Oracle® Retail Data Model

Installation Guide

10*g* Release 2 (10.2)

E10085-03

July 2009

ORACLE®

Oracle Retail Data Model Installation Guide, 10*g* Release 2 (10.2)

E10085-03

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Oracle Retail Data Model is based on the ARTS 5.0 standard.

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Preface

The *Oracle Retail Data Model Installation Guide* describes how to install and configure Oracle Retail Data Model.

Audience

This guide is intended for anyone responsible for installing Oracle Retail Data Model on a supported operating system platform.

Installation of Oracle Retail Data Model requires basic knowledge of Oracle Database, Oracle OLAP, Oracle Data Mining, and Oracle Business Intelligence Suite Enterprise Edition (BI EE).

Documentation Accessibility

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http://www.fcc.gov/cgb/consumerfacts/trs.html, and a list of phone numbers is available at http://www.fcc.gov/cgb/dro/trsphonebk.html.

Related Documents

For more information about Oracle Retail Data Model, see the following documents in the Oracle Retail Data Model documentation set:

- *Oracle Retail Data Model Reference*
- *Oracle Retail Data Model Release Notes*
- *Oracle Retail Data Model Operations Guide*

For information about installing and administering the software prerequisites for Oracle Retail Data Model, see the following:

- For information about Enterprise Linux, see the documentation for Red Hat Enterprise Linux at http://www.redhat.com or for Oracle at http://www.oracle.com/technologies/linux/index.html.
- For information about installing Oracle Database Enterprise Edition for your operating system, see the appropriate installation guide in the documentation library for your Oracle Database:
  - *Oracle Database Documentation Library 10g Release 2* at http://www.oracle.com/technology/documentation/database10gr2.html
  - *Oracle Database Documentation Library 11g Release 1* at http://www.oracle.com/technology/documentation/database.html

  The documentation library also contains information about Oracle Online Analytic Processing (OLAP) and Oracle Data Mining.
- For information about Oracle Business Intelligence Suite Enterprise Edition (BI EE), see Oracle Business Intelligence Enterprise Edition Documentation at http://www.oracle.com/technology/documentation/bi_ee.html; installation information is on the **Getting Started** tab.

Conventions

The following text conventions are used in this document:

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

1

Installation Overview

This guide explains how to install Oracle Retail Data Model. Once the installation is complete, the warehouse is ready for data population and analysis. You can use the included SQL scripts to load various types of entities and to populate and build Oracle Retail Data Model data mining models.

Before you install Oracle Retail Data Model, read *Oracle Retail Data Model Release Notes*.

Installation of Oracle Retail Data Model requires the following steps:

1. Verify that your system is one of the Supported Platforms on page 2-1.
2. Verify that your system satisfies the hardware requirements described in Hardware Requirements on page 2-2.
3. Verify that your system satisfies the software requirements described in Software Requirements on page 2-2. Install any missing software.
4. Install the Oracle Retail Data Model database component, as described in Database Objects Installation on page 3-1.
5. Install and configure Oracle OLAP for your system as described in OLAP Installation and Configuration on page 4-1.

Oracle Retail Data Model includes sample schemas and reports that you may find useful when you develop your own schemas and reports. The sample reports are provided on an as-is basis; they are not supported by Oracle. The sample schemas are the ORDM schema with data that enables you to run the sample reports. Before you install the sample schemas and reports, you must perform an additional post installation task. Appendix A describes how to install the schemas and reports.

If you must de-install Oracle Retail Data Model, follow the directions in De-Installation on page 5-1.

> **Note:** You must de-install Oracle Retail Data Model before you re-install it.

After you install Oracle Retail Data Model, you must create your data model; for instructions, see the *Oracle Retail Data Model Operations Guide*. The *Oracle Retail Data Model Operations Guide* describes other tasks that you can perform, including creating (building) mining models.

If you install Oracle Retail Data Model and then update the underlying Oracle Database, you may have to re-install or modify Oracle Retail Data Model components. For details, see Appendix B.

2

Hardware and Software Requirements

This chapter describes the hardware and software requirements of Oracle Retail Data Model:

- Supported Platforms
- Hardware Requirements
- Software Requirements

Before you install Oracle Retail Data Model, you must verify that all hardware and software requirements are met.

Supported Platforms

Oracle Retail Data Model is supported on the following platforms:

- Linux *x*86
  - Oracle Enterprise Linux 4
  - Oracle Enterprise Linux 5
  - Red Hat Enterprise Linux AS/ES 4.0
  - Red Hat Enterprise Linux AS/ES 5.0
- Linux *x*86-64
  - Oracle Enterprise Linux 4
  - Oracle Enterprise Linux 5
  - Red Hat Enterprise Linux AS/ES 4.0
  - Red Hat Enterprise Linux AS/ES 5.0
- Solaris SPARC (64-bit)
  - Solaris 10
- AIX 5L Based Systems (64-bit)
  - AIX 5L version 5.3
  - AIX 6L version 6.1
- HP-UX Itanium
  - HP-UX 11i v2 (11.23)
  - HP-UX 11i v3 (11.31)

For more information about Oracle Enterprise Linux, see Oracle Enterprise Linux Notes on page 2-2.

Oracle Enterprise Linux Notes

For information about the Oracle Enterprise Linux, go to `http://www.oracle.com/technologies/linux/index.html`. To download Linux, click **Enterprise Linux** in the *Downloads* list; the link takes you to the Oracle Enterprise Linux download site, `http://www.oracle.com/technologies/linux/index.html`. Oracle Enterprise Linux is a free download.

Follow the standard installation for Linux. For a simple installation, install all components (RPMs) when installing Linux. During the installation, select as the installation type "install everything". This installation type installs all the Linux components required by the Oracle Database. For helpful information about installing Oracle Enterprise Linux, see `http://www.oracle.com/technology/pub/articles/smiley_10gdb_install.html`.

Hardware Requirements

The Oracle Database installation guide for your platform includes procedures for checking that your installation meets the hardware and operating system requirements described.

The minimum hardware requirement for Oracle Retail Data Model is:

- Disk space of at least 200 GB.

> **Note:** If all that you plan to do is to run demonstrations of Oracle Retail Data Model, 10 GB of disk space is enough.

Software Requirements

The minimum software requirements for Oracle Retail Data Model are as follows:

- Operating System: For details of supported platforms, see Supported Platforms on page 2-1.
- Oracle Database 10*g* Release 2 Enterprise Edition or Oracle Database 11g Release 1 Enterprise Edition. See Oracle Database Requirements on page 2-2
- Oracle Business Intelligence Suite Enterprise Edition (BI EE) 10.1.3.3.3 or higher for dashboards and reports.
- Oracle Online Analytical Processing (OLAP) and Oracle Analytic Workspace Manager (AWM); OLAP and AWM requirements depend on the release of Oracle Database that you use. See OLAP Installation and Configuration on page 4-1for details.
- Oracle Warehouse Builder (OWB) version compatible with database version you are using. OWB is optional.

Oracle Database Requirements

Oracle Retail Data Model requires one of these releases of Oracle Database:

- Oracle Database 10*g* Release 2 Enterprise Edition 10.2.0.3 or 10.2.0.4.
- Oracle Database 11*g* Release 1 Enterprise Edition 11.1.0.6 or higher.

