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Upgrade Guide for Informatica PowerCenter Users Version 7.9.5.1 E13767-01

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Oracle Business Intelligence Applications Upgrade Guide for Informatica PowerCenter Users Version 7.9.5.1

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Contents

Preface	vii
Audience	vii
Documentation Accessibility	vii
Related Documents	viii
Conventions	viii

1 What's New in This Release

1.1	What's New in Oracle BI Applications Release 7.9.5.1	1-	1
-----	--	----	---

2 Overview of Oracle BI Applications Upgrade

Supported Upgrade Paths	2-1
Preupgrade Considerations	2-2
Best Practices for Preparing to Upgrade	2-2
Major Stages of Oracle BI Applications Upgrade	2-3
Sequence of Upgrade Stages	2-4
	Supported Upgrade Paths Preupgrade Considerations Best Practices for Preparing to Upgrade Major Stages of Oracle BI Applications Upgrade Sequence of Upgrade Stages

Part I Upgrading When Your Source System is Siebel CRM

	3	Upgrading	Siebel Analy	ytics 7.5.x
--	---	-----------	--------------	-------------

3.1	Upgrading Oracle BI Infrastructure	3-1
3.2	Upgrading Oracle BI Applications	3-2
3.3	Upgrading to Informatica PowerCenter Version 8.1.1, SP5	3-2
3.4	Configuring Informatica PowerCenter Version 8.1.1, SP5 to Work with the DAC	3-3
3.5	Upgrading the Informatica Repository	3-3
3.6	Upgrading the DAC Repository	3-4
3.7	Overview of Upgrading the Data Warehouse Schema and Migrating Data	3-6
3.8	Upgrading the Data Warehouse Schema to Version 7.7 and Migrating Data	3-7
3.9	Upgrading the Data Warehouse Schema to Version 7.9.0	3-10
3.10	Importing New Schema Definitions into the Siebel Transactional Database	3-11
3.10.1	Verifying the Siebel Transactional Database Upgrade	3-11
3.11	Migrating Data into the Data Warehouse Upgraded to Version 7.9.0	3-11
3.12	Upgrading the Data Warehouse Schema to Version 7.9.4 and Migrating Data	3-16
3.13	Upgrading the Data Warehouse Schema to Version 7.9.5 and Migrating Data	3-20
3.14	Upgrading the Data Warehouse Schema to Version 7.9.5.1	3-27

3.15	Upgrading the Siebel Analytics Repository	3-27
3.15.1	Preparing for the Oracle BI Repository Upgrade	3-28
3.15.2	Equalizing the Oracle BI Repositories	3-28
3.15.3	Comparing the Siebel Analytics and Oracle BI Repositories	3-30
3.15.4	Merging the Siebel Analytics and Oracle BI Repositories	3-30
3.15.5	Regression Testing the Oracle BI Repository Merge	3-31
3.16	Upgrading the Oracle BI Presentation Catalog	3-32
3.16.1	Trimming the Input Presentation Catalog	3-32
3.16.2	Upgrading the Oracle BI Presentation Catalog to a Newer Version	3-32
3.16.3	Testing the Results of the Presentation Catalog Upgrade	3-33

