00 off any order between 1/1/02 and 1/31/02.)

**Table 7-14 ORDER\_ADJUSTMENT**

| Column Name         | Data Type     | Null Value | Description                                                                                                   |
|---------------------|---------------|------------|---------------------------------------------------------------------------------------------------------------|
| ORDER_ADJUSTMENT_ID | NUMBER (15)   | Not Null   | PK—a unique, system-generated number to be used as the record ID.                                             |
| ORDER_ID            | VARCHAR (20)  | Not Null   | FK—foreign key to the DISCOUNT_SET table.                                                                     |
| ADJUSTMENT_TYPE     | VARCHAR (20)  | Null       | The type of adjustment being made to the order line item (e.g., order line discount, shipping discount, etc.) |
| COMPUTATION         | VARCHAR (254) | Not Null   | The number of times the discount has been used.                                                               |

**Table 7-14 ORDER\_ADJUSTMENT (Continued)**

| Column Name         | Data Type      | Null Value | Description                                                                                                                                                                         |
|---------------------|----------------|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ADJUSTMENT_AMOUNT   | NUMBER (16, 4) | Not Null   | The discount description used for display purposes only.                                                                                                                            |
| DISCOUNT_ID         | NUMBER (15)    | Null       | FK—foreign key to the DISCOUNT table.                                                                                                                                               |
| DISPLAY_DESCRIPTION | VARCHAR (254)  | Null       | The description used for display purposes only. Depending on the nature of the discount, the DISPLAY_DESCRIPTION is generated from either the Discount service or Campaign service. |
| CREATION_DATE       | DATE           | Not Null   | The date and time the order adjustment was created.                                                                                                                                 |
| MODIFIED_DATE       | DATE           | Null       | The date and time the order adjustment record was last modified.                                                                                                                    |

## The ORDER\_LINE\_ADJUSTMENT Database Table

Information about a discount taken at the order line item level (for example, 10% off SKU “Power Drill”).

**Table 7-15 ORDER\_LINE\_ADJUSTMENT Table Metadata**

| Column Name              | Data Type      | Null Value | Description                                                                                                                                                                          |
|--------------------------|----------------|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ORDER_LINE_ADJUSTMENT_ID | NUMBER (15)    | Not Null   | PK—a unique, system-generated number to be used as the record ID.                                                                                                                    |
| ORDER_LINE_ID            | NUMBER (15)    | Not Null   | A unique identifier for each line in a customer’s shopping cart. This field is the table’s primary key and cannot be NULL. All other fields in the WLCS_ORDERLINE table can be NULL. |
| ADJUSTMENT_TYPE          | VARCHAR (20)   | Null       | The type of adjustment being made to the order line item (e.g., order line discount, shipping discount, etc.)                                                                        |
| ADJUSTMENT_AMOUNT        | NUMBER (16, 4) | Not Null   | The dollar amount of the adjustment.                                                                                                                                                 |
| ADJUSTMENT_QUANTITY      | NUMBER (16, 4) | Not Null   | The quantity amount for the adjustment.                                                                                                                                              |

**Table 7-15 ORDER\_LINE\_ADJUSTMENT Table Metadata (Continued)**

| Column Name         | Data Type      | Null Value | Description                                                    |
|---------------------|----------------|------------|----------------------------------------------------------------|
| ADJUSTED_UNIT_PRICE | NUMBER (16, 4) | Not Null   | The adjusted unit price of the specific line item.             |
| COMPUTATION         | VARCHAR (254)  | Not Null   | The computation for determining ADJUSTED_UNIT_PRICE.           |
| CREATION_DATE       | DATE           | Not Null   | The date and time the adjustment record was created.           |
| MODIFIED_DATE       | DATE           | Null       | The date and time the adjustment record was last modified.     |
| DISCOUNT_ID         | NUMBER (15)    | Null       | FK—a foreign key to the discount used from the DISCOUNT table. |
| DISPLAY_DESCRIPTION | VARCHAR (254)  | Null       | The adjustment description used for display purposes.          |

## The WLCS\_CREDIT\_CARD Database Table

Information related to a customer's credit card(s) in the order processing database.

**Table 7-16 WLCS\_CREDIT\_CARD Table Metadata**

| Column Name    | Data Type     | Null Value | Description and Recommendations                                                                                                                                            |
|----------------|---------------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CREDIT_CARD_ID | NUMBER (15)   | Not Null   | A unique identifier for the credit card. This field is the table's primary key and cannot be NULL. All other fields in the WLCS_CREDIT_CARD table can be NULL.             |
| CC_NUMBER      | VARCHAR (200) | Null       | The customer's credit card number. This is encrypted if <code>is.encrypted.enable</code> is set to <code>true</code> in the <code>weblogiccommerce.properties</code> file. |
| CC_TYPE        | VARCHAR (20)  | Null       | The customer's credit card type, such as VISA or MasterCard.                                                                                                               |

**Table 7-16 WLCS\_CREDIT\_CARD Table Metadata (Continued)**

| Column Name                  | Data Type    | Null Value | Description and Recommendations                                                                         |
|------------------------------|--------------|------------|---------------------------------------------------------------------------------------------------------|
| CC_EXP_DATE                  | DATE         | Null       | The expiration date on the customer's credit card.                                                      |
| CC_NAME                      | VARCHAR (50) | Null       | The credit card holder's name.                                                                          |
| CC_DISPLAY_NUMBER            | VARCHAR (20) | Null       | The version of the credit card number that is displayed (all Xs except last 4-digits).                  |
| CC_COMPANY                   | VARCHAR (50) | Null       | The name of the credit card company.                                                                    |
| BILLING_GEOCODE              | VARCHAR (2)  | Null       | The code used by the TAXWARE system to identify taxes for the order based on jurisdiction.              |
| BILLING_STREET1              | VARCHAR (30) | Null       | The first line in the customer's billing address.                                                       |
| BILLING_STREET2              | VARCHAR (30) | Null       | The second line in the customer's billing address.                                                      |
| BILLING_CITY                 | VARCHAR (30) | Null       | The city in the customer's billing address.                                                             |
| BILLING_STATE                | VARCHAR (40) | Null       | The state in the customer's billing address.                                                            |
| BILLING_COUNTRY              | VARCHAR (40) | Null       | The country in the customer's billing address.                                                          |
| BILLING_POBOX                | VARCHAR (30) | Null       | The post office box in the customer's billing address.                                                  |
| BILLING_COUNTY               | VARCHAR (50) | Null       | The county in the customer's billing address.                                                           |
| BILLING_POSTAL_CODE          | VARCHAR (10) | Null       | The postal (ZIP) code in the customer's billing address.                                                |
| BILLING_POSTAL_CODE_TY<br>PE | VARCHAR (10) | Null       | Format or type of postal code, generally determined by country (such as ZIP code in the United States). |

**Table 7-16 WLCS\_CREDIT\_CARD Table Metadata (Continued)**

| Column Name | Data Type    | Null Value | Description and Recommendations                             |
|-------------|--------------|------------|-------------------------------------------------------------|
| CUSTOMER_ID | VARCHAR (20) | Null       | A unique identifier for the customer.                       |
| MAP_KEY     | VARCHAR (60) | Null       | Key that maps multiple credit cards with a single customer. |

### The WLCS\_CUSTOMER Database Table

Information about the customer in the order processing database.

**Table 7-17 WLCS\_CUSTOMER Table Metadata**

| Column Name    | Data Type    | Null Value | Description                                                                                                                                              |
|----------------|--------------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| CUSTOMER_ID    | VARCHAR (20) | Not Null   | A unique identifier for the customer. This field is the table's primary key and cannot be NULL. All other fields in the WLCS_CUSTOMER table can be NULL. |
| CUSTOMER_TYPE  | VARCHAR (20) | Null       | A label for the customer (such as preferred, standard, or business).                                                                                     |
| FIRST_NAME     | VARCHAR (30) | Null       | The customer's first name.                                                                                                                               |
| LAST_NAME      | VARCHAR (30) | Null       | The customer's last name.                                                                                                                                |
| MIDDLE_NAME    | VARCHAR (30) | Null       | The customer's middle name.                                                                                                                              |
| TITLE          | VARCHAR (10) | Null       | The customer's preferred title, such as Mr., Mrs., or Ms.                                                                                                |
| SUFFIX         | VARCHAR (10) | Null       | The customer's preferred suffix, such as Jr. or Sr.                                                                                                      |
| EMAIL          | VARCHAR (80) | Null       | The customer's email address.                                                                                                                            |
| HOME_PHONE     | VARCHAR (15) | Null       | The customer's home phone number.                                                                                                                        |
| BUSINESS_PHONE | VARCHAR (20) | Null       | The customer's business phone number.                                                                                                                    |
| FAX            | VARCHAR (15) | Null       | The customer's fax number.                                                                                                                               |

**Table 7-17 WLCS\_CUSTOMER Table Metadata (Continued)**

| Column Name                  | Data Type    | Null Value | Description                                                                                             |
|------------------------------|--------------|------------|---------------------------------------------------------------------------------------------------------|
| MAILING_GEOCODE              | VARCHAR (2)  | Null       | The code used by the TAXWARE system to identify taxes for the order based on jurisdiction.              |
| MAILING_STREET1              | VARCHAR (30) | Null       | The first line in the customer's street address.                                                        |
| MAILING_STREET2              | VARCHAR (30) | Null       | The second line in the customer's street address.                                                       |
| MAILING_CITY                 | VARCHAR (30) | Null       | The city in the customer's address.                                                                     |
| MAILING_STATE                | VARCHAR (40) | Null       | The state in the customer's address.                                                                    |
| MAILING_COUNTRY              | VARCHAR (40) | Null       | The country in the customer's address.                                                                  |
| MAILING_POBOX                | VARCHAR (30) | Null       | The post office box in the customer's address.                                                          |
| MAILING_COUNTY               | VARCHAR (50) | Null       | The county in the customer's address.                                                                   |
| MAILING_POSTAL_CODE          | VARCHAR (10) | Null       | The postal (ZIP) code in the customer's address.                                                        |
| MAILING_POSTAL_CODE_TY<br>PE | VARCHAR (10) | Null       | Format or type of postal code, generally determined by country (such as ZIP code in the United States). |

## The WLCS\_ORDER Database Table

Information about a customer's specific order in the order-processing database. The Commerce services product does not populate the SHIPPING\_AMOUNT, SHIPPING\_CURRENCY, PRICE\_AMOUNT, or PRICE\_CURRENCY columns.

**Table 7-18 WLCS\_ORDER Table Metadata**

| Column Name       | Data Type      | Null Value | Description                                                                                                                                             |
|-------------------|----------------|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| ORDER_ID          | VARCHAR (20)   | Not Null   | PK - A unique identifier for the order. This field is the table's primary key and cannot be NULL. All other fields in the WLCS_ORDER table can be NULL. |
| CUSTOMER_ID       | VARCHAR (20)   | Null       | A unique identifier for the customer.                                                                                                                   |
| TRANSACTION_ID    | VARCHAR (25)   | Null       | A unique identifier for the transaction.                                                                                                                |
| STATUS            | VARCHAR (20)   | Null       | The status of the order.                                                                                                                                |
| ORDER_DATE        | DATE           | Null       | The date the order was placed.                                                                                                                          |
| SHIPPING_METHOD   | VARCHAR (40)   | Null       | The method by which the order is to be shipped.                                                                                                         |
| SHIPPING_AMOUNT   | NUMBER (16, 4) | Null       | The shipping amount for the order.                                                                                                                      |
| SHIPPING_CURRENCY | VARCHAR (10)   | Null       | The currency associated with the shipping amount.                                                                                                       |
| PRICE_AMOUNT      | NUMBER (16, 4) | Null       | The price of the order.                                                                                                                                 |
| PRICE_CURRENCY    | VARCHAR (10)   | Null       | The currency associated with the price.                                                                                                                 |
| SHIPPING_GEOCODE  | VARCHAR (2)    | Null       | The code used by the TAXWARE system to identify taxes for the order based on jurisdiction.                                                              |
| SHIPPING_STREET1  | VARCHAR (30)   | Null       | The first line in the customer's shipping address.                                                                                                      |
| SHIPPING_STREET2  | VARCHAR (30)   | Null       | The second line in the customer's shipping address.                                                                                                     |

**Table 7-18 WLCS\_ORDER Table Metadata (Continued)**

| Column Name               | Data Type      | Null Value | Description                                                                                            |
|---------------------------|----------------|------------|--------------------------------------------------------------------------------------------------------|
| SHIPPING_CITY             | VARCHAR (30)   | Null       | The city in the customer's shipping address.                                                           |
| SHIPPING_STATE            | VARCHAR (40)   | Null       | The state in the customer's shipping address.                                                          |
| SHIPPING_COUNTRY          | VARCHAR (40)   | Null       | The country in the customer's shipping address.                                                        |
| SHIPPING_POBOX            | VARCHAR (30)   | Null       | The post office box in the customer's shipping address.                                                |
| SHIPPING_COUNTY           | VARCHAR (50)   | Null       | The county in the customer's shipping address.                                                         |
| SHIPPING_POSTAL_CODE      | VARCHAR (10)   | Null       | The postal (ZIP) code in the customer's shipping address.                                              |
| SHIPPING_POSTAL_CODE_TYPE | VARCHAR (10)   | Null       | Format or type of postal code, generally determined by country, such as ZIP code in the United States. |
| SPECIAL_INSTRUCTIONS      | VARCHAR (254)  | Null       | Any special shipping instructions associated with the order.                                           |
| SPLITTING_PREFERENCE      | VARCHAR (254)  | Null       | The splitting preferences for the customer's order.                                                    |
| ORDER_SUBTOTAL            | NUMBER (16, 4) | Null       | The sum of all the TOTAL_LINE_AMOUNT columns in the WLCS_ORDER_LINE table for that specific order.     |

## The WLCS\_ORDER\_LINE Database Table

Information about each line of a customer's shopping cart in the order processing database.

**Table 7-19 WLCS\_ORDER\_LINE Table Metadata**

| Column Name         | Data Type      | Null Value | Description                                                                                                                                                                               |
|---------------------|----------------|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ORDER_LINE_ID       | NUMBER (15)    | Not Null   | PK - A unique identifier for each line in a customer's shopping cart. This field is the table's primary key and cannot be NULL. All other fields in the WLCS_ORDERLINE table can be NULL. |
| QUANTITY            | NUMBER (16, 4) | Null       | The quantity of the item in the shopping cart.                                                                                                                                            |
| PRODUCT_ID          | VARCHAR (40)   | Null       | An identification number for the item in the shopping cart.                                                                                                                               |
| TAX_AMOUNT          | NUMBER (16, 4) | Null       | The tax amount for the order.                                                                                                                                                             |
| TAX_CURRENCY        | VARCHAR (10)   | Null       | The currency associated with the tax amount.                                                                                                                                              |
| SHIPPING_AMOUNT     | NUMBER (16, 4) | Null       | The shipping amount for the order.                                                                                                                                                        |
| SHIPPING_CURRENCY   | VARCHAR (10)   | Null       | The currency associated with the shipping amount.                                                                                                                                         |
| UNIT_PRICE_AMOUNT   | NUMBER (16, 4) | Null       | The unit price amount for the item.                                                                                                                                                       |
| UNIT_PRICE_CURRENCY | VARCHAR (10)   | Null       | The currency associated with the unit price.                                                                                                                                              |
| MSRP_AMOUNT         | NUMBER (16, 4) | Null       | The MSRP amount for the item.                                                                                                                                                             |
| MSRP_CURRENCY       | VARCHAR (10)   | Null       | The currency associated with the MSRP amount.                                                                                                                                             |
| DESCRIPTION         | VARCHAR (254)  | Null       | The name of the item that is part of the order.                                                                                                                                           |
| ORDER_ID            | VARCHAR (20)   | Null       | FK - A unique identifier for the order.                                                                                                                                                   |

**Table 7-19 WLCS\_ORDER\_LINE Table Metadata (Continued)**

| Column Name       | Data Type      | Null Value | Description                                                                                             |
|-------------------|----------------|------------|---------------------------------------------------------------------------------------------------------|
| TOTAL_LINE_AMOUNT | NUMBER (16, 4) | Null       | The total discounted price for the line item. UNIT_PRICE_AMOUNT (less any discount) times the QUANTITY. |

## The WLCS\_SAVED\_ITEM\_LIST Database Table

Information about the customer's saved shopping cart items in the order processing database.

**Table 7-20 WLCS\_SAVED\_ITEM\_LIST Table Metadata**

| Column Name | Data Type    | Null Value | Description                                                                  |
|-------------|--------------|------------|------------------------------------------------------------------------------|
| CUSTOMER_ID | VARCHAR (20) | Not Null   | PK- A unique identifier for the customer.                                    |
| SKU         | VARCHAR (40) | Not Null   | PK - A unique identifier (the Stock Keeping Unit or SKU) for a product item. |

## The WLCS\_SECURITY Database Table

Persists public and private keys for encryption and decryption purposes in the order processing database. This table is meant for internal use by the Commerce services product.

**Table 7-21 WLCS\_SECURITY Table Metadata**

| Column Name | Data Type      | Null Value | Description                                                           |
|-------------|----------------|------------|-----------------------------------------------------------------------|
| ID          | NUMBER (5)     | Not Null   | PK - A unique identifier for the key pair.                            |
| PUBLIC_KEY  | VARCHAR (2000) | Null       | The public key to be used for encryption/decryption of credit cards.  |
| PRIVATE_KEY | VARCHAR (2000) | Null       | The private key to be used for encryption/decryption of credit cards. |

## The WLCS\_SHIPPING\_ADDRESS Database Table

Information related to a customer's shipping address(es) in the order processing database.

**Table 7-22 WLCS\_SHIPPING\_ADDRESS Table Metadata**

| Column Name               | Data Type    | Null Value | Description                                                                                            |
|---------------------------|--------------|------------|--------------------------------------------------------------------------------------------------------|
| SHIPPING_ADDRESS_ID       | NUMBER (15)  | Not Null   | PK - A unique identifier for the shipping address.                                                     |
| MAP_KEY                   | VARCHAR (60) | Null       | Key that maps multiple shipping addresses with a single customer.                                      |
| SHIPPING_GEOCODE          | VARCHAR (2)  | Null       | The code used by the TAXWARE system to identify taxes for the order based on jurisdiction.             |
| SHIPPING_STREET1          | VARCHAR (30) | Null       | The first line in the customer's shipping address.                                                     |
| SHIPPING_STREET2          | VARCHAR (30) | Null       | The second line in the customer's shipping address.                                                    |
| SHIPPING_CITY             | VARCHAR (30) | Null       | The city in the customer's shipping address.                                                           |
| SHIPPING_STATE            | VARCHAR (40) | Null       | The state in the customer's shipping address.                                                          |
| SHIPPING_COUNTRY          | VARCHAR (40) | Null       | The country in the customer's shipping address.                                                        |
| SHIPPING_POBOX            | VARCHAR (30) | Null       | The post office box in the customer's shipping address.                                                |
| SHIPPING_COUNTY           | VARCHAR (50) | Null       | The county in the customer's shipping address.                                                         |
| SHIPPING_POSTAL_CODE      | VARCHAR (10) | Null       | The postal (zip) code in the customer's shipping address.                                              |
| SHIPPING_POSTAL_CODE_TYPE | VARCHAR (10) | Null       | Format or type of postal code, generally determined by country, such as ZIP code in the United States. |

**Table 7-22 WLCS\_SHIPPING\_ADDRESS Table Metadata (Continued)**

| Column Name | Data Type    | Null Value | Description                           |
|-------------|--------------|------------|---------------------------------------|
| CUSTOMER_ID | VARCHAR (20) | Null       | A unique identifier for the customer. |

## The WLCS\_SHIPPING\_METHOD Database Table

Information about the shipping method in the order processing database.