Oracle Retail Data Model may require the following options to the database:

- Oracle Partitioning (recommended)
- Oracle Online Analytical Processing (OLAP)
- Oracle Data Mining (required for model building)

There are two kinds of Oracle Retail Data Model installation:

1. For the Relational with OLAP and Data Mining installation, OLAP and Data Mining are required; Partitioning is optional.
2. Sample Schemas and Reports installation does not require any database options, but does require Oracle BI EE installation.

After you download and install the Database, upgrade to the latest patch. For example, Oracle OLAP requires patchset 10.2.0.3 (patchset number 5337014). Patches are available from My Oracle Support (`http://metalink.oracle.com`).

Check the file `sqlnet.ora` in *ORACLE_HOME*`/network/admin`. If you cannot find `EZCONNECT` in the `NAMES.DIRECTORY_PATH`, add it so that the line reads:

```
NAMES.DIRECTORY_PATH= (TNSNAMES, EZCONNECT)
```

When you install the database ensure that the database character set is UFT8 to support multi-language installations. Oracle Retail Data Model permits the installation of support for English and one other language. See "Setting up Language Support" on page 3 for more information.

Oracle Retail Data Model supports the partition of transaction-related fact tables according to your data volume estimation. You can specify the start year, end year and then the transaction related fact tables are partitioned by the date as one partition for each month.

In order to support the partition of transaction-related fact tables, when you install the database server use DBCA to change the **Maximum Datafiles** option using the following formula:

Maximum Datafiles = Default Value + ((End year) - (Start year) + 1) * 12

If you are using Oracle Database Vault in your Database installation, perform the steps in Database Vault Option on page 2-4 before you install Oracle Retail Data Model.

Setting up Language Support

Brazilian Portuguese, French, German, Italian, Japanese, Korean, Latin American Spanish, Simplified Chinese, and Traditional Chinese are supported in addition to English.

Select **Product Languages** in the installation type selection page of the OUI Installer, and select the language to support in addition to English.

Data Mining Option

Before you install Oracle Retail Data Model, check that the Oracle Data Mining option is installed in your Oracle Database. To check, log in as SYS and enter the following query:

```
SQL> SELECT VALUE FROM V$OPTION WHERE PARAMETER ='Data Mining';
```

If this query returns TRUE, Oracle Data Mining is installed.

> **Note:** For Oracle Data Mining 10.2, you must install the Data Mining Option, not the Oracle Data Mining Scoring Engine. The Scoring Engine does not allow you to build models. For more information, see the *Oracle Data Mining Administrator's Guide*.

Database Vault Option

The Oracle Retail Data Model installer requires additional steps on a Vault-enabled database. For an Oracle Database with the Vault option on, follow these steps to install Oracle Retail Data Model:

1. Activate the SYSDBA.
2. Grant the SYSDBA and DV_ACCTMGR roles to system by performing the following steps:
   a. Login DB as DV_OWNER.
   b. Execute the following SQL command.

   ```
   GRANT DV_ACCTMGR to system;
   ```

   c. Login DB as SYSDBA.
   d. Execute the following SQL command.

   ```
   GRANT SYSDBA to system;
   ```

3. Disable two triggers by performing the following steps:
   a. Login DB as DV_OWNER.
   b. Execute the following SQL commands.

   ```
   ALTER TRIGGER DVSYS.DV_BEFORE_DDL_TRG DISABLE;
   ALTER TRIGGER DVSYS.DV_AFTER_DDL_TRG DISABLE;
   ```

4. Follow the Oracle Retail Data Model installation instructions in this document. When the installation is complete, follow the remaining steps in these instructions.
5. Revoke the SYSDBA and DV_ACCTMGR roles from system.
6. Enable the triggers by performing the following steps:
   a. Login DB as DV_OWNER.
   b. Execute the following SQL commands.

   ```
   ALTER TRIGGER DVSYS.DV_BEFORE_DDL_TRG ENABLE;
   ALTER TRIGGER DVSYS.DV_AFTER_DDL_TRG ENABLE;
   ```

7. Disable the SYSDBA.

Oracle Business Intelligence Suite Enterprise Edition

Oracle Business Intelligence Suite Enterprise Edition (BI EE) 10.1.3.3 or higher can be downloaded from Oracle Technology Network at:

http://www.oracle.com/technology/software/products/ias/htdocs/101320bi.html

Installation instructions are included in the documentation.

3

Database Objects Installation

This chapter describes how to install the Oracle Retail Data Model database objects along with the data mining objects using the Oracle Retail Data Model Installer.

Database Objects Installed on page 3-1 describes briefly what objects are installed.

Database Objects Installation Steps on page 3-1 lists the installation steps.

Oracle Retail Data Model Home Directory Structure on page 3-3 describes the directory structure after installation.

Database Objects Installed

The installation described in this chapter creates all of the database objects of Oracle Retail Data Model and also data mining models.

For detailed information about all created objects in the BIA_RTL and BIA_RTL_MINING schemas, see the *Oracle Retail Data Model Reference*.

Database Objects Installation Steps

Follow these steps to install the database objects:

1. Log in using the user id that you plan to use to run the installation. You should use the same user id to install Oracle Retail Data Model as used to install the Oracle Database and BI EE.
2. Before you start the installation, check that the Oracle Data Mining option is installed. To check, log in as SYS and enter the following query:

   ```
   SQL> SELECT * FROM V$OPTION WHERE PARAMETER ='Data Mining';
   ```

   If this query returns `TRUE`, Oracle Data Mining is installed.

   > **Note:** For Oracle 10*g* Release 2, you must have the Data Mining Option installed, not the Oracle Data Mining Scoring Engine. The Scoring Engine does not allow you to build models. For more information, see the *Oracle Data Mining Administrator's Guide*.

3. Set the ORACLE_HOME environment variable to the location of the Database on which to install ORDM.

   For example, suppose that Oracle Home is in the directory `/loc/app/oracle/product/10.1.0/`

In a Bourne, Bash, or Korn shell, use these commands to set ORACLE_HOME:

```
$ ORACLE_HOME=/loc/app/oracle/product/10.1.0/
$ export ORACLE_HOME
```

In a C shell, use this command to set ORACLE_HOME

```
% setenv ORACLE_HOME /loc/app/oracle/product/10.1.0/
```

4. Start the installer from the directory that contains the ORDM installation files:

   ```
   cd directory-containing-Oracle-Retail-Data_Motel_installation-files
   ./runInstaller
   ```

5. The **Welcome** page is displayed. Click **Next**.
6. In the **Specify Source Location** page, click **Next**.
7. Select the **Retail Data Model** installation type.

   Oracle Retail Data Model supports English and 9 other languages. To add support for one language in addition to English, click **Product Languages** and select the language.

   Click **Next**.
8. In the **Specify Home Details** page, verify that the Name and Path correspond to the Database in which you want to install ORDM.

   Click **Next**.
9. Provide the following information:
   - Host Name: Name of the system where the Oracle Database is installed
   - Oracle Service Name
   - Oracle SID
   - Listener Port Number
   - Password for the system user

   Click **Next**.
10. Specify the data file location. This location is the path where all the data files on which Oracle Retail Data Model tablespaces reside.You can click **Browse** to navigate to any valid local data file path. Click **Next**.
11. Specify the calendar data range by providing a start date and the number of years. This information is used to populate the calendar data.