4 Upgrading Siebel Business Analytics 7.7, 7.7.x and 7.8.x

4.1	Upgrading Oracle BI Infrastructure	. 4-1
4.2	Upgrading Oracle BI Applications	. 4-2
4.3	Upgrading to Informatica PowerCenter Version 8.1.1, SP5	. 4-2
4.4	Configuring Informatica PowerCenter Version 8.1.1, SP5 to Work with the DAC	. 4-3
4.5	Upgrading the Informatica Repository	. 4-3
4.6	Upgrading the DAC Repository	. 4-4
4.7	Overview of Upgrading the Data Warehouse Schema and Migrating Data	. 4-7
4.8	Upgrading the Data Warehouse Schema to Version 7.9.0	. 4-7
4.9	Importing New Schema Definitions into the Siebel Transactional Database	. 4-9
4.9.1	Verifying the Siebel Transactional Database Upgrade	. 4-9
4.10	Migrating Data into the Data Warehouse Upgraded to Version 7.9.0	. 4-9
4.11	Upgrading the Data Warehouse Schema to Versions 7.9.4 and Migrating Data	4-16
4.12	Upgrading the Data Warehouse Schema to Version 7.9.5 and Migrating Data	4-19
4.13	Upgrading the Data Warehouse Schema to Version 7.9.5.1	4-26
4.14	Upgrading the Siebel Analytics Repository	4-26
4.14.1	Preparing for the Oracle BI Repository Upgrade	4-27
4.14.2	Equalizing the Oracle BI Repositories	4-27
4.14.3	Comparing the Siebel Analytics and Oracle BI Repositories	4-29
4.14.4	Merging the Siebel Analytics and Oracle BI Repositories	4-29
4.14.5	Regression Testing the Oracle BI Repository Merge	4-30
4.15	Upgrading the Oracle BI Presentation Catalog	4-31
4.15.1	Trimming the Input Presentation Catalog	4-31
4.15.2	Upgrading the Oracle BI Presentation Catalog to a Newer Version	4-31
4.15.3	Testing the Results of the Presentation Catalog Upgrade	4-32

5 Upgrading Oracle BI Applications 7.9.x for the Siebel Adapter

5.1	Upgrading Oracle BI Infrastructure	5-1
5.2	Upgrading Oracle BI Applications	5-1
5.3	Upgrading to Informatica PowerCenter Release 8.1.1, SP5	5-2
5.4	Configuring Informatica PowerCenter Release 8.1.1, SP5 to Work with the DAC	5-3
5.5	Upgrading the Informatica Repository	5-3
5.6	Upgrading the DAC Repository	5-4
5.7	Upgrading the Data Warehouse Schema and Migrating Data	5-4
5.7.1	Upgrading the Data Warehouse Schema to Version 7.9.4 and Migrating Data	5-5
5.7.2	Upgrading the Data Warehouse Schema to Version 7.9.5 and Migrating Data	5-8

5.7.3	Upgrading the Data Warehouse Schema to Version 7.9.5.1	5-15
5.8	Upgrading the Oracle BI Repository	5-15
5.8.1	Preparing for the Oracle BI Repository Upgrade	5-16
5.8.2	Equalizing the Oracle BI Repositories	5-16
5.8.3	Comparing the Oracle BI Repositories	5-18
5.8.4	Merging the Oracle BI Repositories	5-18
5.8.5	Regression Testing the Oracle BI Repository Merge	5-19
5.9	Upgrading the Oracle BI Presentation Catalog	5-20
5.9.1	Trimming the Input Presentation Catalog	5-20
5.9.2	Upgrading the Oracle BI Presentation Catalog to a Newer Version	5-20
5.9.3	Testing the Results of the Presentation Catalog Upgrade	5-21

Part II Upgrading When Your Source System Is Oracle EBS

6 Upgrading Oracle BI Applications for the Oracle Adapter

Upgrading Oracle BI Infrastructure	6-1
Upgrading Oracle BI Applications	6-1
Upgrading to Informatica PowerCenter Release 8.1.1, SP5	6-2
Configuring Informatica PowerCenter Release 8.1.1, SP5 to Work with the DAC	6-3
Upgrading the Informatica Repository	6-3
Upgrading the DAC Repository	6-4
Upgrading the Data Warehouse Schema and Migrating Data	6-4
Performing Data Warehouse Schema Upgrade Steps Common to All	
Previous Releases	6-5
Upgrading the Data Warehouse Schema to Version 7.9.3 and Migrating Data	6-6
Upgrading the Data Warehouse Schema to Version 7.9.4 and Migrating Data	6-8
Upgrading the Data Warehouse Schema to Version 7.9.5. and Migrating Data	6-14
Upgrading the Data Warehouse Schema to Version 7.9.5.1 and Migrating Data	6-20
Upgrading the Oracle BI Repository	6-27
Preparing for the Oracle BI Repository Upgrade	6-27
Equalizing the Oracle BI Repositories	6-28
Comparing the Oracle BI Repositories	6-29
Merging the Oracle BI Repositories	6-30
Regression Testing the Oracle BI Repository Merge	6-31
Upgrading the Oracle BI Presentation Catalog	6-31
Trimming the Input Presentation Catalog	6-32
Upgrading the Oracle BI Presentation Catalog to a Newer Version	6-32
Testing the Results of the Presentation Catalog Upgrade	6-33
	Upgrading Oracle BI Infrastructure