**Table 7-23 WLCS\_SHIPPING\_METHOD Table Metadata**

| Column Name           | Data Type      | Null Value | Description                                                                               |
|-----------------------|----------------|------------|-------------------------------------------------------------------------------------------|
| PK_IDENTIFIER         | VARCHAR (20)   | Not Null   | PK - A unique identifier for the shipping method.                                         |
| CARRIER               | VARCHAR (40)   | Null       | The carrier being used to ship the order, such as UPS or FedEx.                           |
| METHOD                | VARCHAR (40)   | Null       | The method by which the order is to be shipped, such as Air, 2nd Day Air, or Parcel Post. |
| AVERAGE_SHIPPING_TIME | NUMBER         | Null       | The average number of days it will take the order to arrive.                              |
| PRICE_VALUE           | NUMBER (16, 4) | Null       | The amount it will cost to ship the order.                                                |
| PRICE_CURRENCY        | VARCHAR (10)   | Null       | The currency associated with the PRICE_VALUE column, such as dollars, pounds, or lira.    |
| WEIGHT_LIMIT          | NUMBER (16, 4) | Null       | The weight limit for the shipment.                                                        |
| RESTRICTIONS          | VARCHAR (254)  | Null       | Any restrictions associated with the shipment.                                            |
| DESCRIPTION           | VARCHAR (254)  | Null       | A description of the shipping method, such as FedEx Overnight or Standard.                |
| PO_BOX_ALLOWED        | NUMBER         | Null       | Specifies whether or not the shipment can be left at a post office box.                   |
| SIGNATURE_REQUIRED    | NUMBER         | Null       | Specifies whether or not a signature is required upon receipt of the shipment.            |

**Table 7-23 WLCS\_SHIPPING\_METHOD Table Metadata (Continued)**

| Column Name            | Data Type      | Null Value | Description                                                         |
|------------------------|----------------|------------|---------------------------------------------------------------------|
| SATURDAY_DELIVERY      | NUMBER         | Null       | Specifies whether or not the shipment can be delivered on Saturday. |
| INTERNATIONAL_DELIVERY | NUMBER         | Null       | Specifies whether or not international delivery is an option.       |
| SIZE_LIMIT             | NUMBER (16, 4) | Null       | The size limit for the shipment.                                    |
| PACKAGING_TYPE         | VARCHAR (50)   | Null       | The packaging type for the shipment.                                |

## The WLCS\_TRANSACTION Database Table

Data for every payment transaction in the order processing database.

**Table 7-24 WLCS\_TRANSACTION Table Metadata**

| Column Name    | Data Type      | Null Value | Description                                                                                                                                                            |
|----------------|----------------|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TRANSACTION_ID | VARCHAR (25)   | Not Null   | PK - A unique identifier for the transaction.                                                                                                                          |
| BATCH_ID       | VARCHAR (15)   | Null       | A unique identifier of a batch submitted for settlement, as returned by the Payment Web service. This field need not be populated for other external payment services. |
| TRAN_DATE      | DATE           | Null       | The date of the transaction (that is, date on which the transaction was first started).                                                                                |
| TRAN_STATUS    | VARCHAR (20)   | Null       | The current status of the transaction (Settled, Authorized, MarkedForSettle, PendingSettle, Retry, or Settled).                                                        |
| TRAN_AMOUNT    | NUMBER (16, 4) | Null       | The most recent amount applied to the transaction. MarkForSettle amounts can be different from the authorization amount.                                               |
| TRAN_CURRENCY  | VARCHAR (30)   | Null       | The currency of the transaction.                                                                                                                                       |

**Table 7-24 WLCS\_TRANSACTION Table Metadata (Continued)**

| Column Name       | Data Type     | Null Value | Description                                                                                                                                                                 |
|-------------------|---------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CC_NUMBER         | VARCHAR (200) | Null       | The customer's credit card number. This is encrypted if <code>is.encryption.enable</code> is set to <code>true</code> in the <code>weblogiccommerce.properties</code> file. |
| CC_TYPE           | VARCHAR (20)  | Null       | The customer's credit card type, such as VISA or MasterCard.                                                                                                                |
| CC_EXP_DATE       | DATE          | Null       | The expiration date on the customer's credit card.                                                                                                                          |
| CC_NAME           | VARCHAR (50)  | Null       | The credit card holder's name.                                                                                                                                              |
| CC_DISPLAY_NUMBER | VARCHAR (20)  | Null       | The version of the credit card number that is displayed (displays all Xs except last 4-digits).                                                                             |
| CC_COMPANY        | VARCHAR (50)  | Null       | The name of the credit card company.                                                                                                                                        |
| GEOCODE           | VARCHAR (2)   | Null       | The code used by the TAXWARE system to identify taxes for the order based on jurisdiction.                                                                                  |
| STREET1           | VARCHAR (30)  | Null       | The first line in the customer's street address.                                                                                                                            |
| STREET2           | VARCHAR (30)  | Null       | The second line in the customer's street address.                                                                                                                           |
| CITY              | VARCHAR (30)  | Null       | The city in the customer's address.                                                                                                                                         |
| STATE             | VARCHAR (40)  | Null       | The state in the customer's address.                                                                                                                                        |
| COUNTRY           | VARCHAR (40)  | Null       | The country in the customer's address.                                                                                                                                      |
| POBOX             | VARCHAR (30)  | Null       | The post office box in the customer's address.                                                                                                                              |
| DESCRIPTION       | VARCHAR (30)  | Null       | Any additional data. Can be NULL.                                                                                                                                           |
| COUNTY            | VARCHAR (50)  | Null       | The county in the customer's address.                                                                                                                                       |

**Table 7-24 WLCS\_TRANSACTION Table Metadata (Continued)**

| Column Name      | Data Type    | Null Value | Description                                                                                            |
|------------------|--------------|------------|--------------------------------------------------------------------------------------------------------|
| POSTAL_CODE      | VARCHAR (10) | Null       | The postal (ZIP) code in the customer's address.                                                       |
| POSTAL_CODE_TYPE | VARCHAR (10) | Null       | Format or type of postal code, generally determined by country, such as Zip code in the United States. |

## The WLCS\_TRANSACTION\_ENTRY Database Table

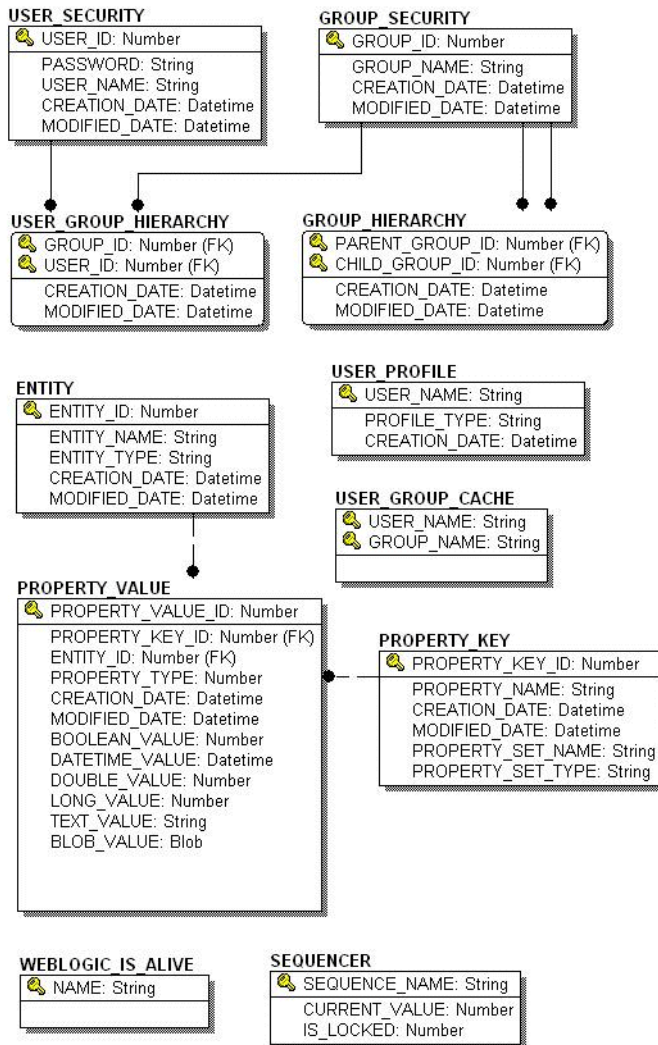
Logs the different states a payment transaction has passed through in the order processing database.

**Table 7-25 WLCS\_TRANSACTION\_ENTRY Table Metadata**

| Column Name          | Data Type      | Null Value | Description                                                |
|----------------------|----------------|------------|------------------------------------------------------------|
| TRANSACTION_ENTRY_ID | NUMBER (25)    | Not Null   | PK - A unique identifier for the transaction entry.        |
| TRAN_ENTRY_SEQUENCE  | VARCHAR (30)   | Null       | Represents the running count per transaction.              |
| TRAN_ENTRY_DATE      | DATE           | Null       | The date of the log entry.                                 |
| TRAN_ENTRY_STATUS    | VARCHAR (20)   | Null       | The status of the transaction when this entry was made.    |
| TRAN_ENTRY_AMOUNT    | NUMBER (16, 4) | Null       | The amount of the transaction when the log entry was made. |
| TRAN_ENTRY_CURRENCY  | VARCHAR (30)   | Null       | The currency of the transaction.                           |
| TRANSACTION_ID       | VARCHAR (25)   | Null       | A unique identifier for the transaction.                   |

## Personalization Database Objects

This section provides information about the database objects for WebLogic Portal personalization features. [Figure 7-6](#) shows an Entity Relation diagram for the WebLogic Portal Personalization database objects.

**Figure 7-6 Entity-Relation Diagram for WebLogic Portal Personalization**

## The Portal Personalization Database Tables

In this section, WebLogic Portal personalization tables are arranged alphabetically as a data dictionary.

The following tables compose the portal personalization database:

- [The GROUP\\_HIERARCHY Database Table](#)
- [The GROUP\\_SECURITY Database Table](#)
- [The USER\\_GROUP\\_CACHE Database Table](#)
- [The USER\\_GROUP\\_HIERARCHY Database Table](#)
- [The USER\\_PROFILE Database Table](#)
- [The USER\\_SECURITY Database Table](#)
- [The ENTITY Database Table](#)
- [The PROPERTY\\_KEY Database Table](#)
- [The PROPERTY\\_VALUE Database Table](#)
- [The SEQUENCER Database Table](#)
- [The WEBLOGIC\\_IS\\_ALIVE Database Table](#)

## The GROUP\_HIERARCHY Database Table

This table will only be populated if the RDBMSAuthenticator is used instead of the default internal LDAP store. This table stores relationship information between groups.

**Table 7-26 GROUP\_HIERARCHY Table Metadata**

| Column Name     | Data Type   | Null Value | Description                                               |
|-----------------|-------------|------------|-----------------------------------------------------------|
| PARENT_GROUP_ID | NUMBER (15) | Not Null   | PK - The parent group identifier. FK to the ENTITY table. |
| CHILD_GROUP_ID  | NUMBER (15) | Not Null   | PK - The child group identifier. FK to the ENTITY table.  |
| CREATION_DATE   | DATE        | Not Null   | The date and time this record was created.                |
| MODIFIED_DATE   | DATE        | Not Null   | The date and time this record was last modified.          |

## The GROUP\_SECURITY Database Table

This table will only be populated if the RDBMSAuthenticator is used instead of the default internal LDAP store. This table holds all groups that a user could be given membership for security authentication of the RDBMS realm.

**Table 7-27 GROUP\_SECURITY Table Metadata**

| Column Name   | Data Type    | Null Value | Description                                                           |
|---------------|--------------|------------|-----------------------------------------------------------------------|
| GROUP_ID      | NUMBER(15)   | Not Null   | PK – a unique, system-generated number used as the record identifier. |
| GROUP_NAME    | VARCHAR(200) | Not Null   | The name of the group.                                                |
| CREATION_DATE | DATE         | Not Null   | The date and time this record was created.                            |
| MODIFIED_DATE | DATE         | Not Null   | The date and time this record was last modified.                      |

## The USER\_GROUP\_CACHE Database Table

This table will only be populated if the RDBMSAuthenticator is used instead of the default internal LDAP store. In the event of a deep group hierarchy, this table will flatten the group hierarchy and enables quick group membership searches.

**Note:** The startup process GroupCache is disabled by default. This table will only be used if enabled.

**Table 7-28 USER\_GROUP\_CACHE Table Metadata**

| Column Name | Data Type     | Null Value | Description         |
|-------------|---------------|------------|---------------------|
| USER_NAME   | VARCHAR (200) | Not Null   | PK - A user's name. |
| GROUP_NAME  | VARCHAR (200) | Not Null   | PK - A group name.  |

## The USER\_GROUP\_HIERARCHY Database Table

This table will only be populated if the RDBMSAuthenticator is used instead of the default internal LDAP store. This table allows you to store associated users and groups.

**Table 7-29 USER\_GROUP\_HIERARCHY Table Metadata**

| Column Name   | Data Type   | Null Value | Description                                         |
|---------------|-------------|------------|-----------------------------------------------------|
| GROUP_ID      | NUMBER (15) | Not Null   | PK - and FK – to<br>USER_SECURITY.USER_ID           |
| USER_ID       | NUMBER (15) | Not Null   | PK - and FK – to<br>GROUP_SECURITY.GROUP_ID         |
| CREATION_DATE | DATE        | Not Null   | The date and time this record was created.          |
| MODIFIED_DATE | DATE        | Not Null   | The date and time this record was last<br>modified. |

## The USER\_PROFILE Database Table

This table associates users with profiles (such as the WLCS\_CUSTOMER user profile). User profiles use property sets to organize the properties that they contain.

**Table 7-30 USER\_PROFILE Table Metadata**

| Column Name   | Data Type     | Null Value | Description                                                            |
|---------------|---------------|------------|------------------------------------------------------------------------|
| USER_NAME     | VARCHAR (200) | Not Null   | PK - The name of the user.                                             |
| PROFILE_TYPE  | VARCHAR (100) | Not Null   | A type of profile associated with the user<br>(such as WLCS_Customer). |
| CREATION_DATE | DATE          | Not Null   | The date and time this record was created.                             |

## The USER\_SECURITY Database Table

This table will only be populated if the RDBMSAuthenticator is used instead of the default internal LDAP store. This table holds all the user records for security authentication.

**Table 7-31 USER\_SECURITY Table Metadata**

| Column Name   | Data Type     | Null Value | Description                                                         |
|---------------|---------------|------------|---------------------------------------------------------------------|
| USER_ID       | NUMBER (15)   | Not Null   | PK—a unique, system-generated number used as the record identifier. |
| USER_NAME     | VARCHAR (200) | Not Null   | The user's name.                                                    |
| PASSWORD      | VARCHAR (50)  | Null       | The user's password.                                                |
| CREATION_DATE | DATE          | Not Null   | The date and time this record was created.                          |
| MODIFIED_DATE | DATE          | Not Null   | The date and time this record was last modified.                    |

## The ENTITY Database Table

Some objects in WebLogic Portal implement a Java interface called ConfigurableEntity. Any ConfigurableEntity within the system will have an entry in this table.

**Table 7-32 ENTITY Table Metadata**

| Column Name   | Data Type     | Null Value | Description                                                             |
|---------------|---------------|------------|-------------------------------------------------------------------------|
| ENTITY_ID     | NUMBER (15)   | Not Null   | PK - A unique, sequence-generated number used as the record identifier. |
| ENTITY_NAME   | VARCHAR (200) | Not Null   | The name of the ConfigurableEntity.                                     |
| ENTITY_TYPE   | VARCHAR (100) | Not Null   | Defines what type of ConfigurableEntity this is.                        |
| CREATION_DATE | DATE          | Not Null   | The date and time this record was created.                              |
| MODIFIED_DATE | DATE          | Not Null   | The date and time this record was last modified.                        |

## The PROPERTY\_KEY Database Table

Any property assigned to a ConfigurableEntity has a unique PROPERTY\_ID. This identifier and associated information is stored here.

**Table 7-33 PROPERTY\_KEY Table Metadata**

| Column Name       | Data Type     | Null Value | Description and Recommendations                                     |
|-------------------|---------------|------------|---------------------------------------------------------------------|
| PROPERTY_KEY_ID   | NUMBER (15)   | Not Null   | PK—a unique, system-generated number used as the record identifier. |
| PROPERTY_NAME     | VARCHAR (100) | Not Null   | The name of the property.                                           |
| CREATION_DATE     | DATE          | Not Null   | The date and time this record was created.                          |
| MODIFIED_DATE     | DATE          | Not Null   | The date and time this record was last modified.                    |
| PROPERTY_SET_NAME | VARCHAR (100) | Null       | The name of the property set.                                       |
| PROPERTY_SET_TYPE | VARCHAR (100) | Null       | The type the property set.                                          |

## The PROPERTY\_VALUE Database Table

This table stores property values for boolean, datetime, float, integer, text, and user-defined properties.