    The start date must be in the format `YYYY-MM-DD`; for example, 2007-01-01 stands for January 1, 2007. The number of years must be a whole number.

    Click **Next**.
12. Oracle Retail Data Model will partition the transaction-related fact tables for you. Specify the start year and the end year. The default partition creates one partition for each month in the range. The start year must be earlier that the end year.

    Click **Next**.
13. You can load data to the base that is at transaction level and at aggregate level, with data summarized at the day or week level.

    Select **Yes** or **No**. Click **Next**.

14. The installer summarizes the information that you specified. Check that this information is correct. If necessary, click **Back** to return to previous screens and make corrections. When you are satisfied with the information, click **Install**.
15. The database objects are installed. If there are any problems, messages are displayed. After the installation finishes, the end of installation screen appears. Click **Exit** to end the installer.
16. At the end of the installation, the BIA_RTL and BIA_RTL_MINING accounts are locked. Log in the database with a DBA id and password and unlock the accounts as follows:

```
SQL> alter user bia_rtl account unlock;

User altered.

SQL> alter user bia_rtl_mining account unlock;

User altered.
```

17. For Oracle 11*g* Release 1 Database, BIA_RTL_MINING does not have the privileges required by Oracle Data Mining 11.1. To assign the proper grants to BIA_RTL_MINING, follow these steps:
    a. Log in to the database using an ID that has been granted the system privilege with the ADMIN OPTION or that has been granted the GRANT ANY PRIVILEGE system privilege.
    b. Execute the following commands:

```
SQL> grant CREATE ANY MINING MODEL to bia_rtl_mining;
SQL> grant ALTER ANY MINING MODEL to bia_rtl_mining;
SQL> grant DROP ANY MINING MODEL to bia_rtl_mining;
SQL> grant SELECT ANY MINING MODEL to bia_rtl_mining;
```

Note: This step is not required for Oracle Database 10*g*.

18. To ensure that all objects are valid, log in to the database with a DBA id and password and recompile all objects in BIA_RTL and BIA_RTL_MINING as follows:

```
SQL> exec utl_recomp.recomp_serial('BIA_RTL');
PL/SQL procedure successfully completed.
SQL>  exec utl_recomp.recomp_serial('BIA_RTL_MINING');
PL/SQL procedure successfully completed.
```

Oracle Retail Data Model Home Directory Structure

The installation image contains the following directories under *ORACLE_HOME*/ORDM:

- **PDM**: Physical schema dump, interface schema, creation script, lookup value population, and physical schema related documents
  - **PDM/Relational**: Schema installation and relational scripts
  - **PDM/Relational/Intra_ETL**: Intra-ETL database packages
  - **PDM/Interface**: Interface schema definition

  - **PDM/OLAP**: OLAP-related documentation and exports
  - **PDM/Mining**: Data Mining model installation
  - **PDM/Utilities**: Scripts used in DDL script generation, out of stock, and so on
- **Report**: Files and documentation required for Oracle Retail Data Model installation

4

OLAP Installation and Configuration

Oracle Online Analytical Processing (OLAP) must be installed with the correction patches and must be appropriately configured to work with Oracle Retail Data Model. OLAP requirements depend on the release of Oracle database:, as described in AWM and Oracle OLAP Requirements.

Installation instructions depend on the database version:

- OLAP for Oracle Database 10g Release 2 (10.2.0.3 or Higher)
- OLAP for Oracle Database 11g Release 1 (11.1.0.6 or Higher)

There are two OLAP installations for each Oracle database release:

- OLAP Component Installation
- OLAP Sample Installation

The Oracle Retail Data Model OLAP Component is the Oracle Retail Data Model OLAP data model installed at your location. The data model is loaded with your data through the Historical/Incremental Load processes (which include activities like loading Dimensions/Facts, generating Forecasts, aggregating Forecasted information, and so forth) and reflects your data in terms of the Oracle Retail Data Model OLAP model Dimensions and Facts.

The Oracle Retail Data Model OLAP Sample is the Oracle Retail Data Model OLAP data model pre-loaded with sample data. The sample data reflects the sample schema data in terms of the Oracle Retail Data Model OLAP model Dimensions and Facts.

You can install either the OLAP Component or the OLAP Sample, but not both.

AWM and Oracle OLAP Requirements

Oracle Retail Data Model OLAP component requires the correct version of Analytic Workspace Manager (AWM) described in AWM Certification and the correction version of Oracle OLAP described in Oracle OLAP Certification.

> **Note:** The recommended patches and software versions are accurate as of product release. For latest recommendations for database and Oracle OLAP for supported platforms, see `http://www.oracle.com/technology/products/bi/olap/collateral/olap_certification.html`.

AWM Certification

The certified version of Analytic Workspace Manager (AWM) are as follows:

- Analytic Workspace Manager (AWM) 10*g* is installed as a standalone product; the latest version is available at the Oracle OLAP home page at http://www.oracle.com/technology/products/bi/olap/olap.html

  Install AWM 10.2.0.3.0A patch number 6032088 from My Oracle Support http://metalink.oracle.com.

- Analytic Workspace Manager (AWM) 11*g* is installed as a standalone product; the latest version is available at the Oracle OLAP home page at http://www.oracle.com/technology/products/bi/olap/olap.html.

  Install the correct version of AWM for your Oracle database version as follows:

  – For Oracle Database 11*g* Release 1 (11.1.0.6), install AWM 11.1.0.6.0A patch number 6368282 from My Oracle Support http://metalink.oracle.com.

  – For Oracle Database 11g Release 1 (11.1.0.7), install AWM 11.1.0.7.0B patch number 7705204 from My Oracle Support http://metalink.oracle.com.

Oracle OLAP Certification

The OLAP component of Oracle Retail Data Model is certified with the following patches based on the version of the Database and, in some cases, the operating system upon which the database runs:

- Oracle Database 10*g* Release 2 (10.2.0.3) with OLAP A Patch (Patch #5746153)
- Oracle Database 10*g* Release 2 (10.2.0.4) with OLAP A Patch (Patch #7195088)
- Oracle Database 11*g* Release 1 (11.1.0.6 - 32 bit operating systems) with OLAP A Patch (Patch #6459753)
- Oracle Database 11*g* Release 1 (11.1.0.6 - Linux 64 bit) with OLAP B Patch (Patch #6992921)
- Oracle Database 11*g* Release 1 (11.1.0.7 - Linux 32 bit) with OLAP Patch #8510869
- Oracle Database 11*g* Release 1 (11.1.0.7 - Other operating systems except Linux 32 bit) with OLAP A Patch (Patch #7486407)

OLAP for Oracle Database 10*g* Release 2 (10.2.0.3 or Higher)

This section describes the following topics:

- Database and OLAP Preparation
- Install the Oracle Retail Data Model OLAP Component or the OLAP Sample

Database and OLAP Preparation

The database and OLAP must be configured properly for OLAP and Oracle Retail Data Model to work properly. This section discusses the following topics:

- OLAP and Database Configuration
- OLAP Installation Directory Setup
- Edit Forecast Programs for Object Installation
- Clean Up an Existing Oracle Retail Data Model OLAP User Schema

OLAP and Database Configuration

To set up a working OLAP environment, you **must** configure the database with the following parameter and configuration settings:

- Set `SGA_TARGET` to 35% of available memory.
- Set `PGA_AGGREGATE_TARGET` to 35% of available memory.
- Set `OLAP_PAGE_POOL_SIZE=0` to make page pool size dynamic.
- Set `_olap_page_pool_hi=30`, lower than default of 50.
- Turn off Parallel Update for AW by setting `set _olap_parallel_update_threshold and _olap_parallel_update_small_threshold` to a high value, such as ~2Gb..2147483647.