Part III Upgrading When Your Source System is Peoplesoft

7 Upgrading Oracle BI Applications for the PeopleSoft Adapter

7.1	Upgrading Oracle BI Infrastructure	7-1
7.2	Upgrading Oracle BI Applications	7-1
7.3	Upgrading to Informatica PowerCenter Version 8.1.1, SP5	7-2
7.4	Configuring Informatica PowerCenter Version 8.1.1, SP5 to Work with the DAC	7-3

7.5	Upgrading the Informatica Repository	7-3
7.6	Upgrading the DAC Repository	7-4
7.7	Upgrading the Data Warehouse Schema and Migrating Data	7-4
7.7.1	Performing Data Warehouse Schema Upgrade Steps Common to All	
	Previous Releases	7-5
7.7.2	Upgrading the Data Warehouse Schema to Version 7.9.4 and Migrating Data	7-5
7.7.3	Upgrading the Data Warehouse Schema to Version 7.9.5 and Migrating Data	7-9
7.7.4	Upgrading the Data Warehouse Schema to Version 7.9.5.1 and Migrating Data	7-16
7.8	Upgrading the Oracle BI Repository	7-22
7.8.1	Preparing for the Oracle BI Repository Upgrade	7-23
7.8.2	Equalizing the Oracle BI Repositories	7-23
7.8.3	Comparing the Oracle BI Repositories	7-25
7.8.4	Merging the Oracle BI Repositories	7-25
7.8.5	Regression Testing the Oracle BI Repository Merge	7-26
7.9	Upgrading the Oracle BI Presentation Catalog	7-27
7.9.1	Trimming the Input Presentation Catalog	7-27
7.9.2	Upgrading the Oracle BI Presentation Catalog to a Newer Version	7-27
7.9.3	Testing the Results of the Presentation Catalog Upgrade	7-28

A Upgrading the Oracle BI Repository for Industry-Specific Analytics Applications

A.1	Common Dimensions	A-1
A.2	Merging Siebel Analytics and Oracle BI Repositories	A-2
A.2.1	Creating Working Folders	A-4
A.2.2	Trimming Repository Files	A-4
A.2.2.1	Trimming the Original Base Repository Files	A-5
A.2.2.2	Trimming the New Base Repository File	A-5
A.2.2.3	Trimming the Custom Repository Files	A-5
A.2.3	Renaming Objects in the Original Pharma Base Repository File	A-5
A.2.4	Equalizing the Oracle BI Repositories	A-6
A.2.5	Merging the Core Repository Files	A-7
A.2.6	Merging the Pharma Repository Files	A-8
A.2.7	Making Merge Decisions in the Server Admin Tool	A-9
A.3	Replacing Common Dimensions After the Repository Merge	A-9

Index

Preface

Oracle Business Intelligence Applications (Oracle BI Applications) are comprehensive prebuilt solutions that deliver pervasive intelligence across an organization, empowering users at all levels with the key information they need to maximize effectiveness. Oracle BI Applications are built on Oracle Business Intelligence Suite Enterprise Edition, a comprehensive next-generation BI and analytics platform.

Oracle BI Applications includes the following application families:

- Oracle Financial Analytics
- Oracle Human Resources Analytics
- Oracle Supply Chain and Order Management Analytics
- Oracle Procurement and Spend Analytics
- Oracle Sales Analytics
- Oracle Service Analytics
- Oracle Contact Center Telephony Analytics
- Oracle Marketing Analytics
- Oracle Partner Analytics
- Oracle Pricing Analytics

The Oracle Business Intelligence Applications Upgrade Guide for Informatica PowerCenter Users is part of the documentation set for Oracle BI Applications. This guide contains information about upgrading to Oracle BI Applications from different versions of Siebel Business Analytics Applications and Oracle Business Intelligence Applications.