**Table 7-34 PROPERTY\_VALUE Table Metadata**

| Column Name       | Data Type   | Null Value | Description                                                                                               |
|-------------------|-------------|------------|-----------------------------------------------------------------------------------------------------------|
| PROPERTY_VALUE_ID | NUMBER (15) | Not Null   | PK – a unique, system-generated number used as the record identifier.                                     |
| PROPERTY_KEY_ID   | NUMBER (15) | Not Null   | FK - to<br>PROPERTY_KEY.PROPERTY_KEY_ID                                                                   |
| ENTITY_ID         | NUMBER (15) | Not Null   | FK – to ENTITY.ENTITY_ID                                                                                  |
| PROPERTY_TYPE     | NUMBER (1)  | Not Null   | Valid entries are:<br>0=Boolean, 1=Integer, 2=Float, 3=Text,<br>4=Date and Time, 5=User-Defined<br>(BLOB) |

**Table 7-34 PROPERTY\_VALUE Table Metadata (Continued)**

| Column Name    | Data Type     | Null Value | Description                                               |
|----------------|---------------|------------|-----------------------------------------------------------|
| CREATION_DATE  | DATE          | Not Null   | The date and time this record was created.                |
| MODIFIED_DATE  | DATE          | Not Null   | The date and time this record was last modified.          |
| BOOLEAN_VALUE  | NUMBER (1)    | Null       | The value for each boolean property identifier.           |
| DATETIME_VALUE | DATE          | Null       | The value for each date and time property identifier.     |
| DOUBLE_VALUE   | NUMBER        | Null       | The value associated with each float property identifier. |
| LONG_VALUE     | NUMBER (20)   | Null       | The value associated with the integer property.           |
| TEXT_VALUE     | VARCHAR (254) | Null       | The value associated with the text property.              |
| BLOB_VALUE     | BLOB          | Null       | The value associated with the user-defined property.      |

## The SEQUENCER Database Table

The SEQUENCER table is used to maintain all of the sequence identifiers (for example, property\_meta\_data\_id\_sequence, and so on) used in the application.

**Table 7-35 SEQUENCER Table Metadata**

| Column Name   | Data Type    | Null Value | Description                                       |
|---------------|--------------|------------|---------------------------------------------------|
| SEQUENCE_NAME | VARCHAR (50) | Not Null   | PK – A unique name used to identify the sequence. |
| CURRENT_VALUE | NUMBER (15)  | Not Null   | The current value of the sequence.                |

**Table 7-35 SEQUENCER Table Metadata (Continued)**

| Column Name | Data Type  | Null Value | Description                                                                                                                                                                                              |
|-------------|------------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IS_LOCKED   | NUMBER (1) | Not Null   | This flag identifies whether or not the particular SEQUENCE_ID has been locked for update. This column is being used as a generic locking mechanism that can be used for multiple database environments. |

## The WEBLOGIC\_IS\_ALIVE Database Table

This table is used by the JDBC connection pools to insure the connection to the database is still alive.

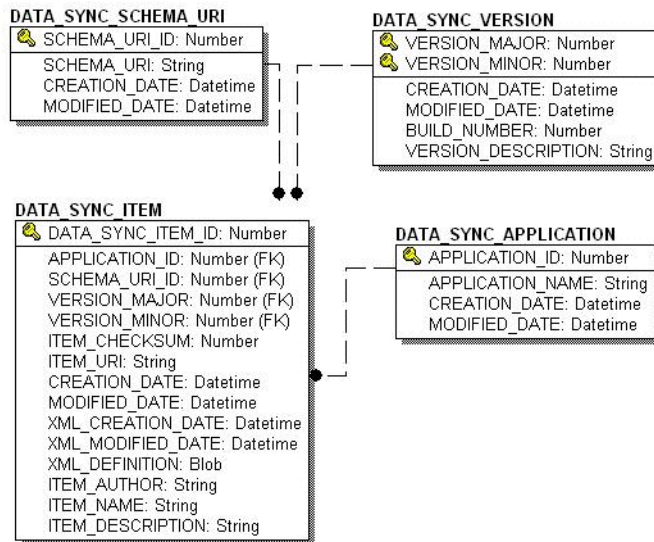
**Table 7-36 WEBLOGIC\_IS\_ALIVE Table Metadata**

| Column Name | Data Type     | Null Value | Description                                                                                |
|-------------|---------------|------------|--------------------------------------------------------------------------------------------|
| NAME        | VARCHAR (100) | Not Null   | Used by the JDBC connection pools to insure the connection to the database is still alive. |

## Data Synchronization Database Objects

Data synchronization is a feature that manages XML data about various WebLogic Portal services. Information from the files in the META-INF data folder, under certain circumstances, are written into the data synchronization tables in the database.

This section provides information about the database objects for WebLogic Portal data synchronization features. [Figure 7-7](#) shows an Entity Relation diagram for WebLogic Portal data synchronization database objects.

**Figure 7-7 Entity-Relation Diagram for WebLogic Portal Data Synchronization**

## The Data Synchronization Database Tables

In this section, WebLogic Portal data synchronization objects tables are arranged alphabetically as a data dictionary.

The following tables compose the data synchronization database:

- [The DATA\\_SYNC\\_APPLICATION Database Table](#)
- [The DATA\\_SYNC\\_ITEM Database Table](#)
- [The DATA\\_SYNC\\_SCHEMA\\_URI Database Table](#)
- [The DATA\\_SYNC\\_VERSION Database Table](#)

### The DATA\_SYNC\_APPLICATION Database Table

This table holds the various applications available for the data synchronization process..

**Table 7-37 DATA\_SYNC\_APPLICATION Table Metadata**

| Column Name      | Data Type     | Null Value | Description                                                                                      |
|------------------|---------------|------------|--------------------------------------------------------------------------------------------------|
| APPLICATION_ID   | NUMBER (15)   | Not Null   | PK - A unique, system-generated number used as the record identifier.                            |
| APPLICATION_NAME | VARCHAR (100) | Not Null   | The deployed J2EE application name. (This should match the name in the WebLogic Server console.) |
| CREATION_DATE    | DATE          | Not Null   | The date and time this record was created.                                                       |
| MODIFIED_DATE    | DATE          | Not Null   | The date and time this record was last modified.                                                 |

## The DATA\_SYNC\_ITEM Database Table

This table stores all the data items to be synchronized.

**Table 7-38 DATA\_SYNC\_ITEM Table Metadata**

| Column Name       | Data Type   | Null Value | Description                                                                |
|-------------------|-------------|------------|----------------------------------------------------------------------------|
| DATA_SYNC_ITEM_ID | NUMBER (15) | Not Null   | PK - A unique, system-generated number used as the record identifier.      |
| APPLICATION_ID    | NUMBER (15) | Not Null   | FK – to<br>DATA_SYNC_APPLICATION.APPLICATION_ID                            |
| SCHEMA_URI_ID     | NUMBER (15) | Not Null   | FK – to<br>DATA_SYNC_SCHEMA_URI.SCHEMA_URI_ID                              |
| VERSION_MAJOR     | NUMBER (15) | Not Null   | FK – to<br>DATA_SYNC_VERSION.VERSION_MAJOR                                 |
| VERSION_MINOR     | NUMBER (15) | Not Null   | FK – to<br>DATA_SYNC_VERSION.VERSION_MINOR                                 |
| ITEM_CHECKSUM     | NUMBER (15) | Not Null   | A generated number representing the contents of the XML_DEFINITION column. |

**Table 7-38 DATA\_SYNC\_ITEM Table Metadata (Continued)**

| Column Name       | Data Type     | Null Value | Description                                                         |
|-------------------|---------------|------------|---------------------------------------------------------------------|
| CREATION_DATE     | DATE          | Not Null   | The date and time this record was created.                          |
| MODIFIED_DATE     | DATE          | Not Null   | The date and time this record was last modified.                    |
| XML_MODIFIED_DATE | DATE          | Not Null   | The date and time the XML file was last modified.                   |
| XML_CREATION_DATE | DATE          | Not Null   | The date and time the XML file was created.                         |
| XML_DEFINITION    | CLOB          | Not Null   | The XML representation of the data item to be synchronized.         |
| ITEM_URI          | VARCHAR (254) | Not Null   | The path on the file system of the data item to be synchronized.    |
| ITEM_AUTHOR       | VARCHAR (200) | Null       | Metadata info—the o/s login.                                        |
| ITEM_NAME         | VARCHAR (100) | Null       | Metadata info—the full path to the item.                            |
| ITEM_DESCRIPTION  | VARCHAR (254) | Null       | Metadata info—a general description of the item to be synchronized. |

## The DATA\_SYNC\_SCHEMA\_URI Database Table

This table holds information pertaining to each of the governing schemas used by various documents.

**Table 7-39 DATA\_SYNC\_SCHEMA\_URI Table Metadata**

| Column Name   | Data Type     | Null Value | Description                                                           |
|---------------|---------------|------------|-----------------------------------------------------------------------|
| SCHEMA_URI_ID | NUMBER (15)   | Not Null   | PK - A unique, system-generated number used as the record identifier. |
| SCHEMA_URI    | VARCHAR (254) | Not Null   | The governing schema of the document.                                 |
| CREATION_DATE | DATE          | Not Null   | The date and time this record was created.                            |
| MODIFIED_DATE | DATE          | Not Null   | The date and time this record was last modified.                      |

## The DATA\_SYNC\_VERSION Database Table

This table is not being used currently. It is reserved for future use and is expected to accommodate data synchronization versioning. As a result, this table only holds one record.

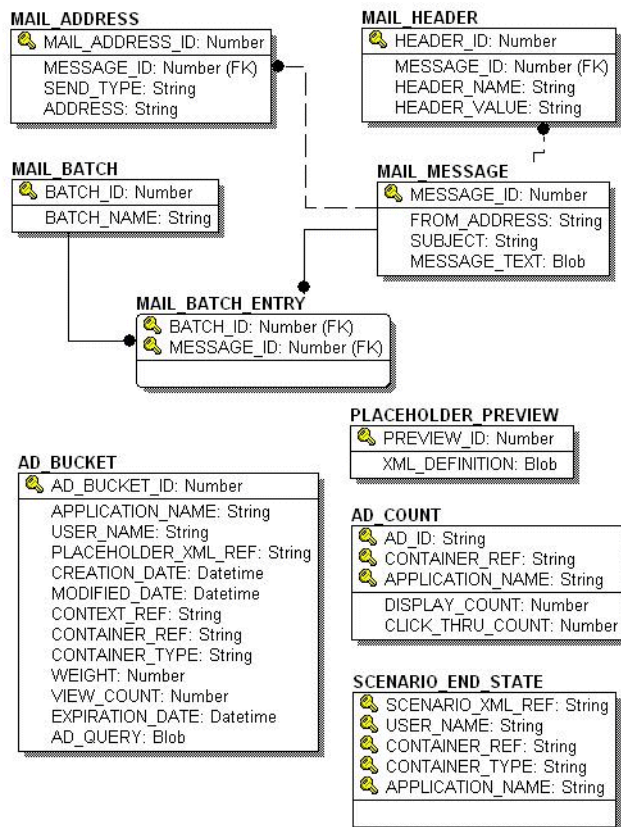
**Table 7-40 DATA\_SYNC\_VERSION Table Metadata**

| Column Name         | Data Type    | Null Value | Description                                     |
|---------------------|--------------|------------|-------------------------------------------------|
| VERSION_MAJOR       | NUMBER (15)  | Not Null   | PK - The current record has a value of zero.    |
| VERSION_MINOR       | NUMBER (15)  | Not Null   | PK - The current record has a value of zero.    |
| CREATION_DATE       | DATE         | Not Null   | The date and time the record was created.       |
| MODIFIED_DATE       | DATE         | Not Null   | The date and time the record was last modified. |
| BUILD_NUMBER        | NUMBER (15)  | Null       | The build number associated with the version.   |
| VERSION_DESCRIPTION | VARCHAR (30) | Null       | A description of the particular sync version.   |

## WebLogic Portal Services Database Objects

This section provides information about the database objects for WebLogic Portal Services features. [Figure 7-8](#) shows an Entity Relation diagram for WebLogic Portal services database objects.

**Figure 7-8 Entity-Relation Diagram for WebLogic Portal Services**



# The Portal Services Database Tables

In this section, WebLogic Portal Services objects tables are arranged alphabetically as a data dictionary.

The following tables compose the Portal services database:

- [The AD\\_BUCKET Database Table](#)
- [The AD\\_COUNT Database Table](#)
- [The PLACEHOLDER\\_PREVIEW Database Table](#)
- [The MAIL\\_ADDRESS Database Table](#)
- [The MAIL\\_BATCH Database Table](#)
- [The MAIL\\_BATCH\\_ENTRY Database Table](#)
- [The MAIL\\_HEADER Database Table](#)
- [The MAIL\\_MESSAGE Database Table](#)
- [The SCENARIO\\_END\\_STATE Database Table](#)

## The AD\_BUCKET Database Table

This table maintains content queries for ads.

Table 7-41 AD\_BUCKET Table Metadata

| Column Name         | Data Type     | Null Value | Description                                                           |
|---------------------|---------------|------------|-----------------------------------------------------------------------|
| AD_BUCKET_ID        | NUMBER (15)   | Not Null   | PK—a unique, system-generated number used as the record identifier.   |
| USER_NAME           | VARCHAR (200) | Not Null   | The user’s name associated with the ad.                               |
| PLACEHOLDER_XML_REF | VARCHAR (254) | Not Null   | The location identifier of the XML-based placeholder definition file. |
| APPLICATION_NAME    | VARCHAR (100) | Not Null   | The name of the application for which the ad has been scoped.         |
| CONTEXT_REF         | VARCHAR (254) | Null       | The scenario unique identifier.                                       |
| CONTAINER_REF       | VARCHAR (254) | Null       | The campaign unique identifier.                                       |

**Table 7-41 AD\_BUCKET Table Metadata**

| Column Name     | Data Type    | Null Value | Description                                                          |
|-----------------|--------------|------------|----------------------------------------------------------------------|
| CONTAINER_TYPE  | VARCHAR (50) | Null       | Identifies the service associated with the CONTAINER_REF.            |
| WEIGHT          | NUMBER (15)  | Null       | A weighted scheme used in prioritizing one placeholder over another. |
| VIEW_COUNT      | NUMBER (15)  | Null       | <i>Disabled. Reserved for future use.</i>                            |
| EXPIRATION_DATE | DATE         | Null       | The date and time the ad expires or becomes invalid.                 |
| CREATION_DATE   | DATE         | Not Null   | The date and time this record was created.                           |
| MODIFIED_DATE   | DATE         | Not Null   | The date and time this record was last modified.                     |
| AD_QUERY        | CLOB         | Null       | The actual content query.                                            |

## The AD\_COUNT Database Table

This table tracks the number of times the ads are displayed and clicked though.

**Table 7-42 AD\_COUNT Table Metadata**

| Column Name         | Data Type     | Null Value | Description                                                                   |
|---------------------|---------------|------------|-------------------------------------------------------------------------------|
| AD_ID               | VARCHAR (254) | Not Null   | PK - A unique, system-generated number used as the record identifier.         |
| CONTAINER_REF       | VARCHAR (254) | Not Null   | PK - The campaign unique identifier.                                          |
| APPLICATION_NAME    | VARCHAR (100) | Not Null   | PK - The name of the application for which the ad clicks or views were scoped |
| DISPLAY_COUNT       | NUMBER (15)   | Not Null   | The number of times the ad has been displayed.                                |
| CLICK_THROUGH_COUNT | NUMBER (15)   | Not Null   | The number of times the ad has been clicked on.                               |

## The PLACEHOLDER\_PREVIEW Database Table

This table is used as a mechanism to hold the placeholder for previewing purposes only.

**Table 7-43 PLACEHOLDER\_PREVIEW Table Metadata**

| Column Name    | Data Type | Null Value | Description                                                         |
|----------------|-----------|------------|---------------------------------------------------------------------|
| PREVIEW_ID     | NUMBER    | Not Null   | PK—a unique, system generated number used as the record identifier. |
| XML_DEFINITION | CLOB      | Null       | The representation of the expression to be previewed.               |

## The MAIL\_ADDRESS Database Table

This table stores all of the address info for e-mail purposes.

**Table 7-44 MAIL\_ADDRESS Table Metadata**

| Column Name     | Data Type     | Null Value | Description                                                                                            |
|-----------------|---------------|------------|--------------------------------------------------------------------------------------------------------|
| MAIL_ADDRESS_ID | NUMBER (15)   | Not Null   | PK—a unique, system-generated number to be used as the record ID.                                      |
| MESSAGE_ID      | NUMBER (15)   | Not Null   | FK—foreign key to the MAIL_MESSAGE table.                                                              |
| ADDRESS         | VARCHAR (254) | Not Null   | Stores the various e-mail addresses on the distribution list.                                          |
| SEND_TYPE       | VARCHAR (4)   | Not Null   | Determines how the ADDRESS should be included on the distribution. Possible values are TO, CC, or BCC. |

## The MAIL\_BATCH Database Table

This table establishes a batch for each mailing.

**Table 7-45 MAIL\_BATCH Table Metadata**

| Column Name | Data Type     | Null Value | Description                                                       |
|-------------|---------------|------------|-------------------------------------------------------------------|
| BATCH_ID    | NUMBER (15)   | Not Null   | PK—a unique, system-generated number to be used as the record ID. |
| BATCH_NAME  | VARCHAR (254) | Not Null   | The name of the mail message batch.                               |

## The MAIL\_BATCH\_ENTRY Database Table

This table is used to correlate the mail batch with the specific mail message.

**Table 7-46 MAIL\_BATCH\_ENTRY Table Metadata**

| Column Name | Data Type   | Null Value | Description                                                              |
|-------------|-------------|------------|--------------------------------------------------------------------------|
| BATCH_ID    | NUMBER (15) | Not Null   | PK and FK—a unique, system-generated number to be used as the record ID. |
| MESSAGE_ID  | NUMBER (15) | Not Null   | PK and FK—foreign key to the MAIL_MESSAGE table.                         |

## The MAIL\_HEADER Database Table

This table contains all of the header information specific to the e-mail message.

**Table 7-47 MAIL\_HEADER Table Metadata**

| Column Name  | Data Type     | Null Value | Description                                                       |
|--------------|---------------|------------|-------------------------------------------------------------------|
| HEADER_ID    | NUMBER (15)   | Not Null   | PK—a unique, system-generated number to be used as the record ID. |
| MESSAGE_ID   | NUMBER (15)   | Not Null   | FK—foreign key to the MAIL_MESSAGE table.                         |
| HEADER_NAME  | VARCHAR (50)  | Null       | The name of the mail message header.                              |
| HEADER_VALUE | VARCHAR (254) | Null       | The value of the mail message header.                             |

## The MAIL\_MESSAGE Database Table

This table contains the specifics of the mail message (e.g., the subject line, text, etc.).

**Table 7-48 MAIL\_MESSAGE Table Metadata**

| Column Name  | Data Type     | Null Value | Description                                                       |
|--------------|---------------|------------|-------------------------------------------------------------------|
| MESSAGE_ID   | NUMBER (15)   | Not Null   | PK—a unique, system-generated number to be used as the record ID. |
| FROM_ADDRESS | VARCHAR (254) | Null       | Identifies who is sending the message.                            |
| SUBJECT      | VARCHAR (128) | Null       | Stores the mail message subject.                                  |
| MESSAGE_TEXT | CLOB          | Null       | Holds the content of the mail message.                            |

## The SCENARIO\_END\_STATE Database Table

This table identifies when a user is no longer eligible to participate in a particular scenario.