The following commands show how to make all of these required changes:

```
alter system set sga_target=1365M scope=spfile;
alter system set pga_aggregate_target=1365M scope=spfile;
alter system set olap_page_pool_size=0 scope=spfile;
alter system set "_olap_parallel_update_small_threshold"=2147483647 scope=spfile;
alter system set "_olap_page_pool_hi"=30 scope=spfile;
alter system set job_queue_processes=5 scope=spfile;
shutdown immediate;
startup;
```

OLAP Installation Directory Setup

The files required for the installation of the Oracle Retail Data Model (OLAP Component as well as OLAP Sample) on Oracle Database 10*g* Release 2 are in the following directories:

- *ORACLE_HOME*`/ORDM/PDM/OLAP/Install/10gR2_ALL` for the OLAP Component installation
- *ORACLE_HOME*`/ORDM/Sample/OLAP/Install/10gR2_ALL` for the OLAP Sample installation

Verify that the following files are present in the directory:

1. `rbia_olap_views_star_setup.sql`
2. `RBIA_OLAP_ETL_AW_LOAD.sql`
3. `rbia_olap_grants.sql`
4. `RBIA_OOS_EMPTY.EIF`
5. `oos_forecast_stock_sales_olap_dml.txt`
6. `oos_forecast_stock_inv_olap_dml.txt`
7. `ordm_olap_user_env_install_scr.sql`
8. `ordm_olap_install_scr.sql`
9. `ordm_olap_demo_install_scr.sql`
10. `RBIA_OOS_DEMO.EIF.gz` for OLAP Sample **only**

Edit Forecast Programs for Object Installation

Note: This step is **not** required for Sample Installation.

For the OLAP Component installation, edit the forecast programs in the files `oos_forecast_stock_sales_olap_dml.txt` and `oos_forecast_stock_inv_olap_dml.txt`.

The section of program to be customized in the two text files is marked by `BEGIN/END` as follows:

```
**********BEGIN: Forecast Initialization section **************
...
**********END: Forecast Initialization section **************
```

By default, the forecast programs run at the Store/SKU Item/Day level using data for two business years (BY 2005 and BY 2006) as input and forecast the data for the third business year (BY 2007).

Change the following lines:

- `v_time_yr1_dsc = 'BY 2005'`

  This value depends on the year being forecast. The value should be the forecast year minus 2, that is, 2 years before the forecast year. The value must be in the format `BY YYYY`.

- `v_time_yr2_dsc = 'BY 2006'`

  This value depends on the year being forecast. The value should be the forecast year minus 1, that is, 1 year before the forecast year. The value must be in the format `BY YYYY`.

- `v_time_yr3_dsc = 'BY 2007'`

  This value depends on the year being forecast. The value should be the forecast year. The value must be in the format `BY YYYY`.

The forecast programs are run as part of the Historical Load. After the programs are run, the Historical load aggregates the Forecast Cubes so that the forecasted information is available across all levels of the cube.

Clean Up an Existing Oracle Retail Data Model OLAP User Schema

If you re-install Oracle Retail Data Model, you must re-create the OLAP user environment again from the beginning. Use the following SQL commands to clean up the OLAP schema before re-running the installation scripts:

```
SQL> drop user BIA_RTL_OLAP cascade;
SQL> drop tablespace BIA_RTL_OLAP including contents and datafiles;
SQL> drop tablespace BIA_RTL_OLAP_TEMP including contents and datafiles;
```

Install the Oracle Retail Data Model OLAP Component or the OLAP Sample

You can install either the OLAP Component or the OLAP Sample but **not** both.

Follow these steps to install the Oracle Retail Data Model OLAP Component or the OLAP Sample:

1. Check that the OLAP option is installed in the Oracle Data. Log in as DBA and then base the following query:

   ```
   select * from v$option where parameter = 'OLAP';
   ```

   If OLAP is installed you see the following output.

   ```
   PARAMETER      VALUE
   ```

```
---------------------
OLAP            TRUE
```

2. To create an OLAP User, tablespaces, and directory, log in as DBA and run the script `ordm_olap_user_env_install_scr.sql`.

   ```
   SQL> @ordm_olap_user_env_install_scr.sql
   ```

   The following are the recommended tablespace sizes used by the script:

   - bia_rtl_olap Tablespace = 6 Gb autoextend on size 40Mb
   - bia_rtl_olap_temp Tablespace = 4 Gb autoextend on size 30Mb

   `ordm_olap_user_env_install_scr.sql` has the following dialog:

   a. Datafile (full path) for ORDM OLAP USER Tablespace:

      Enter full absolute path of filename required to create tablespace here.

   b. Datafile (full path) for ORDM OLAP TEMP Tablespace:

      Enter full absolute path for filename required to create temporary tablespace here.

   c. Enter the password to use for bia_rtl_olap user creation:

      Enter password for the user bia_rtl_olap here.

   d. ORDM OLAP Directory (full path including ending /):

      Enter the correct path here as follows:

      – *For the OLAP Component Installation,* *ORACLE_HOME*`/ORDM/PDM/OLAP/Install/10gR2_ALL/`

      – *For the OLAP Sample Installation,* *ORACLE_HOME*`/ORDM/Sample/OLAP/Install/10gR2_ALL/`

   e. User: bia_rtl, Password:

      Enter password for ORDM Product Schema User here.

   f. User: bia_rtl_olap, Password:

      Enter password for bia_rtl_olap that was defined earlier.

3. To install the OLAP Component, run `ordm_olap_install_scr.sql`:

   ```
   SQL> @ordm_olap_install_scr.sql
   ```

   Initially, this script uses the bia_rtl account created in the earlier script.

   `ordm_olap_install_scr.sql` has the following dialog:

   a. User:bia_rtl_olap, Password:

      Enter password for user bia_rtl_olap created in step 2.

   b. HISTORICAL Load Start Date:

      Enter the Historical Load Start Date in the format YYYY-MM-DD. Read the description of the requirements for Historical Start Date carefully.

   c. HISTORICAL Load End Date:

      Enter the Historical Load End Date in the format YYYY-MM-DD. Read the description of the requirements for Historical Start Date carefully.

4. To install the OLAP Sample, go to the directory go to the directory *ORACLE_HOME*/ORDM/Sample/OLAP/Install/10gR2_ALL. Unzip the sample EIF (.gz) file RBIA_OOS_DEMO.EIF.gz:

   ```
   gunzip RBIA_OOS_DEMO.EIF.gz
   ```

   Run the script ordm_olap_demo_install_scr.sql

   ```
   SQL> @ ordm_olap_demo_install_scr.sql
   ```

   ordm_olap_demo_install_scr.sql has the following dialog:

   a. User:bia_rtl_olap, Password: (Enter password for user bia_rtl_olap.)