Oracle recommends reading the *Oracle Business Intelligence Applications Release Notes* before installing, using, or upgrading Oracle Business Intelligence Applications. The *Oracle Business Intelligence Applications Release Notes* are available:

- On the Oracle Business Intelligence Applications CD-ROM.
- On the Oracle Technology Network at http://www.oracle.com/technology/documentation/bi_apps.html

To register for a free account on the Oracle Technology Network, go to http://www.oracle.com/technology/about/index.html.

Audience

This document is intended for BI managers and implementers of Oracle Business Intelligence Applications.

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Related Documents

For more information, see the following documents in the Oracle Business Intelligence Applications release 7.9.5.1 documentation set (available at http://www.oracle.com/technology/documentation/bi_apps.html):

- Oracle Business Intelligence Applications Release Notes
- System Requirements and Supported Platforms for Oracle Business Intelligence Applications
- Oracle Business Intelligence Applications Installation Guide for Informatica PowerCenter Users
- Oracle Business Intelligence Applications Configuration Guide for Informatica PowerCenter Users
- Oracle Business Intelligence Infrastructure Installation and Configuration Guide
- Oracle Business Intelligence Data Warehouse Administration Console Guide
- Oracle Business Analytics Warehouse Data Model Reference

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

What's New in This Release

This section lists changes in Oracle BI Applications release 7.9.5.1 and in the corresponding documentation.

1.1 What's New in Oracle BI Applications Release 7.9.5.1

The main changes in Oracle BI Applications release 7.9.5.1 are the following:

- Financial Analytics has been enhanced to add U.S. Federal Financial Analytics for U.S.-based federal agencies using Oracle e-Business Suite as a data source. This new application provides insight into budget authority and execution and includes metrics, such as Appropriations, Apportionments, Allotments, Commitments, Obligations, Expenditures, and Available Authority.
- HR Analytics now supports PeopleSoft department-based organization hierarchy. The organization hierarchy (W_INT_ORG_DH) has been expanded to support 15 levels. ETL mappings are available to extract and flatten PeopleSoft department trees into a flattened organization hierarchy. ETL parameters are also available to flatten department trees by SetID and tree name."

This version of *Oracle BI Applications Upgrade Guide for Informatica PowerCenter Users* includes the following changes:

- All sections were updated to reflect the requirement to install Informatica PowerCenter version 8.1.1 SP5.
- Chapter 3, "Upgrading Siebel Analytics 7.5.x" was updated to include instructions for upgrading to release 7.9.5.1.
- Chapter 4, "Upgrading Siebel Business Analytics 7.7, 7.7.x and 7.8.x" was updated to include instructions for upgrading to release 7.9.5.1.
- Chapter 5, "Upgrading Oracle BI Applications 7.9.x for the Siebel Adapter" was updated to include instructions for upgrading to release 7.9.5.1.
- Chapter 6, "Upgrading Oracle BI Applications for the Oracle Adapter" was updated to include instructions for upgrading to release 7.9.5.1.
- Chapter 7, "Upgrading Oracle BI Applications for the PeopleSoft Adapter" was updated to include instructions for upgrading to release 7.9.5.1.

Overview of Oracle BI Applications Upgrade

This chapter provides an overview of the Oracle BI Applications upgrade process. It includes the following topics:

- Section 2.1, "Supported Upgrade Paths"
- Section 2.2, "Preupgrade Considerations"
- Section 2.3, "Best Practices for Preparing to Upgrade"
- Section 2.4, "Major Stages of Oracle BI Applications Upgrade"

2.1 Supported Upgrade Paths

The Oracle Business Intelligence Applications Upgrade Guide for Informatica PowerCenter Users provides instructions for upgrading to the current release of Oracle BI Applications from the previous releases listed below:

Siebel Analytics 7.5.3

For instructions, see Chapter 3, "Upgrading Siebel Analytics 7.5.x".

• Siebel Business Analytics 7.7, 7.7.x and 7.8.x

For instructions, see Chapter 4, "Upgrading Siebel Business Analytics 7.7, 7.7.x and 7.8.x".