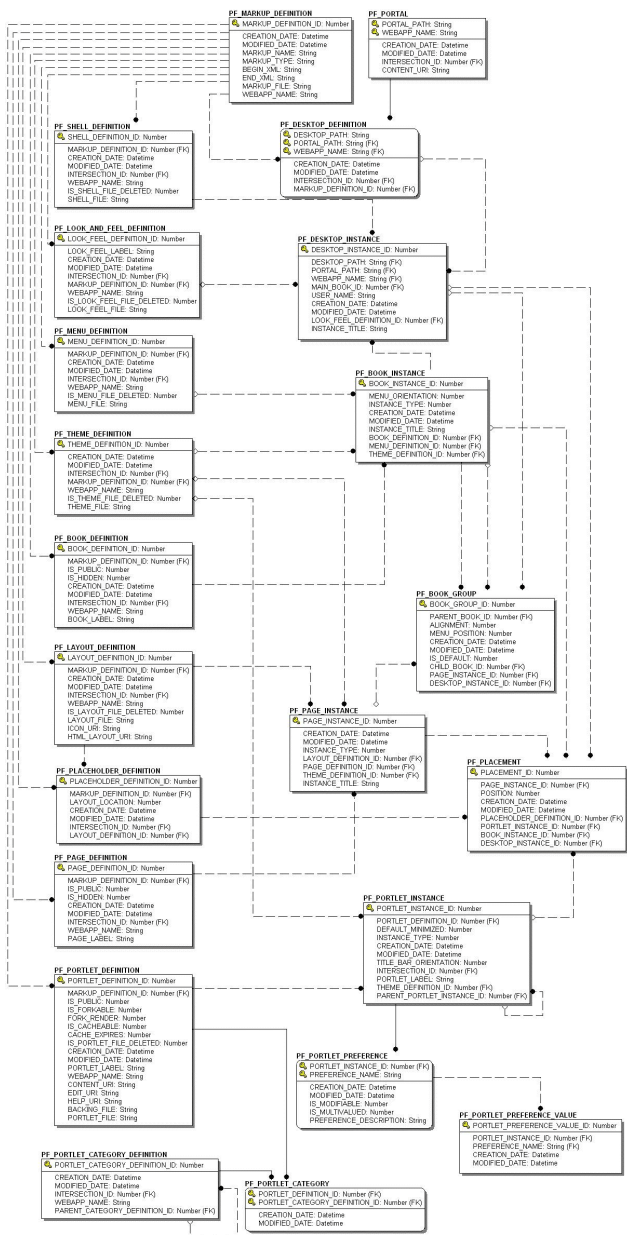
**Table 7-49 SCENARIO\_END\_STATE Table Metadata**

| Column Name      | Data Type     | Null Value | Description                                                                                        |
|------------------|---------------|------------|----------------------------------------------------------------------------------------------------|
| SCENARIO_XML_REF | VARCHAR (20)  | Not Null   | PK—The identifier for the XML-based scenario definition file.                                      |
| USER_NAME        | VARCHAR (200) | Not Null   | PK—the user ID. (FK to WLCS_USER.IDENTIFIER)                                                       |
| CONTAINER_REF    | VARCHAR (254) | Not Null   | PK—the campaign unique identifier. (FK to CAMPAIGN.CAMPAIGN_UID)                                   |
| CONTAINER_TYPE   | VARCHAR (50)  | Not Null   | PK—At this time this column will always hold the string 'Campaign'.                                |
| APPLICATION_NAME | VARCHAR (100) | Not Null   | PK—The deployed J2EE application name. This should match the name in the WebLogic Server console.) |

## Portal Framework Database Objects

This section documents the database objects for the WebLogic Portal package. [Figure 7-9](#) shows the Entity Relation diagram for the WebLogic Portal Framework database objects.

Figure 7-9 Entity-Relation Diagram for the Portal Framework Tables



## The Portal Framework Database Tables

In this section, WebLogic Portal Services tables are arranged alphabetically as a data dictionary. The following tables compose the Portal Framework database:

- [The PF\\_BOOK\\_DEFINITION Database Table](#)
- [The PF\\_BOOK\\_GROUP Database Table](#)
- [The PF\\_BOOK\\_INSTANCE Database Table](#)
- [The PF\\_DESKTOP\\_DEFINITION Database Table](#)
- [The PF\\_DESKTOP\\_INSTANCE Database Table](#)
- [The PF\\_LAYOUT\\_DEFINITION Database Table](#)
- [The PF\\_LOOK\\_AND\\_FEEL\\_DEFINITION Database Table](#)
- [The PF\\_MARKUP\\_DEFINITION Database Table](#)
- [The PF\\_MENU\\_DEFINITION Database Table](#)
- [The PF\\_PAGE\\_DEFINITION Database Table](#)
- [The PF\\_PAGE\\_INSTANCE Database Table](#)
- [The PF\\_PLACEHOLDER\\_DEFINITION Database Table](#)
- [The PF\\_PLACEMENT Database Table](#)
- [The PF\\_PORTAL Database Table](#)
- [The PF\\_PORTLET\\_CATEGORY Database Table](#)
- [The PF\\_PORTLET\\_CATEGORY\\_DEFINITION Database Table](#)
- [The PF\\_PORTLET\\_DEFINITION Database Table](#)
- [The PF\\_PORTLET\\_INSTANCE Database Table](#)

The following tables are a subset of the PF\_PORTLET\_INSTANCE Database Table

- [The PF\\_CONSUMER\\_PROPERTIES Database Table](#)
- [The PF\\_CONSUMER\\_REGISTRY Database Table](#)
- [The PF\\_CONSUMER\\_REGISTRY Database Table](#)

- [The PF\\_PRODUCER\\_PROPERTIES Database Table](#)
- [The PF\\_PRODUCER\\_REGISTRY Database Table](#)
- [The PF\\_PROXY\\_PORTLET\\_INSTANCE Database Table](#)
- [Entity-Relation Diagram for the WSRP Tables](#)
- [The PF\\_PORTLET\\_PREFERENCE\\_VALUE Database Table](#)
- [The PF\\_SHELL\\_DEFINITION Database Table](#)
- [The PF\\_THEME\\_DEFINITION Database Table](#)

## The PF\_BOOK\_DEFINITION Database Table

This table defines a BOOK portal library resource, Books are used to aggregate PAGES and other BOOKS.

**Table 7-50 PF\_BOOK\_DEFINITION Table Metadata**

| Column Name          | Data Type | Null Value | Description                                                                                                                                                                                                                                                                                                           |
|----------------------|-----------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BOOK_DEFINITION_ID   | NUMBER    | Not Null   | PK—a unique, system-generated number to be used as the record ID.                                                                                                                                                                                                                                                     |
| MARKUP_DEFINITION_ID | NUMBER    | Not Null   | FK to PF_MARKUP_DEFINITION                                                                                                                                                                                                                                                                                            |
| IS_PUBLIC            | NUMBER    | Not Null   | A boolean flag indicating if this book definition will be displayed to the public. When end users create books they are not marked as public.                                                                                                                                                                         |
| IS_HIDDEN            | NUMBER    | Not Null   | A boolean flag indicating if this book definition will be hidden from the menu.<br><br>If a page or book is hidden it does not prevent it from being displayed it is only a hint to the menu control to not display a tab for the given book or page. The page or book may be activated via a link or a backing file. |
| CREATION_DATE        | DATE      | Not Null   | The date and time the row was created.                                                                                                                                                                                                                                                                                |

**Table 7-50 PF\_BOOK\_DEFINITION Table Metadata (Continued)**

| Column Name     | Data Type   | Null Value | Description                                                                                                                                                                                                                                                                                                                                         |
|-----------------|-------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MODIFIED_DATE   | DATE        | Not Null   | The date and time the row was last modified. This columns data is maintained via a database trigger.                                                                                                                                                                                                                                                |
| INTERSECTION_ID | NUMBER      | Not Null   | FK to L10N_INTERSECTION                                                                                                                                                                                                                                                                                                                             |
| WEBAPP_NAME     | VARCHAR(80) | Not Null   | Name of the J2EE Web Application (as defined in the <code>config.xml</code> ) to which the portal resource is scoped.                                                                                                                                                                                                                               |
| BOOK_LABEL      | VARCHAR(80) | Null       | <p>A moniker used to reference this portal resource for development purposes. This is the same as the <code>bookDefinitionLabel</code> in WebLogic Workshop.</p> <p>If a label is not supplied at creation time the <code>BOOK_DEFINITION_ID</code> prefixed with a 'B' is used. This label can be supplied to APIs to activate books or pages.</p> |

## The PF\_BOOK\_GROUP Database Table

This table represent a child page or book placement on the parent book. A single record in the table represents one placement on a book. This table also identifies a customized grouping of Books and Pages. Customized groupings are represented and aggregated around the `DESKTOP_INSTANCE_ID`.

**Table 7-51 PF\_BOOK\_GROUP Table Metadata**

| Column Name    | Data Type | Null Value | Description                                                                                    |
|----------------|-----------|------------|------------------------------------------------------------------------------------------------|
| BOOK_GROUP_ID  | NUMBER    | Not Null   | PK—a unique, system-generated number to be used as the record ID.                              |
| PARENT_BOOK_ID | NUMBER    | Not Null   | FK to <code>PF_BOOK_INSTANCE</code> that identifies the parent <code>BOOK_INSTANCE_ID</code> . |

**Table 7-51 PF\_BOOK\_GROUP Table Metadata (Continued)**

| Column Name         | Data Type | Null Value | Description                                                                                                                                                                                                                 |
|---------------------|-----------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ALIGNMENT           | NUMBER    | Not Null   | The alignment is a 'hint' to the menu skeleton JSP to indicate if the tab should be aligned on the left or right of the tab bar. A skeleton may choose to implement this feature or ignore it.                              |
| MENU_POSITION       | NUMBER    | Not Null   | The order in the tab menu this page or book will appear on the parent book. Order does not need to be contiguous.                                                                                                           |
| CREATION_DATE       | DATE      | Not Null   | The date and time the row was created.                                                                                                                                                                                      |
| MODIFIED_DATE       | DATE      | Not Null   | The date and time the row was last modified. This columns data is maintained via a database trigger.                                                                                                                        |
| IS_DEFAULT          | NUMBER    | Not Null   | A boolean flag indicating that this is the default page or book on the parent book.                                                                                                                                         |
| CHILD_BOOK_ID       | NUMBER    | Null       | FK to PF_BOOK_INSTANCE that identifies the child BOOK_INSTANCE_ID.                                                                                                                                                          |
| PAGE_INSTANCE_ID    | NUMBER    | Null       | FK to PF_BOOK_INSTANCE.                                                                                                                                                                                                     |
| DESKTOP_INSTANCE_ID | NUMBER    | Null       | FK to PF_DESKTOP_INSTANCE. If this book grouping is an administrators' or end user's customization. This will be non null and point to the admins or users desktop. If this field is null it represents the library's view. |

## The PF\_BOOK\_INSTANCE Database Table

This table identifies an instance of the BOOK\_DEFINITION. There is always at least one book instance, namely the primary instance. All other instances represent customization by administrators or end users.

**Table 7-52 PF\_BOOK\_INSTANCE Table Metadata**

| Column Name         | Data Type     | Null Value | Description                                                                                                                                                                                                                                                                  |
|---------------------|---------------|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BOOK_INSTANCE_ID    | NUMBER        | Not Null   | PK—a unique, system-generated number to be used as the record ID.                                                                                                                                                                                                            |
| MENU_ORIENTATION    | NUMBER        | Not Null   | The orientation is a hint to the book skeleton JSP and the menu skeleton JSP to display the tabs on the top, left, right, or bottom of the main book. The skeletons may choose to ignore this field.                                                                         |
| INSTANCE_TYPE       | NUMBER        | Not Null   | The type of book instance: 1=Primary, 3=Admin, 4=User                                                                                                                                                                                                                        |
| CREATION_DATE       | DATE          | Not Null   | The date and time the row was created                                                                                                                                                                                                                                        |
| MODIFIED_DATE       | DATE          | Not Null   | The date and time the row was last modified. This columns data is maintained via a database trigger.                                                                                                                                                                         |
| INSTANCE_TITLE      | VARCHAR (255) | Null       | An end user customized title for this BOOK. This title is not internationalized as it is only used by the end user and there should be no need to do so. If the end user does not customize his books title then this will be null and the L10N_RESOURCE title will be used. |
| BOOK_DEFINITION_ID  | NUMBER        | Not Null   | FK to PF_BOOK_DEFINITION                                                                                                                                                                                                                                                     |
| MENU_DEFINITION_ID  | NUMBER        | Null       | FK to PF_MENU_DEFINITION. Maybe null as not every book is required to have a menu.                                                                                                                                                                                           |
| THEME_DEFINITION_ID | NUMBER        | Null       | FK to PF_THEME_DEFINITION                                                                                                                                                                                                                                                    |

## The PF\_DESKTOP\_DEFINITION Database Table

This table defines a desktop definition. Desktops may be created from template (.portal files) or from existing resources.

**Table 7-53 PF\_DESKTOP\_DEFINITION Table Metadata**

| Column Name          | Data Type    | Null Value | Description                                                                                                                                    |
|----------------------|--------------|------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| DESKTOP_PATH         | VARCHAR (40) | Not Null   | Part of the PK- identifies the partial url path to the desktop.                                                                                |
| PORTAL_PATH          | VARCHAR (40) | Not Null   | Part of the PK and FK to PF_PORTAL- identifies the partial url path to this desktop and parent portal.                                         |
| WEBAPP_NAME          | VARCHAR (80) | Not Null   | Part of the PK and FK to PF_PORTAL. This is the name of the webapp (as defined in the <code>config.xml</code> file) this desktop is scoped to. |
| CREATION_DATE        | DATE         | Not Null   | The date and time the row was created.                                                                                                         |
| MODIFIED_DATE        | DATE         | Not Null   | The date and time the row was last modified. This columns data is maintained via a database trigger.                                           |
| INTERSECTION_ID      | NUMBER       | Not Null   | <b>FK to L10N_INTERSECTION. The BOOK_INSTANCE_ID of the main or default PF_BOOK_INSTANCE for the desktop.</b>                                  |
| MARKUP_DEFINITION_ID | NUMBER       | Not Null   | FK to PF_MARKUP_DEFINITION                                                                                                                     |

## The PF\_DESKTOP\_INSTANCE Database Table

This table identifies a customized or localized instance of a desktop

**Table 7-54 PF\_DESKTOP\_INSTANCE Table Metadata**

| Column Name         | Data Type    | Null Value | Description                                         |
|---------------------|--------------|------------|-----------------------------------------------------|
| DESKTOP_INSTANCE_ID | NUMBER       | Not Null   | PK- identifies the partial url path to the desktop. |
| DESKTOP_PATH        | VARCHAR (40) | Not Null   | FK to PF_DESKTOP_DEFINITION                         |
| PORTAL_PATH         | VARCHAR (40) | Not Null   | FK to PF_DESKTOP_DEFINITION                         |

**Table 7-54 PF\_DESKTOP\_INSTANCE Table Metadata (Continued)**

| Column Name             | Data Type     | Null Value | Description                                                                                                                                                                                                                                                                                    |
|-------------------------|---------------|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| WEBAPP_NAME             | VARCHAR (80)  | Not Null   | FK-to PF_DESKTOP_DEFINITION                                                                                                                                                                                                                                                                    |
| MAIN_BOOK_ID            | NUMBER        | Not Null   | FK to BOOK_INSTANCE_ID of the main or default PF_BOOK_INSTANCE for the desktop                                                                                                                                                                                                                 |
| USER_NAME               | VARCHAR (200) | Null       | NULL if the desktop instance is not for a particular user or admin. The name of the user if the user has customized his/her desktop.                                                                                                                                                           |
| CREATION_DATE           | DATE          | Not Null   | The date and time the row was created.                                                                                                                                                                                                                                                         |
| MODIFIED_DATE           | DATE          | Not Null   | The date and time the row was last modified. This columns data is maintained via a database trigger.                                                                                                                                                                                           |
| LOOK_FEEL_DEFINITION_ID | NUMBER        | Null       | FK to PF_LOOK_AND_FEEL_DEFINITION                                                                                                                                                                                                                                                              |
| INSTANCE_TITLE          | VARCHAR (20)  | Null       | An end user customized title for this DESKTOP. Note this title is not internationalized as it is only used by the end user and there should be no need to do so.<br><br>If the end user does not customize his desktops title then this will be null and the L10N_RESOURCE title will be used. |
| SHELL_DEFINITION_ID     | NUMBER        | Not Null   | FK to PF_SHELL_DEFINITION.                                                                                                                                                                                                                                                                     |

## The PF\_LAYOUT\_DEFINITION Database Table

This table defines a `LAYOUT` portal library resource which is used as a specification for determining the location of items on a page. For every layout definition there is a corresponding `.layout` file. By updating the `.layout` file you are updating this record.

**Table 7-55 PF\_LAYOUT\_DEFINITION Table Metadata**

| Column Name            | Data Type     | Null Value | Description                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|------------------------|---------------|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LAYOUT_DEFINITION_ID   | NUMBER        | Not Null   | PK—a unique, system-generated number to be used as the record ID.                                                                                                                                                                                                                                                                                                                                                                              |
| MARKUP_DEFINITION_ID   | NUMBER        | Not Null   | FK to PF_MARKUP_DEFINITION.                                                                                                                                                                                                                                                                                                                                                                                                                    |
| CREATION_DATE          | DATE          | Not Null   | The date and time the row was created.                                                                                                                                                                                                                                                                                                                                                                                                         |
| MODIFIED_DATE          | DATE          | Not Null   | The date and time the row was last modified. This columns data is maintained via a database trigger.                                                                                                                                                                                                                                                                                                                                           |
| INTERSECTION_ID        | NUMBER        | Not Null   | FK to L10N_INTERSECTION                                                                                                                                                                                                                                                                                                                                                                                                                        |
| WEBAPP_NAME            | VARCHAR (80)  | Not Null   | Name of the J2EE Web Application that portal resource is scoped to.                                                                                                                                                                                                                                                                                                                                                                            |
| IS_LAYOUT_FILE_DELETED | NUMBER        | Not Null   | <p>A boolean indicating that the file associated with this layout was removed from the file system. If the layout is not being used then the record will get deleted outright.</p> <p>This flag is only set to true when the .layout file is deleted and the layout is still in use. You may either return the .layout file and this flag will automatically get reset, or remove the layout with a replacement layout in the admin tools.</p> |
| LAYOUT_FILE            | VARCHAR (255) | Null       | The name and location of the file associated with this layout definition.                                                                                                                                                                                                                                                                                                                                                                      |
| ICON_URI               | VARCHAR (255) | Null       | The URI that identifies the ICON for this layout definition.                                                                                                                                                                                                                                                                                                                                                                                   |
| HTML_LAYOUT_URI        | VARCHAR (255) | Null       | The URI for the HTML for this layout definition, the http file is used by the admin and visitor tools to provide a visual display that emulates the real layout.                                                                                                                                                                                                                                                                               |

## The PF\_LOOK\_AND\_FEEL\_DEFINITION Database Table

This table defines a LOOK and FEEL portal library resource or template for assignment to DESKTOPs that control how a portal renders.