   The following Historical Start/End Date values were used to create the sample database:

   - Historical Start Date: 2004-01-01
   - Historical End Date: 2007-01-21

OLAP for Oracle Database 11*g* Release 1 (11.1.0.6 or Higher)

This section describes the following topics:

- Database and OLAP Preparation
- Install the Oracle Retail Data Model OLAP Component or OLAP Sample

Database and OLAP Preparation

The database and OLAP must be configured properly for OLAP and Oracle Retail Data Model to work properly. This section discusses the following topics:

- OLAP and Database Configuration
- OLAP Installation Directory Setup
- Edit Forecast Programs
- Clean Up an Existing Oracle Retail Data Model OLAP User Schema

OLAP and Database Configuration

To set up a working OLAP environment, you **must** configure the database with the following parameter and configuration settings:

- Set SGA_TARGET to 35% of available memory.
- Set PGA_AGGREGATE_TARGET to 35% of available memory.
- Set OLAP_PAGE_POOL_SIZE=0 to make page pool size dynamic.
- Set _olap_page_pool_hi=30, lower than default of 50.
- Turn off Parallel Update for AW by setting set _olap_parallel_update_threshold and _olap_parallel_update_small_threshold to a high value, such as ~2Gb..2147483647.

Set memory_target to a value greater than the SGA and PGA setting. This is maximum memory used by the database for both SGA and PGA. The SGA and PGA settings specified are the minimum settings. If you do not set memory_target, instance startup fails. The next time these settings are validated failure occurs if spfile had an older and distinct setting for memory_target.

The following commands show how to make all of these required changes:

```
alter system set sga_target=1365M scope=spfile;
alter system set pga_aggregate_target=1365M scope=spfile;
alter system set olap_page_pool_size=0 scope=spfile;
alter system set "_olap_parallel_update_small_threshold"=2147483647 scope=spfile;
alter system set "_olap_page_pool_hi"=30 scope=spfile;
alter system set job_queue_processes=5 scope=spfile;
shutdown immediate;
startup;
```

OLAP Installation Directory Setup

The files required for the installation of Oracle Retail Data Model (OLAP Component as well as OLAP Samples) on Oracle Database 11*g* Release 1 are in the following directories:

- *ORACLE_HOME*/ORDM/PDM/OLAP/Install/11gR1_ALL for the OLAP Component installation
- *ORACLE_HOME*/ORDM/Sample/OLAP/Install/11gR1_ALL for the OLAP Sample installation

Verify that the following files are present in the directory:

1. ordm_olap_11g_dml_cmds.txt
2. oos_forecast_stock_sales_olap_cc_dml.txt
3. oos_forecast_stock_inv_olap_cc_dml.txt
4. rbia_olap_11g_views_star_setup.sql
5. rbia_olap_11g_etl_aw_load.sql
6. rbia_olap_11g_sql_main_schema.sql
7. PSLSINV.M10.XML
8. PSLSINV.M11.XML
9. ordm_olap_11g_user_env_install_scr.sql
10. ordm_olap_11g_install_scr.sql

Note: The script file `ordm_olap_11g_user_env_install_scr.sql` has two separate sections of code: one section for Oracle Database 11.1.0.6 and another for Oracle Database 11.1.0.7. By default, the script works for Oracle Database 11*g* Release 1 (11.1.0.7 or higher).

To install OLAP Component on Oracle Database 11.1.0.6, edit the script as follows:

1. Search for the string "PROMPT BEGIN Build of AW PSLSINV from Template" in script.
2. PSLSINV.M10.XML is file to be used for Oracle Database 11.1.0.6 and PSLSINV.M11.XML is the file to be used for Oracle Database 11.1.0.7 or higher.
3. Uncomment the PL/SQL block for 11.1.0.6. This block is marked by the following comments in script file:

   ```
   --=====================================================
   - Database version: 11.1.0.6, OLAPI Metadata version:
   1.0
   --=====================================================
   ```

4. Comment out the PL/SQL block for 11.1.0.7 and higher. This block is marked by the following comments in script file.

   ```
   --=====================================================
   -- Database version: 11.1.0.7 higher, OLAPI Metadata
   version: 1.1
   --=====================================================
   ```

Edit Forecast Programs

Note: This step is **not** required for Sample Reports.

For the OLAP Component install, edit the forecast programs in the files `oos_forecast_stock_sales_olap_dml.txt` and `oos_forecast_stock_inv_olap_dml.txt`.

The section of program to be customized in the two text files is marked by `BEGIN/END` as follows:

```
**********BEGIN: Forecast Initialization section **************
...
**********END: Forecast Initialization section **************
```

By default, the forecast programs run at the Store/SKU Item/Day level using data for two business years (BY 2005 and BY 2006) as input and forecast the data for the third business year (BY 2007).

Change the following lines:

- `v_time_yr1_dsc = 'BY 2005'`

  This value depends on the year being forecast. The value should be the forecast year minus 2, that is, 2 years before the forecast year. The value must be in the format `BY YYYY`.

- `v_time_yr2_dsc = 'BY 2006'`

This value depends on the year being forecast. The value should be the forecast year minus 1, that is, 1 year before the forecast year. The value must be in the format `BY YYYY`.

- `v_time_yr3_dsc = 'BY 2007'`

  This value depends on the year being forecast. The value should be the forecast year. The value must be in the format `BY YYYY`.

The forecast programs are run as part of the Historical Load. After the programs are run, the Historical load aggregates the Forecast Cubes so that the forecasted information is available across all levels of the cube.

Clean Up an Existing Oracle Retail Data Model OLAP User Schema

If you re-install Oracle Retail Data Model, you must re-create the OLAP user environment again from the beginning. Use the following SQL commands to clean up the OLAP schema before re-running the installation scripts:

```
SQL> drop user BIA_RTL_OLAP cascade;
SQL> drop tablespace BIA_RTL_OLAP including contents and datafiles;
SQL> drop tablespace BIA_RTL_OLAP_TEMP including contents and datafiles;
```

Install the Oracle Retail Data Model OLAP Component or OLAP Sample

The Oracle Retail Data Model OLAP Component refers to the ORDM OLAP data model installed at your location. The data model is loaded with your data through the Historical/Incremental Load processes (which include activities like loading Dimensions/Facts, generating Forecasts, aggregating Forecasted information, and so forth) and reflects your data in terms of the Oracle Retail Data Model OLAP model Dimensions and Facts.

Follow these steps to install the OLAP Component or the OLAP Sample:

1. Check that the OLAP option is installed in the Oracle Data. Log in as DBA and then base the following query:

   ```
   select * from v$option where parameter = 'OLAP';
   ```

   If OLAP is installed you see the following output.

   ```
   PARAMETER      VALUE
   ---------------------
   OLAP            TRUE
   ```

2. To create OLAP User, tablespaces, and directory, log in as DBA and run the script `ordm_olap_11g_user_env_install_scr.sql`.