Note: Upgrade paths to the current release of Oracle BI Applications from Siebel Business Analytics Applications 6.x, 7.x, and Oracle Business Intelligence 7.9.x with Siebel Relationship Management Warehouse or Oracle Business Analytics Warehouse on NCR Teradata database are currently NOT available.

• Siebel Business Analytics for Life Sciences 7.8.0, 7.8.1 and 7.8.2

For instructions, see Chapter 4, "Upgrading Siebel Business Analytics 7.7, 7.7.x and 7.8.x".

Oracle Business Intelligence Applications 7.9.0, 7.9.1, 7.9.2, 7.9.3, 7.9.4, and 7.9.5

For instructions, see one of the following, depending on your source system adapter:

- Chapter 5, "Upgrading Oracle BI Applications 7.9.x for the Siebel Adapter"
- Chapter 6, "Upgrading Oracle BI Applications for the Oracle Adapter"
- Chapter 7, "Upgrading Oracle BI Applications for the PeopleSoft Adapter"

2.2 Preupgrade Considerations

You should consider the following points before you begin your upgrade:

- Review the System Requirements and Supported Platforms for Oracle Business Intelligence Applications to make sure your database platform versions are supported.
- The upgrade process is not only a technical process. You will also need to analyze the impact of the schema changes on your current custom implementation. The extent of your customizations will have an impact on the length of time required for the upgrade.

In addition, at different stages of the upgrade you will also need to analyze your organization's business requirements. For example, at the stage in which you are upgrading the Oracle Business Intelligence repository, you will need to know which repository objects are not in use so that they can be trimmed from the repository. To determine this information, you will need to know what reports are in use.

• It is highly recommended that you use side-by-side environments when performing each stage of the upgrade process. Enabling side-by-side-instances of the entire Oracle Business Intelligence Applications environment is a critical success factor for upgrade.

For the other stages of the upgrade, you can upgrade your environments in place. However, for comparison and benchmarking purposes, it is recommended that you upgrade using side-by-side environments.

- You should determine what customizations were made to your existing DAC repository before you begin the upgrade process. Depending on the release from which you are upgrading, moving the customizations in your existing DAC repository into the new DAC repository may be a manual process.
- For each stage of the upgrade process, you need to allocate a reasonable amount of time to validate the results of that stage and address any problems. In addition, final user acceptance testing must confirm that the entire upgrade process was successful.
- When you move from a development environment to test or production environments, you must perform the following stages of the upgrade process for each environment:
 - Upgrade the platform
 - Upgrade the applications
 - Migrate the data

You can migrate the DAC, Informatica, and Oracle BI repositories into the production environment after you merge and test them.

For a description of the major stages of the upgrade process, see Section 2.4, "Major Stages of Oracle BI Applications Upgrade".

2.3 Best Practices for Preparing to Upgrade

This section provides best practice steps you need to perform before you begin the upgrade process.

Review this guide, *Oracle Business Intelligence Applications Upgrade Guide for Informatica PowerCenter Users*, in its entirety.

 Rename and copy into a different location your current repositories, Presentation Catalog (formerly known as the Web Catalog), and DAC installation folder from your existing environment. The file names and locations listed below represent the standard names and locations of files that shipped with previous versions of Siebel Business Analytics Applications and Oracle BI Applications.

When you backup the DAC repository, you export the DAC metadata, in XML format (using the DAC's Export tool), into a different database, which can be used later as a reference. For instructions, see the *Oracle Business Intelligence Data Warehouse Administration Console Guide*.

Туре	Name	Location
DAC metadata repository	*.xml	OracleBI\DAC\export
Oracle BI repository (formerly called Analytics repository)	OracleBIAnalyticsApps.rpd	OracleBI\Repository
Informatica repository	Oracle_BI_DW_Base.rep	OracleBI\dwrep\Informatica\Repository
Presentation Catalog (formerly called Web Catalog)	<file_name>.webcat</file_name>	OracleBIData\web\catalog
DAC installation folder	DAC	OracleBI\DAC

- Gather information that describes the current implementation, including the following:
 - Version of the transactional database to which you upgraded.
 - Version of the Oracle BI Infrastructure (platform) or Siebel Business Analytics platform from which you are upgrading.