**Table 7-56 PF\_LOOK\_AND\_FEEL\_DEFINITION Table Metadata**

| Column Name               | Data Type     | Null Value | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|---------------------------|---------------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LOOK_FEEL_DEFINITION_ID   | NUMBER        | Not Null   | PK—a unique, system-generated number to be used as the record ID.                                                                                                                                                                                                                                                                                                                                                                                                                |
| LOOK_FEEL_LABEL           | VARCHAR (80)  | Not Null   | A moniker used to reference this portal resource for development purposes.                                                                                                                                                                                                                                                                                                                                                                                                       |
| CREATION_DATE             | DATE          | Not Null   | The date and time the row was created.                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| MODIFIED_DATE             | DATE          | Not Null   | The date and time the row was last modified. This columns data is maintained via a database trigger.                                                                                                                                                                                                                                                                                                                                                                             |
| INTERSECTION_ID           | NUMBER        | Not Null   | FK to L10N_INTERSECTION                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| MARKUP_DEFINITION_ID      | NUMBER        | Not Null   | FK to PF_MARKUP_DEFINITION                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| WEBAPP_NAME               | VARCHAR (80)  | Not Null   | Name of the J2EE Web Application to which the portal resource is scoped.                                                                                                                                                                                                                                                                                                                                                                                                         |
| IS_LOOK_FEEL_FILE_DELETED | NUMBER        | Not Null   | A boolean indicating that the file associated with this look and feel was removed from the file system. If the look and feel is not being used then the record will get deleted outright. This flag is only set to true when the .laf file is deleted and the look and feel is still in use. You may either return the .laf file and this flag will automatically get reset, or remove the look and feel with a replacement look and feel in the WebLogic Administration Portal. |
| LOOK_FEEL_FILE            | VARCHAR (255) | Not Null   | The fully qualified file path (from the web app) to the location of the .laf file associated with this look and feel definition.                                                                                                                                                                                                                                                                                                                                                 |

## The PF\_MARKUP\_DEFINITION Database Table

This table defines the `MARKUP` (blueprint, design, model) for a portal library resource.

**Table 7-57 PF\_MARKUP\_DEFINITION Table Metadata**

| Column Name          | Data Type      | Null Value | Description                                                                                          |
|----------------------|----------------|------------|------------------------------------------------------------------------------------------------------|
| MARKUP_DEFINITION_ID | NUMBER         | Not Null   | PK—a unique, system-generated number to be used as the record ID.                                    |
| CREATION_DATE        | DATE           | Not Null   | The date and time the row was created.                                                               |
| MODIFIED_DATE        | DATE           | Not Null   | The date and time the row was last modified. This columns data is maintained via a database trigger. |
| MARKUP_NAME          | VARCHAR (255)  | Not Null   | The file name and location which contains the definition of this portal object.                      |
| MARKUP_TYPE          | VARCHAR (20)   | Not Null   | The type of portal resource that this markup defines.                                                |
| BEGIN_XML            | VARCHAR (2000) | Not Null   | The first 2000 characters of XML definition of this portal object.                                   |
| END_XML              | VARCHAR (2000) | Null       | The last 2000 characters of the XML definition of this portal object.                                |
| MARKUP_FILE          | VARCHAR (255)  | Null       | Location of the file containing the markup definition.                                               |
| WEBAPP_NAME          | VARCHAR (80)   | Null       | Name of the J2EE Web Application to which the portal resource is scoped.                             |

## The PF\_MENU\_DEFINITION Database Table

This table defines a `MENU` portal library resource or template which can be assigned to a `BOOK INSTANCE`.

**Table 7-58 PF\_MENU\_DEFINITION Table Metadata**

| Column Name          | Data Type     | Null Value | Description                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------------------|---------------|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MENU_DEFINITION_ID   | NUMBER        | Not Null   | PK—a unique, system-generated number to be used as the record ID.                                                                                                                                                                                                                                                                                                                                                                    |
| MARKUP_DEFINITION_ID | NUMBER        | Not Null   | FK to PF_MARKUP_DEFINITION                                                                                                                                                                                                                                                                                                                                                                                                           |
| CREATION_DATE        | DATE          | Not Null   | The date and time the row was created.                                                                                                                                                                                                                                                                                                                                                                                               |
| MODIFIED_DATE        | DATE          | Not Null   | The date and time the row was last modified. This columns data is maintained via a database trigger.                                                                                                                                                                                                                                                                                                                                 |
| INTERSECTION_ID      | NUMBER        | Not Null   | FK to L10N_INTERSECTION                                                                                                                                                                                                                                                                                                                                                                                                              |
| WEBAPP_NAME          | VARCHAR (80)  | Not Null   | Name of the J2EE Web Application to which the portal resource is scoped.                                                                                                                                                                                                                                                                                                                                                             |
| IS_MENU_FILE_DELETED | NUMBER        | Not Null   | A boolean indicating that the file associated with this menu was removed from the file system. If the menu is not being used then the record will get deleted outright. This flag is only set to true when the menu file is deleted and the menu is still in use. You may either return the .menu file and this flag will automatically get reset, or remove the menu with a replacement menu in the WebLogic Administration Portal. |
| MENU_FILE            | VARCHAR (255) | Not Null   | The fully qualified path (from the Web application) to the location of the .menu file associated with this menu definition.                                                                                                                                                                                                                                                                                                          |

## The PF\_PAGE\_DEFINITION Database Table

This table defines a PAGE portal library resource or template which can be assigned to a PAGE INSTANCE.

**Table 7-59 PF\_PAGE\_DEFINITION Table Metadata**

| Column Name          | Data Type    | Null Value | Description                                                                                                                                                                       |
|----------------------|--------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PAGE_DEFINITION_ID   | NUMBER       | Not Null   | PK—a unique, system-generated number to be used as the record ID.                                                                                                                 |
| MARKUP_DEFINITION_ID | NUMBER       | Not Null   | FK to PF_MARKUP_DEFINITION                                                                                                                                                        |
| IS_PUBLIC            | NUMBER       | Not Null   | A boolean indicating this page definition is public. Only public page definitions are ever exposed to 'visitors'                                                                  |
| IS_HIDDEN            | NUMBER       | Not Null   | A boolean indicating this page is hidden. The hidden flag is a hint to the menu not render a tab for this page. The page can still be displayed by other methods (links, events). |
| CREATION_DATE        | DATE         | Not Null   | The date and time the row was created.                                                                                                                                            |
| MODIFIED_DATE        | DATE         | Not Null   | The date and time the row was last modified. This columns data is maintained via a database trigger.                                                                              |
| INTERSECTION_ID      | NUMBER       | Not Null   | FK to L10N_INTERSECTION                                                                                                                                                           |
| WEBAPP_NAME          | VARCHAR (80) | Not Null   | Name of the J2EE Web Application to which the portal resource is scoped.                                                                                                          |
| PAGE_LABEL           | VARCHAR (80) | Null       | A moniker used to reference this portal resource for development purposes.                                                                                                        |

## The PF\_PAGE\_INSTANCE Database Table

This table identifies an instance of the page definition - there is always at least one instance per definition.

**Table 7-60 PF\_PAGE\_INSTANCE Table Metadata**

| Column Name      | Data Type | Null Value | Description                                                       |
|------------------|-----------|------------|-------------------------------------------------------------------|
| PAGE_INSTANCE_ID | NUMBER    | Not Null   | PK—a unique, system-generated number to be used as the record ID. |

**Table 7-60 PF\_PAGE\_INSTANCE Table Metadata (Continued)**

| Column Name          | Data Type     | Null Value | Description                                                                                                                               |
|----------------------|---------------|------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| CREATION_DATE        | DATE          | Not Null   | The date and time the row was created.                                                                                                    |
| MODIFIED_DATE        | DATE          | Not Null   | The date and time the row was last modified. This columns data is maintained via a database trigger.                                      |
| INSTANCE_TYPE        | NUMBER        | Not Null   | 1=Primary, 3=Admin, 4=User                                                                                                                |
| LAYOUT_DEFINITION_ID | NUMBER        | Not Null   | FK to PF_LAYOUT_DEFINITION                                                                                                                |
| PAGE_DEFINITION_ID   | NUMBER        | Not Null   | FK to PF_PAGE_DEFINITION                                                                                                                  |
| THEME_DEFINITION_ID  | NUMBER        | Null       | FK to PF_THEME_DEFINITION                                                                                                                 |
| INSTANCE_TITLE       | VARCHAR (255) | Null       | A DESKTOP or USER customized title for this PAGE . This instance title is only valid to end users as it cannot and need not be localized. |

## The PF\_PLACEHOLDER\_DEFINITION Database Table

This table defines a `PLACEHOLDER` portal library resource or template which has a `LAYOUT` definition and can be assigned to a `PLACEMENT`.

**Table 7-61 PF\_PLACEHOLDER\_DEFINITION Table Metadata**

| Column Name               | Data Type | Null Value | Description                                                                                                                                                                                                                                                                                                              |
|---------------------------|-----------|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PLACEHOLDER_DEFINITION_ID | NUMBER    | Not Null   | PK—a unique, system-generated number to be used as the record ID.                                                                                                                                                                                                                                                        |
| MARKUP_DEFINITION_ID      | NUMBER    | Not Null   | FK to PF_MARKUP_DEFINITION                                                                                                                                                                                                                                                                                               |
| LAYOUT_LOCATION           | NUMBER    | Not Null   | The location of this placeholder in the layout. This is used when swapping layouts as portlets in one layout's location will be moved to the other layouts location with the same id. If the other layout does not have the same number of placeholders the modulus of the location by number of locations will be used. |

**Table 7-61 PF\_PLACEHOLDER\_DEFINITION Table Metadata (Continued)**

| Column Name          | Data Type | Null Value | Description                                                                                          |
|----------------------|-----------|------------|------------------------------------------------------------------------------------------------------|
| CREATION_DATE        | DATE      | Not Null   | The date and time the row was created                                                                |
| MODIFIED_DATE        | DATE      | Not Null   | The date and time the row was last modified. This columns data is maintained via a database trigger. |
| INTERSECTION_ID      | NUMBER    | Not Null   | FK to L10N_INTERSECTION                                                                              |
| LAYOUT_DEFINITION_ID | NUMBER    | Not Null   | FK to PF_LAYOUT_DEFINITION                                                                           |

## The PF\_PLACEMENT Database Table

Each record in this table represents a single placement of a book or portlet on a page.

**Table 7-62 PF\_PLACEMENT Table Metadata**

| Column Name               | Data Type | Null Value | Description                                                                                                 |
|---------------------------|-----------|------------|-------------------------------------------------------------------------------------------------------------|
| PLACEMENT_ID              | NUMBER    | Not Null   | PK—a unique, system-generated number to be used as the record ID.                                           |
| PAGE_INSTANCE_ID          | NUMBER    | Not Null   | FK to PF_PAGE_INSTANCE                                                                                      |
| POSITION                  | NUMBER    | Not Null   | The position within the placeholder this placement lies (placeholders can contain more then one placement). |
| CREATION_DATE             | DATE      | Not Null   | The date and time the row was created.                                                                      |
| MODIFIED_DATE             | DATE      | Not Null   | The date and time the row was last modified. This columns data is maintained via a database trigger.        |
| PLACEHOLDER_DEFINITION_ID | NUMBER    | Not Null   | FK to PF_PLACEHOLDER_DEFINITION                                                                             |
| PORTLET_INSTANCE_ID       | NUMBER    | Null       | FK to PF_PORTLET_INSTANCE                                                                                   |
| BOOK_INSTANCE_ID          | NUMBER    | Null       | FK to PF_BOOK_INSTANCE                                                                                      |

**Table 7-62 PF\_PLACEMENT Table Metadata (Continued)**

| Column Name         | Data Type | Null Value | Description                                                                                                                                                                                                              |
|---------------------|-----------|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DESKTOP_INSTANCE_ID | NUMBER    | Null       | FK to PF_DESKTOP_INSTANCE . If this placement grouping is an admins or end user's customization. This will be non null and point to the admins or users desktop. If this field is null it represents the library's view. |

## The PF\_PORTAL Database Table

This table identifies a PORTAL application library resource or template which can be associated with a DESKTOP definition.

**Table 7-63 PF\_PORTAL Table Metadata**

| Column Name     | Data Type     | Null Value | Description                                                                                                                                                                                                                      |
|-----------------|---------------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PORTAL_PATH     | VARCHAR (40)  | Not Null   | PK - partial primary key and partial URL to this portal                                                                                                                                                                          |
| WEBAPP_NAME     | VARCHAR (80)  | Not Null   | PK-Name of the J2EE Web Application to which the portal resource is scoped.                                                                                                                                                      |
| CREATION_DATE   | DATE          | Not Null   | The date and time the row was created.                                                                                                                                                                                           |
| MODIFIED_DATE   | DATE          | Not Null   | The date and time the row was last modified. This columns data is maintained via a database trigger.                                                                                                                             |
| INTERSECTION_ID | NUMBER        | Not Null   | FK to L10N_INTERSECTION                                                                                                                                                                                                          |
| CONTENT_URI     | VARCHAR (255) | Null       | Defines an optional URI to be forwarded to when only the portal portion of the URL is supplied. This URL (JSP or .portal) can be used to forward to a default desktop or display a list of desktops available under this portal. |

## The PF\_PORTLET\_CATEGORY Database Table

This table associates a PORTLET CATEGORY resource with a PORTLET DEFINITION.

**Table 7-64 PF\_PORTLET\_CATEGORY Table Metadata**

| Column Name                    | Data Type | Null Value | Description                                                                                          |
|--------------------------------|-----------|------------|------------------------------------------------------------------------------------------------------|
| PORTLET_DEFINITION_ID          | NUMBER    | Not Null   | PK—a unique, system-generated number to be used as the record ID.                                    |
| PORTLET_CATEGORY_DEFINITION_ID | NUMBER    | Not Null   | FK to PF_PORTLET_CATEGORY_DEFINITION                                                                 |
| CREATION_DATE                  | DATE      | Not Null   | The date and time the row was created.                                                               |
| MODIFIED_DATE                  | DATE      | Not Null   | The date and time the row was last modified. This columns data is maintained via a database trigger. |

## The PF\_PORTLET\_CATEGORY\_DEFINITION Database Table

This table identifies a PORTLET\_CATEGORY and PORTLET\_CATEGORY hierarchy resource or template for association with a PORTLET resource.

**Table 7-65 PF\_PORTLET\_CATEGORY\_DEFINITION Table Metadata**

| Column Name                    | Data Type   | Null Value | Description                                                                                                             |
|--------------------------------|-------------|------------|-------------------------------------------------------------------------------------------------------------------------|
| PORTLET_CATEGORY_DEFINITION_ID | NUMBER      | Not Null   | PK—a unique, system-generated number to be used as the record ID.                                                       |
| CREATION_DATE                  | DATE        | Not Null   | The date and time the row was created                                                                                   |
| MODIFIED_DATE                  | DATE        | Not Null   | The date and time the row was last modified. This columns data is maintained via a database trigger.                    |
| INTERSECTION_ID                | NUMBER      | Not Null   | FK to L10N_INTERSECTION                                                                                                 |
| WEBAPP_NAME                    | VARCHAR(80) | Not Null   | Name of the J2EE Web Application to which the portal resource is scoped.                                                |
| PARENT_CATEGORY_DEFINITION_ID  | NUMBER      | Null       | FK to PF_PORTLET_CATEGORY_DEFINITION that identifies the parent portlet category. NULL if this is a top level category. |

## The PF\_PORTLET\_DEFINITION Database Table

This table identifies the characteristics of a PORTLET library resource or template which can used as the user interfaces for a web application.

**Table 7-66 PF\_PORTLET\_DEFINITION Table Metadata**

| Column Name             | Data Type | Null Value | Description                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------|-----------|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PORTLET_DEFINITION_ID   | NUMBER    | Not Null   | PK—a unique, system-generated number to be used as the record ID.                                                                                                                                                                                                                                                                                                   |
| MARKUP_DEFINITION_ID    | NUMBER    | Not Null   | FK to PF_MARKUP_DEFINITION                                                                                                                                                                                                                                                                                                                                          |
| IS_PUBLIC               | NUMBER    | Not Null   | A boolean indicating this portlet definition is public. Only public portlet definitions are ever exposed to 'visitors'.                                                                                                                                                                                                                                             |
| IS_FORKABLE             | NUMBER    | Not Null   | A boolean indicating this portlet supports multi threading.                                                                                                                                                                                                                                                                                                         |
| FORK_RENDER             | NUMBER    | Not Null   | A boolean - _is_ multi-threading being used for this portlet, can only be true if IS_FORKABLE is true                                                                                                                                                                                                                                                               |
| IS_CACHEABLE            | NUMBER    | Not Null   | A boolean - _can_ this portlet use render caching                                                                                                                                                                                                                                                                                                                   |
| CACHE_EXPIRES           | NUMBER    | Not Null   | Is this portlet using caching and if so what is the ttl, -1 indicates off, 0..n indicates a ttl for the cache, can only have a value other then -1 if IS_CACHEABLE is true.                                                                                                                                                                                         |
| IS_PORTLET_FILE_DELETED | NUMBER    | Not Null   | A boolean that indicates that the PORTLET_FILE associated with this object has been removed from the file system. This flag is only set to true when the .portlet file is deleted and the portlet is still in use. You may either return the .portlet file and this flag will automatically get reset, or remove the portlet in the WebLogic Administration Portal. |

**Table 7-66 PF\_PORTLET\_DEFINITION Table Metadata (Continued)**

| Column Name   | Data Type     | Null Value | Description                                                                                                                           |
|---------------|---------------|------------|---------------------------------------------------------------------------------------------------------------------------------------|
| CREATION_DATE | DATE          | Not Null   | The date and time the row was created                                                                                                 |
| MODIFIED_DATE | DATE          | Not Null   | The date and time the row was last modified. This columns data is maintained via a database trigger.                                  |
| PORTLET_LABEL | VARCHAR (80)  | Not Null   | A moniker used to reference this portal resource for development purposes.                                                            |
| WEBAPP_NAME   | VARCHAR (80)  | Not Null   | Name of the J2EE Web Application to which the portal resource is scoped.                                                              |
| CONTENT_URI   | VARCHAR (255) | Not Null   | The content URI for this portlet (JSP, HTML) may be null for JAVA (JSR168) portlets.                                                  |
| EDIT_URI      | VARCHAR (255) | Null       | The Edit mode URI (JSP) for this portlet (if the portlet supports edit mode).                                                         |
| HELP_URI      | VARCHAR (255) | Null       | The Help mode URI (JSP) for this portlet (if the portlet supports help mode).                                                         |
| BACKING_FILE  | VARCHAR (255) | Null       | The optional backing file (java class name) for this portlet. Backing classes must implement JspBacking or extend AbstractJspBacking. |
| PORTLET_FILE  | VARCHAR (255) | Null       | The (*.portlet) file describing the controls that make up the portlet                                                                 |

## The PF\_PORTLET\_INSTANCE Database Table

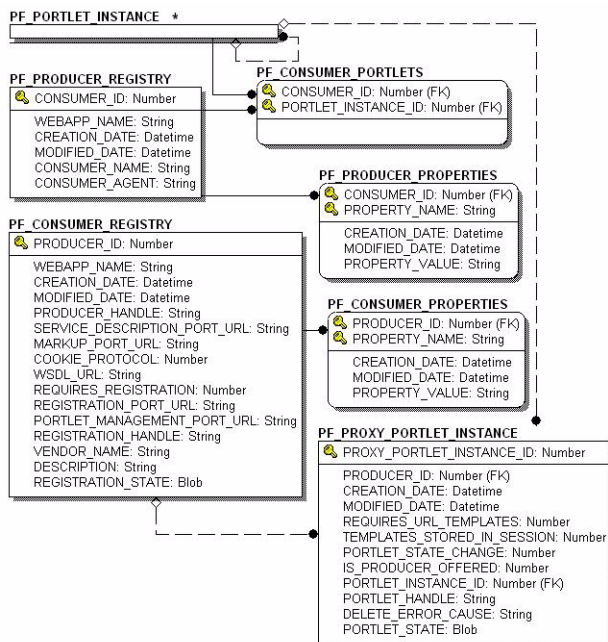
This table identifies a customized or localized instance of a Portlet.