   ```
   SQL> @ordm_olap_11g_user_env_install_scr.sql
   ```

   The following are the recommended tablespace sizes used by the script:

   - bia_rtl_olap Tablespace = 3 Gb autoextend on size 40Mb
   - bia_rtl_olap_temp Tablespace = 2 Gb autoextend on size 30Mb

   `ordm_olap_11g_user_env_install_scr.sql` has the following dialog:

   a. Connecting as SYS (SYSDBA) database user...

      conn sys as sysdba:

      Enter sysdba password here.

b. Datafile (full path) for ORDM OLAP USER Tablespace:

Enter full absolute path for filename required to create tablespace here.

c. Datafile (full path) for ORDM OLAP TEMP Tablespace:

Enter full absolute path for filename required to create temporary tablespace here.

d. Enter the password to use for bia_rtl_olap user creation:

Enter password for user bia_rtl_olap here.

e. ORDM OLAP Directory (full path including ending /):

Enter the correct path as follows:

– *For the OLAP Component Installation*
ORACLE_HOME/ORDM/PDM/OLAP/Install/11gR1_ALL/

– *For the OLAP Sample Installation*
ORACLE_HOME/ORDM/Sample/OLAP/Install/11gR1_ALL/

f. User: bia_rtl, Password:

Enter password for ORDM Product Schema User here.

g. User: bia_rtl_olap, Password:

Enter password for bia_rtl_olap that was defined earlier.

3. Run `ordm_olap_11g_install_scr.sql`:

```
SQL> @ordm_olap_11g_install_scr.sql
```

Initially, the script uses the bia_rtl_olap account created in earlier steps.

`ordm_olap_11g_user_env_install_scr.sql`, has the following dialog:

a. User:bia_rtl_olap, Password: *(Enter password for user bia_rtl_olap created in Step 2.)*

b. HISTORICAL Load Start Date:

Enter the Historical Load Start Date in the format YYYY-MM-DD. Read the description of the requirements for Historical Start Date carefully.

c. HISTORICAL Load End Date:

Enter the Historical Load End Date in the format YYYY-MM-DD. Read the description of the requirements for Historical Start Date carefully.

For a sample installation, use following Historical Start/End Date values:

- Historical Start Date: 2004-01-01
- Historical End Date: 2007-01-21

5

De-Installation

This chapter explains how to de-install Oracle Retail Data Model.

Follow these steps to de-install Oracle Retail Data Model:

> **Note:** Steps 6, 7, and 8 are required only if you installed the sample reports.

1. Drop Oracle Retail Data Model users and related database objects. To drop ORDM users and related database objects, log in as a DBA and execute the following commands:

```
SQL>drop user bia_rtl cascade;
SQL>drop user bia_rtl_mining cascade;
SQL>drop user bia_rtl_olap cascade;
```

2. Drop Oracle Retail Data Model tablespaces, as follows:

```
SQL>drop tablespace dw_aggregate_idx including contents and datafiles;
SQL>drop tablespace dw_derived_idx including contents and datafiles;
SQL>drop tablespace dw_mvlog_tbs including contents and datafiles;
SQL>drop tablespace dw_aggregate_tbs including contents and datafiles;
SQL>drop tablespace dw_derived_tbs including contents and datafiles;
SQL>drop tablespace dw_reference_idx including contents and datafiles;
SQL>drop tablespace dw_base_idx including contents and datafiles;
SQL>drop tablespace dw_dm_tbs including contents and datafiles;
SQL>drop tablespace dw_reference_tbs including contents and datafiles;
SQL>drop tablespace dw_base_tbs including contents and datafiles;
SQL>drop tablespace dw_lookup_tbs including contents and datafiles;
SQL>drop tablespace BIA_RTL_OLAP including contents and datafiles;
SQL>drop tablespace BIA_RTL_OLAP_TEMP including contents and datafiles;
```

3. If you selected partitioning when you installed Oracle Retail Data Model, drop the partition tablespaces. The names of the partition tablespaces have the following forms:

```
DWA_TBS_yyyymm
DWB_TBS_yyyymm
DWD_TBS_yyyymm
```

   `yyyymm` are the 4-digit year and 2-digit month numbers that indicated partition start and end.

   Drop the partition tablespaces using commands like the following for all values of `yyyymm`:

```
drop tablespace DWA_TBS_yyyymm including contents and datafiles;
drop tablespace DWB_TBS_yyyymm including contents and datafiles;
drop tablespace DWD_TBS_yyyymm including contents and datafiles;
```

4. Remove ORDM from the inventory:

   ```
   cd ORACLE_HOME/oui/bin
   ./runInstaller
   ```

   Click **Deinstall Products**, select Oracle Retail Data Model 10.2.2.0.0 and click **Remove**, and then click **Yes**.

5. After the deinstall finishes, click **Exit** to end the installer.
6. Delete `RBIAII.rpd` in the directory *`BIHome`*`/Server/Repository`.
7. Delete the folder `rbiaii` in *`BIDataHome`*`/web/catalog`.
8. Delete the following line from *`BIHome`*`/Server/Config/NQSConfig.INI`:

   ```
   Star    =    RBIAII.rpd, DEFAULT
   ```

A

Sample Schemas and Reports

Oracle Retail Data Model includes sample schemas and sample reports. The reports are samples that you can use for ideas about how to design your own reports.

> **Note:** The reports and dashboards that are used in examples and delivered with Oracle Retail Data Model are provided only for demonstration purposes. They are not supported by Oracle.

Installation of the sample schemas and reports is optional.

Oracle Retail Data Model includes the following sample schemas:

- `bia_rtl.dmp`, a dump file containing schemas for relational and dimensional (OLAP) data. The default user name and password are both `bia_rtl` for the relational schema; the user name and password are both `bia_rtl_olap` for the OLAP schema.
- `bia_rtl_dm.dmp`, a dump file containing a schema for data mining. The default user name and password are both `bia_rtl_mining` for the mining schema.
- For Oracle Retail Data Model OLAP sample schema installation, follow the steps outlined for the Sample installation in OLAP for Oracle Database 10g Release 2 (10.2.0.3 or Higher) on page 4-2 or OLAP for Oracle Database 11g Release 1 (11.1.0.6 or Higher) on page 4-6.

> **Note:** The sample schemas are the ORDM schema with sample data provided so you can run the sample reports and see what the reports look like out-of-the-box.

Oracle Retail Data Model installs the following files for sample reports:

- `rbiaii_rpd.zip`
- `rbia_res.zip`
- `rbiaii_default.zip`
- `RBIA_OOS_DEMO.EIF.gz`

Requirements for Sample Schemas and Reports Installation

Before you install the sample schemas and reports, check the following:

- Ensure that you have enough space for the installation; you must have 310 MB of available space. In addition, the OLAP Sample needs additional storage as explained in OLAP for Oracle Database 10g Release 2 (10.2.0.3 or Higher) on page 4-2 or OLAP for Oracle Database 11g Release 1 (11.1.0.6 or Higher) on page 4-6.
- Check that the Oracle Data Mining option is installed in your Oracle 10*g* Release 2 or Oracle 11*g* Release 1 Database. To check that Oracle Data Mining is installed, log in as SYS and enter the following query:

  ```
  SQL> SELECT VALUE FROM V$OPTION WHERE PARAMETER ='Data Mining';
  ```

  If this query returns `TRUE`, Oracle Data Mining is installed.