To determine the platform version from which you are upgrading, launch the Administration Tool, and click Help, and then click Administration Tool in the toolbar. A message box provides the platform version.

 Version of Siebel Business Analytics Applications or Oracle BI Applications from which you are upgrading.

To determine the version of Siebel Business Analytics Applications or Oracle BI Applications from which you are upgrading, launch the Data Warehouse Administration Console (DAC), and click Help, and then click About DAC.

Note: If the DAC is not a component of your Analytics installation, you are running Siebel Analytics 7.5.x.

2.4 Major Stages of Oracle BI Applications Upgrade

Figure 2–1 shows the upgrade flow for the major stages of the Siebel Business Analytics and Oracle BI Applications upgrade process. Depending on the prior release from which you are upgrading, you may find minor changes in the process shown in Figure 2–1.

Table 2–1 provides the documentation you should refer to for each stage of the upgrade.



Figure 2–1 Oracle BI Applications Upgrade Flow

2.4.1 Sequence of Upgrade Stages

In general, you must complete stages one through five sequentially, in the following order: 1) upgrade the Siebel Business Analytics platform or Oracle BI Infrastructure to the current release of Oracle BI Infrastructure; 2) upgrade the Siebel Business Analytics Applications or Oracle BI Applications to the current release of Oracle BI Applications; 3) upgrade the metadata in the DAC and Informatica repositories; 4) upgrade the data warehouse schema; 5)(For Siebel source systems) upgrade the Siebel transactional database schema.

You can perform stages six through eight simultaneously; that is, you can migrate data into the upgraded data warehouse (stage six), upgrade the Siebel Analytics or Oracle BI repository (stage seven), and upgrade the Web (Presentation) catalog (stage eight) at the same time. However, you cannot test the results of your Web (Presentation) catalog upgrade until you have finished migrating your data.

Note: Depending on the prior release from which you are upgrading, you may find minor changes in the process described in this section.

Sta	ige	Re	lated Documentation
1.	Upgrade the Siebel Business Analytics Platform or Oracle BI Infrastructure to the current release of the Oracle BI Infrastructure.	•	Oracle Business Intelligence Infrastructure Upgrade Guide
No Inf Ora	te: The Oracle Business Intelligence rastructure is code-independent from the acle BI Applications.		
2.	Upgrade the Siebel Business Analytics Applications or Oracle BI Applications to the current release of the Oracle Business Intelligence Applications.	•	Oracle Business Intelligence Applications Upgrade Guide for Informatica PowerCenter Users
3.	Upgrade the DAC and Informatica repositories.	•	Oracle Business Intelligence Applications Upgrade Guide for Informatica PowerCenter Users
		•	Oracle Business Intelligence Data Warehouse Administration Console Guide
4.	Upgrade the data warehouse schema.	•	Oracle Business Intelligence Applications Upgrade Guide for Informatica PowerCenter Users
5.	Upgrade the Siebel transactional database schema.	•	Oracle Business Intelligence Applications Upgrade Guide for Informatica PowerCenter Users
6.	Migrate data into the upgraded data warehouse.	•	Oracle Business Intelligence Applications Upgrade Guide for Informatica PowerCenter Users
7.	Upgrade the Siebel Analytics repository or Oracle BI repository to the current release of the Oracle BI repository.	•	Oracle Business Intelligence Applications Upgrade Guide for Informatica PowerCenter Users
		•	Oracle Business Intelligence Server Administration Guide
8.	Upgrade the Siebel Business Analytics Web Catalog or Oracle BI Presentation Catalog to the current release of the Oracle BI Presentation Catalog.	•	Oracle Business Intelligence Applications Upgrade Guide for Informatica PowerCenter Users
		•	Oracle Business Intelligence Infrastructure Upgrade Guide
		•	Oracle Business Intelligence Presentation Services Administration Guide

Table 2–1Major Stages of the Oracle BI Applications Upgrade and RelatedDocumentation

Caution: It is highly recommended that you consider obtaining support from Professional Services to assist with the end-to-end upgrade process.