**Table 7-67 PF\_PORTLET\_INSTANCE Table Metadata**

| Column Name                | Data Type    | Null Value | Description                                                                                                                                                                             |
|----------------------------|--------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PORTLET_INSTANCE_ID        | NUMBER       | Not Null   | PK—a unique, system-generated number to be used as the record ID.                                                                                                                       |
| PORTLET_DEFINITION_ID      | NUMBER       | Not Null   | FK to PF_PORTLET_DEFINITION                                                                                                                                                             |
| DEFAULT_MINIMIZED          | NUMBER       | Not Null   | A boolean that indicates this portlet is to be displayed in the minimized state by default.                                                                                             |
| INSTANCE_TYPE              | NUMBER       | Not Null   | Type codes for the portlet instance. Valid values: 1=Primary, 3=Admin, 4=User.                                                                                                          |
| CREATION_DATE              | DATE         | Not Null   | The date and time the row was created.                                                                                                                                                  |
| MODIFIED_DATE              | DATE         | Not Null   | The date and time the row was last modified. This columns data is maintained via a database trigger.                                                                                    |
| TITLE_BAR_ORIENTATION      | NUMBER       | Null       | A hint to the skeleton file to display this portlets titlebar in the (top, left, right or bottom) location. Not all skeletons may implement this and therefore may not have any effect. |
| INTERSECTION_ID            | NUMBER       | Not Null   | FK to L10N_INTERSECTION                                                                                                                                                                 |
| PORTLET_LABEL              | VARCHAR (80) | Not Null   | A moniker used to reference this portal resource for development purposes.                                                                                                              |
| THEME_DEFINITION_ID        | NUMBER       | Null       | FK to PF_THEME_DEFINITION                                                                                                                                                               |
| PARENT_PORTLET_INSTANCE_ID | NUMBER       | Null       | FK to PF_PORTLET_INSTANCE that identifies the parent portlet instance. NULL if this is a top level portlet instance.                                                                    |

## WSRP (Web Services for Remote Portlets) Objects

**Figure 7-10 Entity-Relation Diagram for the WSRP Tables**



## The PF\_CONSUMER\_PORTLETS Database Table

The PF\_CONSUMER\_PORTLETS table associates consumer IDs and portlet instance IDs so that when a consumer de-registers from a producer, the latter may clean up any portlets that it created for the consumer.

### Table 7-68 The PF CONSUMER PORTLETS Database Table

| Column Name | Data Type | Null Value | Description                   |
|-------------|-----------|------------|-------------------------------|
| CONSUMER_ID | NUMBER    | Not Null   | PK/FK—to PF_PRODUCER_REGISTRY |
| PORTLET_ID  | NUMBER    | Not Null   | PK/FK—to PF_PORTLET_INSTANCE  |

## The PF\_CONSUMER\_PROPERTIES Database Table

Optional registration properties. The consumer may be set up to ask for these during registration.

**Table 7-69 The PF\_CONSUMER\_PROPERTIES Database Table**

| Column Name    | Data Type       | Null Value | Description                                                                                     |
|----------------|-----------------|------------|-------------------------------------------------------------------------------------------------|
| PRODUCER_ID    | INTEGER         | Not Null   | PK/FK—to PF_PRODUCER_REGISTRY.                                                                  |
| PROPERTY_NAME  | VARCHAR<br>(80) | Not Null   | PK—The name of the property.                                                                    |
| CREATION_DATE  | DATE            | Not Null   | The date and time the row was created.                                                          |
| MODIFIED_DATE  | DATE            | Not Null   | The date and time the row was modified. The column's data is maintained via a database trigger. |
| PROPERTY_VALUE | VARCHAR<br>(80) | Null       | The value associated with the property name.                                                    |

## The PF\_CONSUMER\_REGISTRY Database Table

Registration handles which are assigned by the producer during registration by a consumer.

**Table 7-70 The PF\_CONSUMER\_REGISTRY Database Table**

| Column Name   | Data Type       | Null Value | Description                                                                                            |
|---------------|-----------------|------------|--------------------------------------------------------------------------------------------------------|
| PRODUCER_ID   | INTEGER         | Not Null   | PK—A unique, system-generated number to be used as the record ID.                                      |
| WEBAPP_NAME   | VARCHAR<br>(80) | Not Null   | Name of the J2EE web application (as defined in config.xml) to which the portal application is scoped. |
| CREATION_DATE | DATE            | Not Null   | The date and time the row was created.                                                                 |
| MODIFIED_DATE | DATE            | Not Null   | The date and time the row was modified. The column's data is maintained via a database trigger.        |

**Table 7-70 The PF\_CONSUMER\_REGISTRY Database Table**

| Column Name                  | Data Type     | Null Value | Description                                                                      |
|------------------------------|---------------|------------|----------------------------------------------------------------------------------|
| PRODUCER_HANDLE              | VARCHAR (40)  | Not Null   | Uniquely identifies the producer to the consumer.                                |
| SERVICE_DESCRIPTION_PORT_URL | VARCHAR (255) | Not Null   | URL to the description service port offered by the producer.                     |
| MARKUP_PORT_URL              | VARCHAR (255) | Not Null   | URL to the markup service port offered by the producer.                          |
| COOKIE_PROTOCOL              | SMALLINT      | Not Null   | The cookie protocol used for Valid values: 0 = None, 1 = Per User, 2 = Per Group |
| WSDL_URL                     | VARCHAR (255) | Not Null   | URL to the WSDL offered by the producer.                                         |
| REQUIRES_REGISTRATION        | SMALLINT      | Not Null   | A boolean indicating that registration is required.                              |
| REGISTRATION_PORT_URL        | VARCHAR (255) | Null       | URL to the registration service port offered by the producer (if offered).       |
| PORTLET_MANAGEMENT_PORT_URL  | VARCHAR (255) | Null       | URL to the portlet management service port offered by the producer (if offered). |
| REGISTRATION_HANDLE          | VARCHAR (255) | Null       | Registration handle returned by the producer after registration.                 |
| VENDOR_NAME                  | VARCHAR (255) | Null       | Name of the vendor of the producer implementation.                               |
| DESCRIPTION                  | VARCHAR (255) | Null       | A description of the portlet.                                                    |
| REGISTRATION_STATE           | BLOB          | Null       | Registration state returned by the producer after registration.                  |

## The PF\_PRODUCER\_PROPERTIES Database Table

Optional registration properties. The producer may be asked for these during registration.

**Table 7-71 The PF\_PRODUCER\_PROPERTIES Database Table**

| Column Name    | Data Type       | Null Value | Description                                                                                         |
|----------------|-----------------|------------|-----------------------------------------------------------------------------------------------------|
| CONSUMER_ID    | INTEGER         | Not Null   | PK/FK—to PF_CONSUMER_REGISTRY                                                                       |
| PROPERTY_NAME  | VARCHAR<br>(80) | Not Null   | PK—The name of the property.                                                                        |
| CREATION_DATE  | DATE            | Not Null   | The date and time the row was created.                                                              |
| MODIFIED_DATE  | DATE            | Not Null   | The date and time the row was modified.<br>This column's data is maintained via a database trigger. |
| PROPERTY_VALUE | VARCHAR<br>(80) | Null       | The value associated with the<br>PROPERTY_NAME.                                                     |

## The PF\_PRODUCER\_REGISTRY Database Table

Producer-generated registration handles stored for each consumer during registration.

**Table 7-72 The PF\_PRODUCER\_REGISTRY Database Table**

| Column Name   | Data Type       | Null Value | Description                                                                                                                                                                                                    |
|---------------|-----------------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CONSUMER_ID   | INTEGER         | Not Null   | A unique system-generated number to be used as the record ID.                                                                                                                                                  |
| WEBAPP_NAME   | VARCHAR<br>(80) | Not Null   | Name of the J2EE Web Application to which the portal application is scoped.                                                                                                                                    |
| CREATION_DATE | DATE            | Not Null   | The date and time the row was created.                                                                                                                                                                         |
| MODIFIED_DATE | DATE            | Not Null   | The date and time the row was modified.<br>This column's data is maintained via a database trigger.                                                                                                            |
| CONSUMER_NAME | VARCHAR<br>(80) | Null       | A unique name that identifies the consumer. For the producer to be able to assert user identity, the consumer name must correspond to the alias of consumer's public key deployed in the producer's key store. |

**Table 7-72 The PF\_PRODUCER\_REGISTRY Database Table**

| Column Name    | Data Type       | Null Value | Description                                                                                                                                                                                                                                                                                  |
|----------------|-----------------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CONSUMER_AGENT | VARCHAR<br>(80) | Null       | Name and version of the consumer's vendor. The value must start with "productName.majorVersion.minorVersion" where "productName" identifies the product the Consumer installed for its deployment, and major and minor Version are vendor-defined indications of the version of its product. |

## The PF\_PROXY\_PORTLET\_INSTANCE Database Table

The consumer manages remote portlet-specific data from here. Foreign key from PF\_PORTLET\_INSTANCE with SET NULL to this table. The framework inserts data into this table whenever a proxy portlet instance is created (including successors). When portlet instances are deleted IS\_SET\_FOR\_DESTROY flag is set for subsequent cleanup.

**Table 7-73 The PF\_PROXY\_PORTLET\_INSTANCE Database Table**

| Column Name                 | Data Type | Null Value | Description                                                                                                  |
|-----------------------------|-----------|------------|--------------------------------------------------------------------------------------------------------------|
| PROXY_PORTLET_INSTANCE_ID   | Integer   | Not Null   | A unique system-generated number to be used as the record ID.                                                |
| PRODUCER_ID                 | INTEGER   | Not Null   | FK — to PF_CONSUMER_REGISTRY.                                                                                |
| CREATED_DATE                | DATE      | Not Null   | The date and time the row was created.                                                                       |
| MODIFIED_DATE               | DATE      | Not Null   | The date and time the row was modified. This column's data is maintained via a database trigger.             |
| REQUIRES_URL_TEMPLATES      | SMALLINT  | Not Null   | A boolean indicating that URL templates are required by the producer.                                        |
| TEMPLATES_STORED_IN_SESSION | SMALLINT  | Not Null   | A boolean indicating that the consumer should send templates with every request or not. Default is 1 = True. |

**Table 7-73 The PF\_PROXY\_PORTLET\_INSTANCE Database Table**

| Column Name          | Data Type        | Null Value | Description                                                                                                                                                                                                                                                |
|----------------------|------------------|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PORTLET_STATE_CHANGE | SMALLINT         | Not Null   | A flag that indicates how the consumer handles customizations of remote portlets. Based on the value of this flag, the consumer may close remote portlets. Valid values include:<br>0 = Readonly (default)<br>1 = CBW(CloneBeforeWrite)<br>2 = Read/Write. |
| IS_PRODUCER_OFFERED  | NUMBER           | Not Null   | Identifies portlet as producer-offered. Defaults to 1 = True.<br><br>If IS_PRODUCER_OFFERED is True, and the PORTLET_INSTANCE_ID is NULL, this PF_PROXY_PORTLET_INSTANCE will be removed from the database during data cleanup processing.                 |
| PORTLET_INSTANCE_ID  | INTEGER          | Null       | FK to PF_PORTLET_INSTANCE for the proxy portlet. If the associated PF_PORTLET_INSTANCE row is deleted, the value of this column is set to NULL.                                                                                                            |
| PORTLET_HANDLE       | VARCHAR<br>(255) | Null       | The handle to the remote portlet as it is specified by the producer. The consumer uses portlet handles throughout the communication to address and interact with portlets via the producer.                                                                |
| DELETE_ERROR_CAUSE   | VARCHAR<br>(255) | Null       | A description of the cause of the error, if an error is encountered while trying to delete the counter part of this proxy portlet on the producer.                                                                                                         |
| PORTLET_STATE        | BLOB             | Null       | Portlet state as returned by the producer after implicit/explicit cloning.                                                                                                                                                                                 |

## The PF\_PORTLET\_PREFERENCE Database Table

This table identifies preference values for the portlet instance.

**Table 7-74 PF\_PORTLET\_PREFERENCE Table Metadata**

| Column Name            | Data Type     | Null Value | Description                                                                                          |
|------------------------|---------------|------------|------------------------------------------------------------------------------------------------------|
| PORTLET_INSTANCE_ID    | NUMBER        | Not Null   | PK—a unique, system-generated number to be used as the record ID.                                    |
| PREFERENCE_NAME        | VARCHAR (40)  | Not Null   | An optional name associated with the preference values                                               |
| CREATION_DATE          | DATE          | Not Null   | The date and time the row was created.                                                               |
| MODIFIED_DATE          | DATE          | Not Null   | The date and time the row was last modified. This columns data is maintained via a database trigger. |
| IS_MODIFIABLE          | NUMBER        | Not Null   | A boolean, indicating whether the name/value of this preference may be modified by portlets.         |
| IS_MULTIVALUED         | NUMBER        | Not Null   | A boolean, indicating whether a preference may have more than one value.                             |
| PREFERENCE_DESCRIPTION | VARCHAR (255) | Null       | An optional description of the portlet preferences.                                                  |

## The PF\_PORTLET\_PREFERENCE\_VALUE Database Table

This table maintains values of portlet preferences. There is a one to many correspondence between the records in the PF\_PORTLET\_PREFERENCE table and this table.

**Table 7-75 PF\_PORTLET\_PREFERENCE\_VALUE Table Metadata**

| Column Name                 | Data Type    | Null Value | Description                                                       |
|-----------------------------|--------------|------------|-------------------------------------------------------------------|
| PORTLET_PREFERENCE_VALUE_ID | NUMBER       | Not Null   | PK—a unique, system-generated number to be used as the record ID. |
| PORTLET_INSTANCE_ID         | NUMBER       | Not Null   | FK to PF_PORTLET_PREFERENCE                                       |
| PREFERENCE_NAME             | VARCHAR (40) | Not Null   | FK to PF_PORTLET_PREFERENCE                                       |

**Table 7-75 PF\_PORTLET\_PREFERENCE\_VALUE Table Metadata (Continued)**

| Column Name      | Data Type     | Null Value | Description                                                                                          |
|------------------|---------------|------------|------------------------------------------------------------------------------------------------------|
| CREATION_DATE    | DATE          | Not Null   | The date and time the row was created.                                                               |
| MODIFIED_DATE    | DATE          | Not Null   | The date and time the row was last modified. This columns data is maintained via a database trigger. |
| PREFERENCE_VALUE | VARCHAR (255) | Null       | The actual value for this preference.                                                                |

## The PF\_SHELL\_DEFINITION Database Table

This table represents a shell definition. There is a one-to-one correspondence between records in this table and .shell files.

**Table 7-76 PF\_SHELL\_DEFINITION Table Metadata**

| Column Name          | Data Type    | Null Value | Description                                                                                          |
|----------------------|--------------|------------|------------------------------------------------------------------------------------------------------|
| SHELL_DEFINITION_ID  | NUMBER       | Not Null   | PK—a unique, system-generated number to be used as the record ID.                                    |
| MARKUP_DEFINITION_ID | NUMBER       | Not Null   | FK to PF_MARKUP_DEFINITION                                                                           |
| CREATION_DATE        | DATE         | Not Null   | The date and time the row was created.                                                               |
| MODIFIED_DATE        | DATE         | Not Null   | The date and time the row was last modified. This columns data is maintained via a database trigger. |
| INTERSECTION_ID      | NUMBER       | Not Null   | FK to L10N_INTERSECTION                                                                              |
| WEBAPP_NAME          | VARCHAR (80) | Not Null   | Name of the J2EE Web Application to which the portal resource is scoped.                             |

**Table 7-76 PF\_SHELL\_DEFINITION Table Metadata (Continued)**

| Column Name           | Data Type     | Null Value | Description                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------|---------------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IS_SHELL_FILE_DELETED | NUMBER        | Not Null   | A boolean indicating that the file associated with this shell was removed from the file system. If the shell is not being used then the record will get deleted outright. This flag is only set to true when the .shell file is deleted and the shell is still in use. You may either return the .shell file and this flag will automatically get reset, or remove the shell with a replacement in the WebLogic Administration Portal. |
| SHELL_FILE            | VARCHAR (255) | Not Null   | The name of the .shell file contained in the applications framework/markup/shell directory backing this shell definition                                                                                                                                                                                                                                                                                                               |

## The PF\_THEME\_DEFINITION Database Table

This table represents a theme definition. There is a one to one correspondence between records in this table and .theme files.