  > **Note:** For Oracle 10*g* Release 2, you must have the Data Mining Option installed, not the Oracle Data Mining Scoring Engine. The Scoring Engine does not allow you to build models. For more information, see the *Oracle Data Mining Administrator's Guide*.

- Check that the Oracle OLAP option is installed in your Oracle Database. To check that Oracle OLAP is installed, log in as SYS and use the query:

  ```
  SQL> SELECT VALUE FROM V$OPTION WHERE PARAMETER ='OLAP';
  ```

  If this query returns `TRUE`, OLAP is installed.
- Check that the correct patches for your Oracle database are installed. An easy way to check if a patch is installed correctly is to start SQL*Plus and connect to the database. SQL*Plus displays the version of the database. (SQL*Plus also displays which options are installed.)
- The sample reports require Oracle BI EE. Sample reports folders include
  - `RBIAII.rpd`, the repository.
  - `res`, the resource folder.
  - `RBIAII`, the folder containing the catalog
- Copy the software that you plan to install to the computer where the software is installed.

Sample Schemas and Reports Installation Steps

Before you install the sample schemas and reports, verify that all hardware requirements are satisfied and that all required software is installed. See Hardware and Software Requirements for details.

Follow these steps to install the sample schemas and reports:

1. Log in using the user id that you plan to use to run the installation. You should the same user id to install Oracle Retail Data Model as used to install the Oracle database and BI EE. The user id must user must be able to run SQL*Plus.
2. Set the ORACLE_HOME environment variable to the location of the Database on which to install ORDM.

   For example, suppose that Oracle Home is in the directory `/loc/app/oracle/product/10.1.0/`

   In a Bourne, Bash, or Korn shell, use these commands to set ORACLE_HOME:

```
$ ORACLE_HOME=/loc/app/oracle/product/10.1.0/
$ export ORACLE_HOME
```

In a C shell, use this command to set ORACLE_HOME

```
% setenv ORACLE_HOME /loc/app/oracle/product/10.1.0/
```

3. Start the installer from the directory that contains the ORDM installation files:

   ```
   cd directory-containing-Oracle-Retail-Data_Motel_installation-files
   ./runInstaller
   ```

4. The **Welcome** page is displayed. Click **Next**.
5. In the **Specify Source Location** page, click **Next**.
6. Select the **Sample Schemas and Reports** installation type. Click **Next**.
7. In the **Specify Home Details** page, verify that the Name and Path correspond to the Database in which you want to install ORDM.

   Click **Next**.
8. Select the Oracle BI EE Home directory on your system. Click **Next**.
9. Select the Oracle Database Home directory. Click **Next**.
10. Provide the following information:
    - Host Name: Name of the system where the Oracle Database is installed
    - Oracle Service Name
    - System Identifier (SID)
    - Listener Port Number
    - Password for the system user

    Both service name an SID are required; the installation program uses both of these to connect to the database. Click **Next**.
11. The installer summarizes the information that you specified. Check that the information is correct. If necessary, click **Back** to return to previous screens and make corrections. When you are satisfied with the information, click **Install**.
12. The install installs the sample schemas and reports. If there are any problems, messages are displayed. After the installation finishes, the end of installation screen appears. Click **Exit** to end the installer.
13. Define environment variables to help BI EE to find the proper Oracle home directory for the sample reports. These variable definitions can be copied from scripts in the Oracle user's Home directory.

    Add these lines to *BIEE_HOME*/`setup/user.sh`:

    ```
    ORACLE_BASE=<YOUR ORACLE SERVER HOME DIRECTORY>
    export ORACLE_BASE
    ORACLE_HOME=$ORACLE_BASE/db_1
    export ORACLE_HOME
    TNS_ADMIN=$ORACLE_HOME/network/admin
    export TNS_ADMIN
    ORACLE_SID=<Add your ORACLE Server SID here>
    export ORACLE_SID
    PATH=$ORACLE_HOME/jdk/bin:$ORACLE_HOME/bin:$HOME/bin:/sbin:$ORACLE_
    HOME/opmn/bin:$PATH
    export PATH
    ```

```
LD_LIBRARY_PATH=$ORACLE_HOME/lib:$LD_LIBRARY_PATH
export LD_LIBRARY_PATH
```

Note: Be careful to split these commands properly when you add them to the file; for example, do not add them as one long concatenated line of code.

14. Add a definition for `rbia_db` for the Oracle Retail Data Model repository to uses when connecting to the database. Add this definition to the file `$ORACLE_HOME/network/admin/tnsnames.ora`:

```
rbia_db =
  (DESCRIPTION =
    (ADDRESS = (PROTOCOL = TCP)(HOST = hostname.domain)(PORT = port-number))
    (CONNECT_DATA =
      (SERVER = DEDICATED)
      (SERVICE_NAME = SID)   # Change your SID, Hostname, and Listener Port
      Number
    )
  )
```

Note: Be careful to split these commands properly when you add them to the file; for example, do not add them as one long concatenated line of code.

If you want to use another database name, you must change the tnsname in BI EE repository. See the BI EE documentation for directions for defining a database connection in repository.

15. Start the BI EE Server service with the command:

```
BIEE_HOME/setup/run-sa.sh start
```

16. Start the BI EE Presentation service with the command:

```
BIEE_HOME/setup/run-saw.sh start
```

17. Before you can access the Reports, you must unlock the bia_rtl and bia_rtl_mining accounts. Use the following SQL statements to unlock the accounts:

```
alter user bia_rtl account unlock identified by bia_rtl;
alter user bia_rtl_mining account unlock identified by bia_rtl_mining;
```

18. If you plan to access the Oracle Retail Data Model OLAP Dashboard, install the OLAP sample, as described in OLAP for Oracle Database 10g Release 2 (10.2.0.3 or Higher) on page 4-2 or OLAP for Oracle Database 11g Release 1 (11.1.0.6 or Higher) on page 4-6.

    For Oracle Database 10*g* Release 2, the OLAP Sample installation is done with a separate sample install script using an EIF file with pre-loaded data. For Oracle Database11g Release1, the Sample installation is performed the same way as OLAP Component installation (by building it from the beginning using the data present in the main schema bia_rtl).

19. Open the following URL using the browser of your choice:

```
http://hostname:9704/analytics
```

9704 is default BI EE port; if you specified a different port when you installed BI EE, use that port. The Oracle Retail Data Model login window is displayed.

Sample Schemas and Reports Manual Installation Overview

Follow these steps to install the sample schemas and reports:

1. Install the BI EE Repository and Catalog, as described in BI EE Repository and Catalog Manual Installation on page A-5.
2. Verify that the requirements for the sample schemas and reports are satisfied; see Requirements for Sample Schemas and Reports Installation on page A-1.
3. Install the sample reports and schemas as described in Sample Schemas and Reports Installation Steps on page A-2.

BI EE Repository and Catalog Manual Installation

Follow these steps to install Oracle Business Intelligence Suite Enterprise Edition (BI EE) 10.1.3.3 repository and catalog for Oracle Retail Data Model:

1. BI EE Repository Configuration
2. BI EE Catalog Installation
3. BI EE Installation Test

You must install BI EE before you perform these steps. BI EE documentation is at `http://www.oracle.com/technology/documentation/bi_ee.html`; installation information is on the **Getting Started** tab of the Library.