Note: Upgrading Oracle's Siebel Customer Relationship Management applications is out of the scope of this document. Upgrading your current version of Siebel CRM applications is optional.

Part I

Upgrading When Your Source System is Siebel CRM

Part I contains instructions for upgrading to the current release of Oracle BI Applications from previous releases of Oracle BI Applications, Siebel Business Analytics, and Siebel Analytics.

Part I contains the following sections:

Chapter 3, "Upgrading Siebel Analytics 7.5.x"

Follow the instructions in this section for upgrading to the current release of Oracle BI Applications from Siebel Analytics 7.5.x

• Chapter 4, "Upgrading Siebel Business Analytics 7.7, 7.7.x and 7.8.x"

Follow the instructions in this section for upgrading to the current release of Oracle BI Applications from Siebel Business Analytics 7.7, 7.7.x, and 7.8.x.

Chapter 5, "Upgrading Oracle BI Applications 7.9.x for the Siebel Adapter"

Follow the instructions in this section for upgrading to the current release from previous releases of Oracle BI Applications if your source system is Siebel CRM.

Upgrading Siebel Analytics 7.5.x

This section contains instructions for upgrading Oracle's Siebel Analytics release 7.5.x. This section includes the following topics:

- Section 3.1, "Upgrading Oracle BI Infrastructure"
- Section 3.2, "Upgrading Oracle BI Applications"
- Section 3.3, "Upgrading to Informatica PowerCenter Version 8.1.1, SP5"
- Section 3.4, "Configuring Informatica PowerCenter Version 8.1.1, SP5 to Work with the DAC"
- Section 3.5, "Upgrading the Informatica Repository"
- Section 3.6, "Upgrading the DAC Repository"
- Section 3.7, "Overview of Upgrading the Data Warehouse Schema and Migrating Data"
- Section 3.8, "Upgrading the Data Warehouse Schema to Version 7.7 and Migrating Data"
- Section 3.9, "Upgrading the Data Warehouse Schema to Version 7.9.0"
- Section 3.10, "Importing New Schema Definitions into the Siebel Transactional Database"
- Section 3.11, "Migrating Data into the Data Warehouse Upgraded to Version 7.9.0"
- Section 3.12, "Upgrading the Data Warehouse Schema to Version 7.9.4 and Migrating Data"
- Section 3.13, "Upgrading the Data Warehouse Schema to Version 7.9.5 and Migrating Data"
- Section 3.14, "Upgrading the Data Warehouse Schema to Version 7.9.5.1"
- Section 3.15, "Upgrading the Siebel Analytics Repository"
- Section 3.16, "Upgrading the Oracle BI Presentation Catalog"

3.1 Upgrading Oracle BI Infrastructure

Upgrade the Oracle BI Infrastructure to the version that is supported for this release of Oracle BI Applications. See the *System Requirements and Supported Platforms for Oracle Business Intelligence Applications* for the current version that is supported. For information on installing the supported version of Oracle BI Infrastructure, see the *Oracle Business Intelligence Infrastructure Upgrade Guide*.

3.2 Upgrading Oracle BI Applications

Run the Oracle BI Applications installer to upgrade your Oracle BI Applications environment to the current version. For instructions on running the installer, see *Oracle Business Intelligence Applications Installation Guide for Informatica PowerCenter Users*.

Note: Perform only the step that addresses the running of the installer. Do not perform the configuration instructions that follow the running of the installer.

Note: If you have a previous release of Oracle BI Applications installed, you must uninstall it before you run the installer for the current release. If you do not uninstall the old release, some folders from the current release will not be correctly installed. (Make a back-up of your DAC folder before you uninstall the old release.)

3.3 Upgrading to Informatica PowerCenter Version 8.1.1, SP5

The current version of Oracle BI Applications supports Informatica PowerCenter 8.1.1, Service Pack 5 (SP5). You must install both Informatica PowerCenter 8.1.1 and SP5 to run the current version of Oracle BI Applications.

The components and architecture for Informatica PowerCenter 8.1.1 differ significantly from Informatica PowerCenter 7.x. Oracle recommends that you carefully review the Informatica documentation. The Informatica PowerCenter 8.1.1 SP5 documentation is included in the Informatica PowerCenter DVD provided with Oracle BI Applications.