**Table 7-77 PF\_THEME\_DEFINITION Table Metadata**

| Column Name          | Data Type    | Null Value | Description                                                                                          |
|----------------------|--------------|------------|------------------------------------------------------------------------------------------------------|
| THEME_DEFINITION_ID  | NUMBER       | Not Null   | PK—a unique, system-generated number to be used as the record ID.                                    |
| CREATION_DATE        | DATE         | Not Null   | The date and time the row was created.                                                               |
| MODIFIED_DATE        | DATE         | Not Null   | The date and time the row was last modified. This columns data is maintained via a database trigger. |
| INTERSECTION_ID      | NUMBER       | Not Null   | FK to L10N_INTERSECTION                                                                              |
| MARKUP_DEFINITION_ID | NUMBER       | Not Null   | FK to PF_MARKUP_DEFINITION                                                                           |
| WEBAPP_NAME          | VARCHAR (80) | Not Null   | Name of the J2EE Web Application to which the portal resource is scoped.                             |

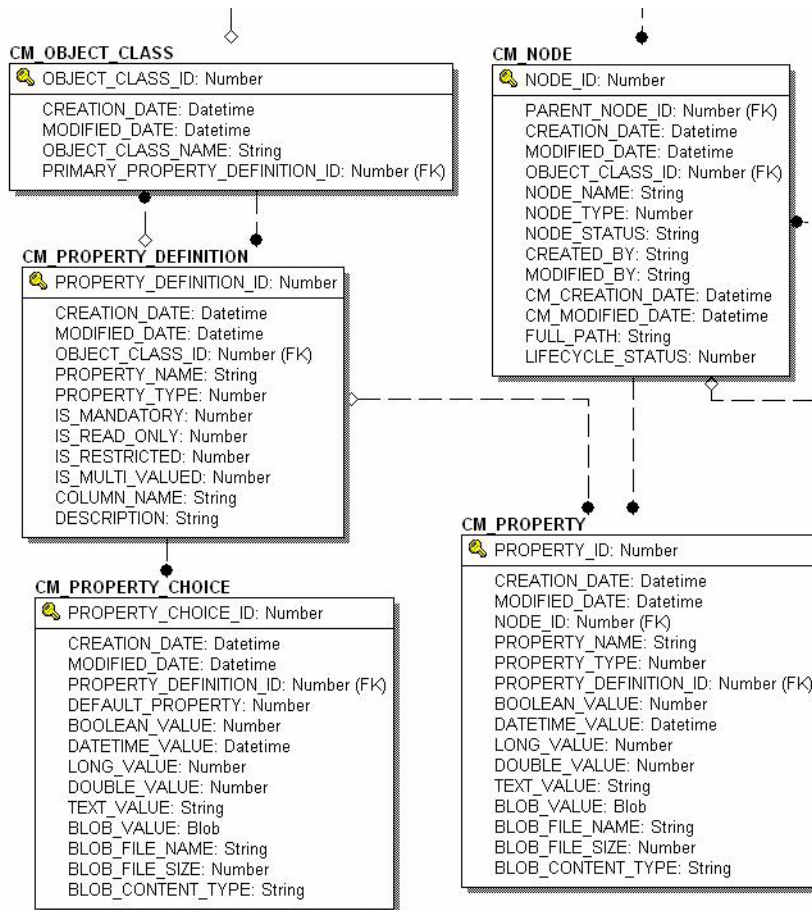
**Table 7-77 PF\_THEME\_DEFINITION Table Metadata (Continued)**

| Column Name           | Data Type     | Null Value | Description                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------------------|---------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IS_THEME_FILE_DELETED | NUMBER        | Not Null   | A boolean indicating that the file associated with this theme was removed from the file system. If the theme is not being used then the record will get deleted outright. This flag is only set to true when the .theme file is deleted and the theme is still in use. You may either return the .theme file and this flag will automatically get reset, or remove the theme in WebLogic Administration Portal. |
| THEME_FILE            | VARCHAR (255) | Not Null   | The name of the .theme file contained in the applications framework/markup/theme directory backing this theme definition.                                                                                                                                                                                                                                                                                       |

## Content Management Database Objects

[Figure 7-11](#) shows the logical Entity-Relation diagram for the WebLogic Portal Content Management tables.

**Figure 7-11 Entity-Relation Diagram for the Content Management Tables**



## The Content Management Data Dictionary Tables

The Content Management system has the following tables:

- [The CM\\_NODE Database Table](#)
- [The CM\\_OBJECT\\_CLASS Database Table](#)
- [The CM\\_PROPERTY Database Table](#)

- [The CM\\_PROPERTY\\_CHOICE Database Table](#)
- [The CM\\_PROPERTY\\_DEFINITION Database Table](#)

## The CM\_NODE Database Table

In the `CM_NODE` table a node represents an element in a hierarchy which can either be a "Hierarchy Node" or a "Content Node". A hierarchy node can contain both other hierarchy and content nodes while a content node can only contain other content nodes. Nodes may contain Properties based on the `ObjectClass` (schema) defined for it.

Both Content and Hierarchy Nodes may contain an `ObjectClass` and Properties. All nodes have a path that uniquely identifies it within the repository.

**Table 7-78 CM\_NODE Table Metadata**

| Column Name     | Data Type    | Null Value | Description                                                                                                                |
|-----------------|--------------|------------|----------------------------------------------------------------------------------------------------------------------------|
| NODE_ID         | NUMBER       | Not Null   | PK—a unique, system-generated number to be used as the record ID.                                                          |
| PARENT_NODE_ID  | NUMBER       | Null       | FK-The nodes parent record ID (NODE_ID)                                                                                    |
| CREATION_DATE   | DATE         | Not Null   | The date and time the row was created.                                                                                     |
| MODIFIED_DATE   | DATE         | Not Null   | The date and time the row was last modified. This columns data is maintained via a database trigger.                       |
| OBJECT_CLASS_ID | NUMBER       | Null       | FK-The object class ID associated to the node.                                                                             |
| NODE_NAME       | VARCHAR (50) | Not Null   | The name of the node. The name is unique relative to it's siblings. The name must not contain forward or backward slashes. |
| NODE_TYPE       | NUMBER       | Not Null   | The node type. Either 1 for Hierarchy Node or 2 for Content Node.                                                          |
| NODE_STATUS     | VARCHAR (40) | Null       | The status of the node. The available values are defined by the application as property definition choices.                |

**Table 7-78 CM\_NODE Table Metadata (Continued)**

| Column Name      | Data Type     | Null Value | Description                                                                                                                                                                                                                                                                                                                                               |
|------------------|---------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CREATED_BY       | VARCHAR (100) | Not Null   | The ID of the user that created the node.                                                                                                                                                                                                                                                                                                                 |
| MODIFIED_BY      | VARCHAR (100) | Null       | The ID of the user that last modified the node.                                                                                                                                                                                                                                                                                                           |
| CM_CREATION_DATE | DATE          | Not Null   | The date and time the row was created. Maintained by the application.                                                                                                                                                                                                                                                                                     |
| CM_MODIFIED_DATE | DATE          | Not Null   | The date and time the row was last modified. Maintained by the application.                                                                                                                                                                                                                                                                               |
| FULL_PATH        | VARCHAR (254) | Null       | AK-Each node has a path that uniquely identifies it within the repository.<br><br>The path is defined in a unix-like format such as /a/b/c where "/" is the root and "a" ("a" is the Nodes NODE_NAME) is the root's child.<br><br>The path must always begin with "/" and never end with it. So neither of the following are valid: a/b/c/d or /a/b/d/d/. |
| LIFECYCLE_STATUS | INTEGER       | Null       | Specific lifecycle status which this node version has been assigned (i.e., In Progress, Published, etc.).                                                                                                                                                                                                                                                 |

## The CM\_OBJECT\_CLASS Database Table

The ObjectClass is the schema for a Node. It has both an id and a name that uniquely identifies it within a content repository. An ObjectClass may have PropertyDefinitions associated with it that define the shape of Properties required for a Node. This does not mean that the Property must contain a value, but simply that the Property must exist for the Node.

It may have a primary PropertyDefinition that defines the primary content Property for a Node. This allows for the definition of content in the schema since the schema does not distinguish between content and meta-content. A Node is only considered valid in the repository if its Properties conform to its ObjectClass PropertyDefinitions.

**Table 7-79 CM\_OBJECT\_CLASS Table Metadata**

| Column Name                    | Data Type     | Null Value | Description                                                                                                                                        |
|--------------------------------|---------------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| OBJECT_CLASS_ID                | NUMBER        | Not Null   | PK—a unique, system-generated number to be used as the record ID.                                                                                  |
| CREATION_DATE                  | DATE          | Not Null   | The date and time the row was created.                                                                                                             |
| MODIFIED_DATE                  | DATE          | Not Null   | The date and time the row was last modified. This columns data is maintained via a database trigger.                                               |
| OBJECT_CLASS_NAME              | VARCHAR (100) | Not Null   | AK-A unique name for the object class.                                                                                                             |
| PRIMARY_PROPERTY_DEFINITION_ID | NUMBER        | Null       | FK-The PROPERTY_DEFINITION_ID for the primary CM_PROPERTY_DEFINITION table row that defines the content for a node associated to the object class. |

## The CM\_PROPERTY Database Table

The CM\_PROPERTY table identifies a property which is a name value pair, with the name being unique relative to the CM\_NODE and the value is either a Date, BLOB, Boolean, Number, Float, or Varchar.

Only one value should be set on a given row, if the value is a BLOB then all of the BLOB\_ columns may be set. If the IS\_MULTIVALUED column is set to 1 then there will be multiple rows with the same property name and same NODE\_ID. A property may represent both the content and meta-content for a Node.

**Table 7-80 CM\_PROPERTY Table Metadata**

| Column Name   | Data Type | Null Value | Description                                                       |
|---------------|-----------|------------|-------------------------------------------------------------------|
| PROPERTY_ID   | NUMBER    | Not Null   | PK—a unique, system-generated number to be used as the record ID. |
| CREATION_DATE | DATE      | Not Null   | The date and time the row was created.                            |

**Table 7-80 CM\_PROPERTY Table Metadata (Continued)**

| Column Name            | Data Type     | Null Value | Description                                                                                                |
|------------------------|---------------|------------|------------------------------------------------------------------------------------------------------------|
| MODIFIED_DATE          | DATE          | Not Null   | The date and time the row was last modified. This columns data is maintained via a database trigger.       |
| NODE_ID                | NUMBER        | Not Null   | FK-The ID of the node that contains the property                                                           |
| PROPERTY_NAME          | VARCHAR (100) | Not Null   | The name of the property. It must be unique relative to it's node                                          |
| PROPERTY_TYPE          | NUMBER        | Not Null   | The type of the property: BOOLEAN = 0; NUMBER = 1; FLOAT = 2; VARCHAR = 3; DATE = 4; BLOB = 5;             |
| PROPERTY_DEFINITION_ID | NUMBER        | Null       | FK-The ID of the property definition to which this property must conform.                                  |
| BOOLEAN_VALUE          | NUMBER        | Null       | True (1) for the Property if the PROPERTY_TYPE is Boolean (PROPERTY_TYPE=0).                               |
| DATETIME_VALUE         | DATE          | Null       | The datetime value for the Property if the PROPERTY_TYPE is DATE (PROPERTY_TYPE=4).                        |
| LONG_VALUE             | NUMBER        | Null       | The long number or integer value for the Property if the PROPERTY_TYPE is NUMBER (PROPERTY_TYPE=1) .       |
| DOUBLE_VALUE           | FLOAT         | Null       | The floating point decimal number value for the Property if the PROPERTY_TYPE is FLOAT (PROPERTY_TYPE=2) . |
| TEXT_VALUE             | VARCHAR (254) | Null       | The textual property value for the Property if the PROPERTY_TYPE is VARCHAR (PROPERTY_TYPE=3) .            |
| BLOB_VALUE             | BLOB          | Null       | The binary large object for the Property if the PROPERTY_TYPE is BLOB (PROPERTY_TYPE=5)                    |
| BLOB_FILE_NAME         | VARCHAR (50)  | Null       | The name of the file associated with the BLOB_VALUE.                                                       |

**Table 7-80 CM\_PROPERTY Table Metadata (Continued)**

| Column Name       | Data Type    | Null Value | Description                                                                                     |
|-------------------|--------------|------------|-------------------------------------------------------------------------------------------------|
| BLOB_FILE_SIZE    | NUMBER       | Null       | The size of the file in bytes associated with the BLOB_VALUE.                                   |
| BLOB_CONTENT_TYPE | VARCHAR(100) | Null       | The content type (mime type and charset) for the BLOB_VALUE. e.g. "text/html;charset=iso8859-1" |

## The CM\_PROPERTY\_CHOICE Database Table

This table identifies the valid values or choices for a PropertyDefinition (row in the CM\_PROPERTY\_DEFINITION table). A property choice can identify a default choice (DEFAULT\_PROPERTY=1) which means that if the creator of a Property does not choose different values, it will be set as a Property value.

If the PropertyChoice value is defined as NULL (no value is supplied for the PROPERTY\_TYPE), it allows for an empty choice. For example, a Property that has a String type (or TEXT\_VALUE) could have three PropertyChoices - "blue", "red" \* and null.

**Table 7-81 CM\_PROPERTY\_CHOICE Table Metadata**

| Column Name            | Data Type | Null Value | Description                                                                                          |
|------------------------|-----------|------------|------------------------------------------------------------------------------------------------------|
| PROPERTY_CHOICE_ID     | NUMBER    | Not Null   | PK—a unique, system-generated number to be used as the record ID.                                    |
| CREATION_DATE          | DATE      | Not Null   | The date and time the row was created.                                                               |
| MODIFIED_DATE          | DATE      | Not Null   | The date and time the row was last modified. This columns data is maintained via a database trigger. |
| PROPERTY_DEFINITION_ID | NUMBER    | Not Null   | FK-The ID of the property definition that contains the property choice                               |
| DEFAULT_PROPERTY       | NUMBER    | Not Null   | Set to 1 if the property choice is a default, or 0 if it is not.                                     |
| BOOLEAN_VALUE          | NUMBER    | Null       | True (1) for the Property if the PROPERTY_TYPE is BOOLEAN (PROPERTY_TYPE=0).                         |

**Table 7-81 CM\_PROPERTY\_CHOICE Table Metadata (Continued)**

| Column Name       | Data Type     | Null Value | Description                                                                                                |
|-------------------|---------------|------------|------------------------------------------------------------------------------------------------------------|
| DATE_TIME_VALUE   | DATE          | Null       | The dietitian value for the Property if the PROPERTY_TYPE is DATE (PROPERTY_TYPE=4) .                      |
| LONG_VALUE        | NUMBER        | Null       | The long number or integer value for the Property if the PROPERTY_TYPE is NUMBER (PROPERTY_TYPE=1) .       |
| DOUBLE_VALUE      | FLOAT         | Null       | The floating point decimal number value for the Property if the PROPERTY_TYPE is FLOAT (PROPERTY_TYPE=2) . |
| TEXT_VALUE        | VARCHAR (254) | Null       | The textual property value for the Property if the PROPERTY_TYPE is VARCHAR (PROPERTY_TYPE=3) .            |
| BLOB_VALUE        | BLOB          | Null       | The binary large object for the Property if the PROPERTY_TYPE is BLOB (PROPERTY_TYPE=5) .                  |
| BLOB_FILE_NAME    | VARCHAR (50)  | Null       | The name of the file associated with the BLOB_VALUE.                                                       |
| BLOB_FILE_SIZE    | NUMBER        | Null       | The size of the file in bytes associated with the BLOB_VALUE.                                              |
| BLOB_CONTENT_TYPE | VARCHAR (100) | Null       | The content type (mime type and charset) for the BLOB_VALUE. Eg. "text/html;charset=iso8859-1"             |

## The CM\_PROPERTY\_DEFINITION Database Table

The PropertyDefinition table defines the shape of a property. It describes the property type (blob, boolean, varchar, float, date, number), whether it is required, whether it is editable, the default value and restricted values, if applicable. A PropertyDefinition may have 0..n PropertyChoices.

This is a list of values that may be selected for a Property's values. Rules for a PropertyDefinition are as follows. If the PropertyDefinition contains a reference, it may not be multi-valued, or binary. If the PropertyDefinition is binary, it may not be multi-valued or restricted and may only have one PropertyChoice.

If the PropertyDefinition is boolean, it may not be multi-valued. If the PropertyDefinition is restricted then the Property's value(s) must be contained in the PropertyChoice list, or be null.

For example: consider a PropertyDefinition named "color". It has PropertyChoices "blue", "green", and "red". If the PropertyDefinition is restricted then the value of a Property defined by this PropertyDefinition may not have a value that isn't "green", "red", "blue", or null.

**Table 7-82 CM\_PROPERTY\_DEFINITION Table Metadata**

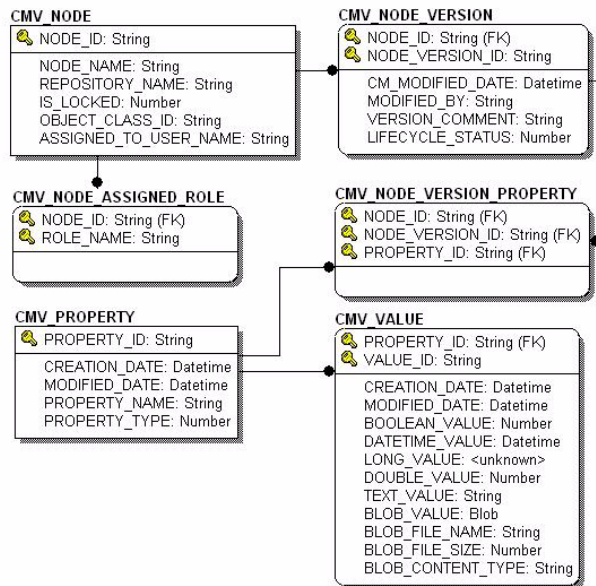
| Column Name            | Data Type     | Null Value | Description                                                                                                                                                             |
|------------------------|---------------|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PROPERTY_DEFINITION_ID | NUMBER        | Not Null   | PK—a unique, system-generated number to be used as the record ID.                                                                                                       |
| CREATION_DATE          | DATE          | Not Null   | The date and time the row was created.                                                                                                                                  |
| MODIFIED_DATE          | DATE          | Not Null   | The date and time the row was last modified. This columns data is maintained via a database trigger.                                                                    |
| OBJECT_CLASS_ID        | NUMBER        | Not Null   | FK-The OBJECT_CLASS_ID of the property definitions<br>CM_OBJECT_CLASS.                                                                                                  |
| PROPERTY_NAME          | VARCHAR (100) | Not Null   | The name associated with the property definition. The combination of<br>PROPERTY_NAME AND OBJECT_CLASS_ID for an Alternate Key for the<br>CM_PROPERTY_DEFINITION table. |
| PROPERTY_TYPE          | NUMBER        | Not Null   | The type of the property; BOOLEAN = 0;<br>NUMBER = 1; FLOAT = 2; VARCHAR = 3; DATE = 4; BLOB = 5;                                                                       |
| IS_MANDATORY           | NUMBER        | Not Null   | True if the value of a property must be set.                                                                                                                            |
| IS_READ_ONLY           | NUMBER        | Not Null   | True if the value of a property should not be set by an end-user.                                                                                                       |
| IS_RESTRICTED          | NUMBER        | Not Null   | True if the value of a property should come from the property choice values.                                                                                            |

**Table 7-82 CM\_PROPERTY\_DEFINITION Table Metadata (Continued)**

| Column Name     | Data Type     | Null Value | Description                                                                                          |
|-----------------|---------------|------------|------------------------------------------------------------------------------------------------------|
| IS_MULTI_VALUED | NUMBER        | Not Null   | True if there may be multiple rows with the same property name, node_id, but different property_IDs. |
| COLUMN_NAME     | VARCHAR (30)  | Null       | The name of a column added to the CM_NODE table that defines an explicit property.                   |
| DESCRIPTION     | VARCHAR (254) | Null       | A description of the property definition.                                                            |

## Content Management Virtual Database Objects

Figure 7-12 shows the logical Entity-Relation diagram for the WebLogic Portal Content Management tables.