BI EE Repository Configuration

In these directions, replace *`BIEE_HOME`* with the name of the directory where BI EE is installed, and replace *`BIEE_DATA_HOME`* with the name of the directory where BI EE data is stored.

> **Note:** Any reports included with Oracle Retail Data Model are provided as samples to illustrate how you might construct reports; they are provided on an as-is basis.

Follow these steps to install the Repository:

1. Stop the BI EE Server service using the following command:

   ```
   BIEE_HOME/setup/run-sa.sh stop
   ```

2. Add the following lines to *`BIEE_HOME`*`/setup/user.sh`. These environment variables help BI EE find the correct Oracle home. The definitions can be copied from the startup scripts in the home directory of the user who installed Oracle Database; on Linux systems this script is usually `/home/oracle/.bash_profile`:

   ```
   export ORACLE_BASE=<Your Oracle Server home directory>
   export ORACLE_HOME=$ORACLE_BASE/db_1
   export TNS_ADMIN=$ORACLE_HOME/network/admin
   export ORACLE_SID=<Your Oracle Server SID>
   ```

```
export PATH=$ORACLE_HOME/jdk/bin:$ORACLE_HOME/bin:$HOME/bin:/sbin:$ORACLE_
HOME/opmn/bin:$PATH
export LD_LIBRARY_PATH=$ORACLE_HOME/lib
```

3. Add the name `rbia_db` to the file *ORACLE_HOME*`/network/admin/tnsnames.ora`. The Oracle Retail Data Model repository relies on this value to connect to the proper database. In the following sample, change HOST, SID, and PORT to the correct values for your installation:

   ```
   rbia_db=
   (DESCRIPTION =
     (ADDRESS = (PROTOCOL = TCP)(HOST = hostname.domain)(PORT = port-number))
     (CONNECT_DATA =
       (SERVER = DEDICATED)
       (SERVICE_NAME = Your-Oracle-Server-SID)
        )
    )
   ```

   If you want to use a different database name, you must change the value of `tnsnames` in the BI EE repository. See the BI EE *Infrastructure Installation and Configuration Guide* for how to define database connections in the repository.

4. Copy the repository file to *OBIEE_HOME*`/server/Repository/`. In the Oracle Retail Data Model package, the repository file `rbiaii_rpd.zip` is in the directory *ORACLE_HOME*`/ORDM/Report/Install`.

5. Update the configuration file *BIEE_HOME*`/server/Config/NQSConfig.INI`. Add the following new line to the `[REPOSITORY]` section of the file:

   ```
   Repos_Name = "repository.rpd",DEFAULT;
   ```

   Here is an example of a correct entry:

   ```
   ##########################################################
   [ REPOSITORY ]
   //Star = paint.rpd, DEFAULT,
   RBIAII = rbiaii.rpd, DEFAULT;
   ##########################################################
   ```

6. Start BI EE Server service with the following command:

   ```
   BIEE_HOME/setup/run-sa.sh start
   ```

BI EE Catalog Installation

Install the catalog as follows:

1. Stop the BIEE Presentation services using the following command:

   ```
   BIEE_HOME/setup/run-saw.sh stop
   ```

2. Copy the catalog files to *BIEE_DATA_HOME*`/web/catalog`. Then change the name to `default`. The catalog file is `rbiaii_default.zip` in the *ORACLE_HOME*`/ORDM/Report/Install` directory.

   Update *BIEE_DATA_HOME*`/web/config/instanceconfig.xml`, the configuration file:

   a. Change the catalog path to `<CatalogPath>/oracle/OracleBIData/web/catalog/default </CatalogPath>`

b. Add a new line between `</Alerts>` and `<AdvancedReporting>`:

```
<HardenXSS>false</HardenXSS>
```

3. Copy the resource files to the folder *OC4J_HOME*/j2ee/home/applications/analytics/res/. The resource file is at *ORACLE_HOME*/ORDM/Report/Install/rbiaii_res.zip.

4. Start the BI EE Presentation Services with the following command:

```
OBIEE_HOME/setup/run-saw.sh start
```

BI EE Installation Test

Test the BI EE Installation by opening the following link in a browser:

```
http://hostname:9704/analytics
```

9704 is default BI EE port; if you specified a different port when you installed BI EE, use that port. The Oracle Retail Data Model login window is displayed.

Use `rbiaii` for both the user name (ID) and the password. (There is no password for the id Administrator.)

B

Database Upgrade

If you install Oracle Retail Data Model and then upgrade the underlying Oracle Database, the Oracle Retail Data Model components may require modifications. This appendix describes steps required when you perform the following upgrades:

- Upgrade from Oracle Database 10g Release 2 (10.2.0.3) to Oracle Database 10g Release 2 (10.2.0.4)
- Upgrade from Oracle Database 10g Release 2 (10.2.0.3 or 10.2.0.4) to Oracle Database 11g Release 1 (11.1.0.6 or 11.1.0.7)
- Upgrade from Oracle Database 11g Release 1 (11.1.0.6) to Oracle Database 11g Release 1 (11.1.0.7)

Upgrade from Oracle Database 10*g* Release 2 (10.2.0.3) to Oracle Database 10*g* Release 2 (10.2.0.4)

Oracle Retail Data Model works without any problem with the Relational, Oracle OLAP, or Data Mining components.

Upgrade from Oracle Database 10*g* Release 2 (10.2.0.3 or 10.2.0.4) to Oracle Database 11*g* Release 1 (11.1.0.6 or 11.1.0.7)

Since the underlying metadata and technology of the OLAP component and the Data Mining component changed in Oracle Database 11*g* Release 1, it is recommended that you de-install Oracle Retail Data Model on Oracle Database 10*g* and re-install Oracle Retail Data Model.

- **OLAP component**: You must re-install the OLAP component as described in OLAP Installation and Configuration on page 4-1.
- **Data Mining component**: You must re-install the Data Mining component as described in Database Objects Installation on page 3-1.

Upgrade from Oracle Database 11*g* Release 1 (11.1.0.6) to Oracle Database 11*g* Release 1 (11.1.0.7)

The Relational and Data Mining components work after the upgrade. The OLAP component also works after the upgrade. However, you modify the PSLSINV analytic workspace as follows:

1. In the Analytic Workspace Manager 11*g*, open the PSLSINV analytic workspace in Read-Write mode. (For information on installing AWM, see OLAP Installation and Configuration on page 4-1.)
2. Expand the **Cube**s node and perform the following actions on the OOS_INV, OOS_INV_FCST, OOS_SALES and OOS_SALES_FCST cubes:
   a. Expand cube-specific node (that is, the node that represents the one of the cubes).
   b. Expand the **Cube Scripts** node.
   c. Select the name of the default script for the cube as outlined in the following table:

Cube name	Default Cube Script Name
OOS_INV	LOAD_AND_AGGREGATE
OOS_INV_FCST	AGGREGATE_AND_ANALYZE
OOS_SALES	LOAD_AND_AGGREGATE
OOS_SALES_FCST	AGGREGATE_AND_ANALYZE

   d. Select and delete the last step of the default Cube Script (that is, the "Analyze" step). Apply your changes.

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