**Figure 7-12 Entity-Relation Diagram for the Content Management Virutal Tables**

## The CMV\_NODE Table

Uniquely identifies a content-managed node from a BEA repository (i.e., CM\_NODE table) that has been versioned and is being edited within the Content Management Virtual Repository.

**Table 7-83 The CMV\_NODE Table**

| Column Name           | Data Type        | Null Value | Description                                                          |
|-----------------------|------------------|------------|----------------------------------------------------------------------|
| NODE_ID               | VARCHAR<br>(254) | Not Null   | PK—a unique, system-generated number to be used as the record ID.    |
| REPOSITORY_NAME       | VARCHAR<br>(254) | Not Null   | The name of the repository where the node was created and published. |
| IS_LOCKED             | SMALLINT         | Not Null   | Flag to determine if the record is locked.                           |
| OBJECT_CLASS_ID       | VARCHAR<br>(254) | Not Null   | The object class ID that is associated with the node.                |
| OBJECT_CLASS_ID       | NUMBER           | Null       | FK-The object class ID associated to the node.                       |
| ASSIGNED_TO_USER_NAME | VARCHAR(200)     | Null       | Username to which the node is assigned.                              |

## The CMV\_NODE\_ASSIGNED\_ROLE Table

Uniquely identifies all roles for a given node that have authorization to view or alter the node.

**Table 7-84 The CMV\_NODE\_ASSIGNED\_ROLE Table**

| Column Name | Data Type        | Null Value | Description                                                                                              |
|-------------|------------------|------------|----------------------------------------------------------------------------------------------------------|
| NODE_ID     | VARCHAR<br>(254) | Not Null   | PK/FK—the ID of the node that roles will be associated with. Foreign key relationship to CMV_NODE table. |
| ROLE_NAME   | VARCHAR<br>(254) | Not Null   | PK—the name of the role.                                                                                 |

## The CMV\_NODE\_VERSION Table

Uniquely identifies all the versions of a mode within the Content Management Virtual repository.

**Table 7-85** The CMV\_NODE\_VERSION Table

| Column Name      | Data Type        | Null Value | Description                                                                                                |
|------------------|------------------|------------|------------------------------------------------------------------------------------------------------------|
| NODE_ID          | VARCHAR<br>(254) | Not Null   | PK/FK—the ID of the node for which versions have been created. Foreign key relationship to CMV_NODE table. |
| NODE_VERSION_ID  | VARCHAR<br>(254) | Not Null   | PK—the unique version ID for the node.                                                                     |
| CM_MODIFIED_DATE | DATE             | Not Null   | Date the node version was last edited.                                                                     |
| MODIFIED_BY      | VARCHAR<br>(254) | Not Null   | Username of the person who last edited the a node version.                                                 |
| VERSION_COMMENT  | VARCHAR<br>(254) | Not Null   | Comment added to a node version when saving.                                                               |
| LIFECYCLE_STATUS | INTEGER          | Null       | Specific lifecycle status which this node version has been assigned (i.e., In Progress, Published, etc.).  |

## The CMV\_PROPERTY Table

Uniquely identifies a property tha can be associated with a node version. For example, some properties of a book might be author, title, and subject.

**Table 7-86** The CMV\_PROPERTY Table

| Column Name   | Data Type        | Null Value | Description                                                                                       |
|---------------|------------------|------------|---------------------------------------------------------------------------------------------------|
| PROPERTY_ID   | VARCHAR<br>(254) | Not Null   | PK—unique, system-generated number to be used as the record ID.                                   |
| CREATION_DATE | DATE             | Not Null   | The date and time the row was created.                                                            |
| MODIFIED_DATE | DATE             | Not Null   | Date and time the row was last modified. This column's data is maintained via a database trigger. |

**Table 7-86 The CMV\_PROPERTY Table**

| Column Name   | Data Type        | Null Value | Description                                                                                             |
|---------------|------------------|------------|---------------------------------------------------------------------------------------------------------|
| PROPERTY_NAME | VARCHAR<br>(100) | Not Null   | The name of the property. It must be unique relative to it's node.                                      |
| PROPERTY_TYPE | SMALLINT         | Not Null   | The type of the property:<br>BOOLEAN = 0<br>NUMBER = 1<br>FLOAT = 2<br>VARCHAR =3<br>DATE =4<br>BLOB =5 |

## The CMV\_VALUE Table

Uniquely identifies a value for a given property. For example, a property SUBJECT for a BOOK might have a value of FINANCE.

Only one value will be set on a given record. If the value is BLOB, then all the BLOB\_columns may be set.

**Table 7-87 The CMV\_VALUE Table**

| Column Name   | Data Type        | Null Value | Description                                                                                                                                   |
|---------------|------------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| PROPERTY_ID   | VARCHAR<br>(254) | Not Null   | PK/FK—ID of the property with which the values will be associated. Foreign key relationship to CMV_PROPERTY.                                  |
| VALUE_ID      | VARCHAR<br>(254) | Not Null   | PK—unique, system-generated number to be used as the value ID.                                                                                |
| CREATION_DATE | DATE             | Not Null   | The date and time the row was created<br>Date and time the row was last modified.<br>This column's data is maintained via a database trigger. |

**Table 7-87 The CMV\_VALUE Table**

| Column Name       | Data Type     | Null Value | Description                                                                                         |
|-------------------|---------------|------------|-----------------------------------------------------------------------------------------------------|
| MODIFIED_DATE     | DATE          | Not Null   | Date and time the row was last modified. This column's data is maintained via a database trigger.   |
| BOOLEAN_VALUE     | SMALLINT      | Not Null   | Flag to determine if property is a Boolean value. 1= True, 0 = False                                |
| DATETIME_VALUE    | DATE          | Null       | The datetime value for the property if the PROPERTY_TYPE is DATE.                                   |
| LONG_VALUE        | NUMERIC (20)  | Null       | The long number or interger value for the propertyif the PROPERTY_TYPE is NUMBER.                   |
| DOUBLE_VALUE      | FLOAT         | Null       | The floating point decimal number value for the property value if the PROPERTY_TYPE is FLOAT.       |
| TEXT_VALUE        | VARCHAR (254) | Null       | The textual property value if the PROPERTY_TYPE is                                                  |
| BLOB_VALUE        | BLOB          | Null       | The binary large object for the property value if the PROPERTY_TYPE is BLOB.                        |
| BLOB_FILE _NAME   | VARCHAR (50)  | Null       | The name of the file associated with BLOB_VALUE.                                                    |
| BLOB_FILE_SIZE    | INTEGER       | Null       | The size of the file (in bytes) associated with BLOB_VALUE.                                         |
| BLOB_CONTENT_TYPE | VARCHAR (100) | Null       | The content type (MIME and character set) for the BLOB_VALUE (e.g., "text/html;charset=iso8859-1"). |

## The CMV\_NODE\_VERSION\_PROPERTY Table

Uniquely identifies a relationship between a CMV\_NODE\_VERSION and CMV\_PROPERTY.

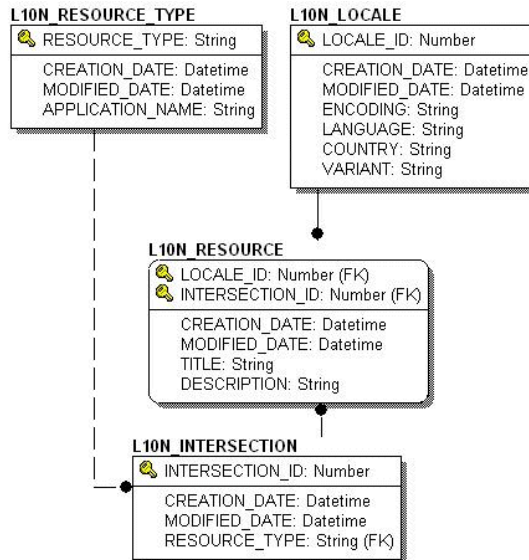
**Table 7-88** The CMV\_NODE\_VERSION\_PROPERTY Table

| Column Name     | Data Type        | Null Value | Description                                                                                                                   |
|-----------------|------------------|------------|-------------------------------------------------------------------------------------------------------------------------------|
| NODE_ID         | VARCHAR<br>(254) | Not Null   | PK/FK—ID of the node with which the properties will be associated. Foreign key relationship to CMV_NODE_VERSION.              |
| NODE_VERSION_ID | VARCHAR<br>(254) | Not Null   | PK/FK—ID of the node version that with which the properties will be associated. Foreign key relationship to CMV_NODE_VERSION. |
| PROPERTY_ID     | VARCHAR<br>(254) | Not Null   | PK/FK—ID of the property that with which the node version will be associated. Foreign key relationship to CMV_PROPERTY.       |

## Localization Database Objects

This section documents the database objects for the WebLogic Portal package. [Figure 7-13](#) shows the Entity Relation diagram for the WebLogic Portal Localization database objects.

**Figure 7-13 Entity-Relation Diagram for the Localization Tables**



## The Localization Dictionary Tables

The following tables support Localization:

- [The L10N\\_INTERSECTION Database Table](#)
- [The L10N\\_LOCALE Database Table](#)
- [The L10N\\_RESOURCE Database Table](#)
- [The L10N\\_RESOURCE\\_TYPE Database Table](#)

### The L10N\_INTERSECTION Database Table

This table is used to tie an application resource (menu, portlet, etc.) to a localized title and description.

**Table 7-89 L10N\_INTERSECTION Table Metadata**

| Column Name     | Data Type    | Null Value | Description                                                                                           |
|-----------------|--------------|------------|-------------------------------------------------------------------------------------------------------|
| INTERSECTION_ID | NUMBER       | Not Null   | PK—a unique, system-generated number to be used as the record ID.                                     |
| CREATION_DATE   | DATE         | Not Null   | The date and time the row was created.                                                                |
| MODIFIED_DATE   | DATE         | Not Null   | The date and time the row was last modified. This column's data is maintained via a database trigger. |
| RESOURCE_TYPE   | VARCHAR (80) | Not Null   | FK to L10N_RESOURCE_TYPE.                                                                             |

## The L10N\_LOCALE Database Table

This table defines the characteristics of a locale that are needed to localize an application.

**Table 7-90 L10N\_LOCALE Table Metadata**

| Column Name   | Data Type    | Null Value | Description                                                                                           |
|---------------|--------------|------------|-------------------------------------------------------------------------------------------------------|
| LOCALE_ID     | NUMBER       | Not Null   | PK—a unique, system-generated number to be used as the record ID.                                     |
| CREATION_DATE | DATE         | Not Null   | The date and time the row was created.                                                                |
| MODIFIED_DATE | DATE         | Not Null   | The date and time the row was last modified. This column's data is maintained via a database trigger. |
| ENCODING      | VARCHAR (20) | Not Null   | The encoding that will be used by the locale. The default encoding is UTF-8.                          |
| LANGUAGE      | CHAR (2)     | Not Null   | Lowercase two-letter ISO-639 language code that will be used by the locale. e.g. en, a.               |
| COUNTRY       | CHAR (2)     | Null       | Uppercase two-letter ISO-3166 country code that will be used by the locale. e.g. US, UK.              |

**Table 7-90 L10N\_LOCALE Table Metadata (Continued)**

| Column Name | Data Type    | Null Value | Description                                                                                         |
|-------------|--------------|------------|-----------------------------------------------------------------------------------------------------|
| VARIANT     | VARCHAR (40) | Null       | Vendor and browser specific code variant code that will be used by the locale. e.g. WIN, MAC, UNIX. |

## The L10N\_RESOURCE Database Table

This table is used to define the localized title and description of a localized resource.

**Table 7-91 L10N\_RESOURCE Table Metadata**

| Column Name     | Data Type     | Null Value | Description                                                                                                |
|-----------------|---------------|------------|------------------------------------------------------------------------------------------------------------|
| LOCALE_ID       | NUMBER        | Not Null   | PK and FK to L10N_LOCALE.                                                                                  |
| INTERSECTION_ID | NUMBER        | Not Null   | PK and FK to L10N_INTERSECTION.                                                                            |
| CREATION_DATE   | DATE          | Not Null   | The date and time the row was created.                                                                     |
| MODIFIED_DATE   | DATE          | Not Null   | The date and time the row was last modified. This column's data is maintained via a database trigger.      |
| TITLE           | VARCHAR (80)  | Not Null   | A localized title for the object, typically used for display purposes. e.g. Name of the portal or portlet. |
| DESCRIPTION     | VARCHAR (500) | Null       | A localized description of the object.                                                                     |

## The L10N\_RESOURCE\_TYPE Database Table

This table is used to define portal resource types for localization.

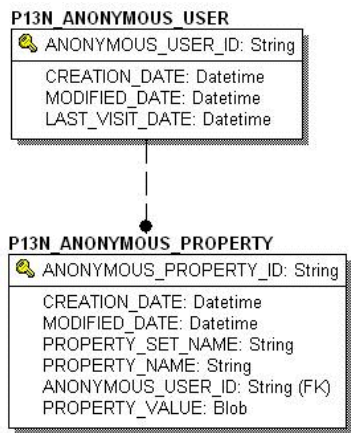
**Table 7-92 L10N\_RESOURCE\_TYPE Table Metadata**

| Column Name      | Data Type     | Null Value | Description                                                                                                                                                 |
|------------------|---------------|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RESOURCE_TYPE    | VARCHAR (80)  | Not Null   | PK-type of Resource to be Localized.<br>e.g. BOOK, DESKTOP, DESKTOP<br>CATEGORY.                                                                            |
| CREATION_DATE    | DATE          | Not Null   | The date and time the row was created.                                                                                                                      |
| MODIFIED_DATE    | DATE          | Not Null   | The date and time the row was last<br>modified. This column's data is<br>maintained via a database trigger.                                                 |
| APPLICATION_NAME | VARCHAR (100) | Not Null   | The name of the application that the<br>resource belongs to. APPLICATION_<br>NAME is currently set to PORTAL for all<br>types of resources to be localized. |

## Tracked Anonymous User Database Objects

This section documents the database objects for the WebLogic Portal package. [Figure 7-13](#) shows the Entity Relation diagram for the WebLogic Portal Anonymous User database objects.

Figure 7-14 Entity-Relation Diagram for the Anonymous User Tables



# The Tracked Anonymous User Dictionary Tables

The following tables support Anonymous Users:

- [The P13N\\_ANONYMOUS\\_PROPERTY Database Table](#)
- [The P13N\\_ANONYMOUS\\_USER Database Table](#)

## The P13N\_ANONYMOUS\_PROPERTY Database Table

This table is used store the properties associated with the tracked anonymous user.

Table 7-93 P13N\_ANONYMOUS\_PROPERTY Table Metadata

| Column Name           | Data Type     | Null Value | Description                                                                                           |
|-----------------------|---------------|------------|-------------------------------------------------------------------------------------------------------|
| ANONYMOUS_PROPERTY_ID | VARCHAR (128) | Not Null   | PK—a unique, system-generated number to be used as the record ID.                                     |
| CREATION_DATE         | DATE          | Not Null   | The date and time the row was created.                                                                |
| MODIFIED_DATE         | DATE          | Not Null   | The date and time the row was last modified. This column’s data is maintained via a database trigger. |
| PROPERTY_SET_NAME     | VARCHAR (100) | Not Null   | The name of the property set for which the tracked anonymous user data is set.                        |

**Table 7-93 P13N\_ANONYMOUS\_PROPERTY Table Metadata (Continued)**

| Column Name       | Data Type     | Null Value | Description                                                     |
|-------------------|---------------|------------|-----------------------------------------------------------------|
| PROPERTY_NAME     | VARCHAR (100) | Not Null   | The name of the property.                                       |
| ANONYMOUS_USER_ID | VARCHAR (128) | Not Null   | The foreign key that maps to the primary key of the same.       |
| PROPERTY_VALUE    | LONG RAW      | Not Null   | The value ". Must implement <code>java.io.Serializable</code> . |

## The P13N\_ANONYMOUS\_USER Database Table

This table is used to store the tracked anonymous user data.

**Table 7-94 P13N\_ANONYMOUS\_USER Table Metadata**

| Column Name       | Data Type     | Null Value | Description                                                                                           |
|-------------------|---------------|------------|-------------------------------------------------------------------------------------------------------|
| ANONYMOUS_USER_ID | VARCHAR (128) | Not Null   | The foreign key that maps to the primary key of the same.                                             |
| CREATION_DATE     | DATE          | Not Null   | The date and time the row was created.                                                                |
| MODIFIED_DATE     | DATE          | Not Null   | The date and time the row was last modified. This column's data is maintained via a database trigger. |
| LAST_VISIT_DATE   | DATE          | Null       | Date the tracked anonymous user last updated the data.                                                |

## The Data Dictionary

# WebLogic Portal DDL Modules

## WebLogic Portal DDL Modules

WebLogic Portal Database Definition Language (DDL) modules are provided in directories with the following format:

```
<WL_HOME>/portal/db/<dbms name>/<dbms version>
```

For example:

```
<WL_HOME>/portal/db/pointbase/44
```

```
<WL_HOME>/portal/db/oracle/817
```

```
<WL_HOME>/portal/db/oracle/9i
```

**Note:** The same WebLogic Portal DDL is used for both Oracle 8.1.7 and 9i databases as indicated by a readme.txt file in the oracle/9i directory. This directory naming structure offers the ability to have distinct DDL between dbms versions.

Data inserts for bootstrap data that must be inserted into tables in each WebLogic Portal databases are contained in the following:

```
<WL_HOME>/portal/db/data/required/xx_insert_system_required_data.sql
```

WebLogic Portal DDL is provided in files named as follows:

```
xx_create_fkeys.sql
```

```
xx_create_indexes.sql
```

```
xx_create_tables.sql
```

```
xx_create_triggers.sql
```

## WebLogic Portal DDL Modules

```
xx_create_views.sql
xx_drop_constraints.sql
xx_drop_fkeys.sql
xx_drop_indexes.sql
xx_drop_tables.sql
xx_drop_views.sql
```

where the xx is a prefix from the table below:

| Prefix         | Description                                |
|----------------|--------------------------------------------|
| au             | Anonymous user                             |
| bt             | Behavior Tracking                          |
| cm             | Content Management                         |
| cmv            | Content Management Versioning              |
| collaboration* | Compoze portlets                           |
| ds             | Data synchronization                       |
| p13n           | WebLogic Portal Personalization            |
| pf             | WebLogic Portal Framework and Localization |
| sample_cm      | Content Management types data              |
| wlcs           | WebLogic Commerce Services                 |
| wps            | WebLogic Portal Services                   |
| wsrp           | Web Services for Remote Portlets           |

\* Database object definitions for portlets from Compoze Software