For a summary of installation instructions for installing Informatica PowerCenter 8.1.1 and SP5 on a single machine in an Oracle BI Applications deployment, see the *Oracle Business Intelligence Applications Installation Guide for Informatica PowerCenter Users*. For instructions on configuring Informatica PowerCenter components for use with Oracle BI Applications, see the section in the *Oracle Business Intelligence Applications Installation Guide for Informatica PowerCenter Users* that covers configuring Informatica PowerCenter components.

For detailed information about deploying Informatica 8.1.1, refer to the *Informatica PowerCenter Installation and Configuration Guide*, and related documentation.

To upgrade to Informatica PowerCenter version 8.1.1, SP5

- **1.** Perform the pre-upgrade steps documented in the *Informatica PowerCenter Installation and Configuration Guide*.
- **2.** Install Informatica PowerCenter version 8.1.1 and SP5, following the instructions in the *Informatica PowerCenter Installation and Configuration Guide*.
- **3.** Perform the post-upgrade steps documented in the *Informatica PowerCenter Installation and Configuration Guide*.

Note: The Informatica PowerCenter 8.1.1 installation process includes upgrading your current Informatica repository to the version 8.1.1 format. This process is necessary so that you will be able to access your current repository using version 8.1.1 client tools so that you can perform the procedure Section 3.5, "Upgrading the Informatica Repository."

In Section 3.5, "Upgrading the Informatica Repository" you back up and rename your current repository and then restore the Informatica repository (Oracle_BI_DW_Base.rep) that is installed during the Oracle BI Applications installation. You then copy your custom folder from the backed up repository into the newly restored Oracle_BI_ DW_Base repository.

3.4 Configuring Informatica PowerCenter Version 8.1.1, SP5 to Work with the DAC

Informatica PowerCenter version 8.1.1, SP5 requires additional configuration steps in order to work with the DAC. For instructions on performing these steps, see the following sections in the *Oracle Business Intelligence Applications Installation Guide for Informatica PowerCenter Users*.

- Enabling DAC client communication with Informatica PowerCenter
- Enabling DAC server communication with Informatica PowerCenter
- Registering Informatica Services in the DAC

3.5 Upgrading the Informatica Repository

Follow this procedure to upgrade the Informatica repository.

To upgrade the Informatica repository

1. Make sure you have backed up and renamed your current Informatica repository.

For instructions, see the Informatica documentation, which is included in the Informatica PowerCenter DVD provided with Oracle BI Applications.

Note: This repository must be upgraded during the procedure in Section 3.3, "Upgrading to Informatica PowerCenter Version 8.1.1, SP5." You must upgrade this repository to the version 8.1.1 format in order to move your custom folder from this repository into the new Oracle_ BI_DW_Base repository that you restore in the steps below.

 Copy the Oracle_BI_DW_Base.rep file from the folder OracleBI\dwrep\Informatica\Repository into the folder \Informatica\PowerCenter8.1.1\server\infa_shared\Backup.

Note: The Oracel_BI_DW_Base.rep file is installed in the OracleBI root directory when you run the Oracle BI Applications installer, as described in Section 3.2, "Upgrading Oracle BI Applications."

3. Restore the Oracle_BI_DW_Base.rep repository.

For instructions, see the *Informatica PowerCenter Installation and Configuration Guide*, which is included in the Informatica PowerCenter DVD provided with Oracle BI Applications.

- **4.** Copy the custom folder from your previous Informatica repository to the newly created Informatica repository:
 - **a.** Launch the Informatica PowerCenter Repository Manager, and connect to both your previous and newly created Informatica repositories.
 - **b.** Copy the Custom folder in your previous repository into the newly created Informatica repository.
 - **c.** Make sure there is an individual workflow for each of the mappings in the Custom folder.

3.6 Upgrading the DAC Repository

Before you begin this procedure, do the following:

- Create and configure a new DAC repository according to the instructions in *Oracle Business Intelligence Applications Installation Guide for Informatica PowerCenter Users.*
- Make sure you have set up the DAC system properties, Informatica PowerCenter Services, and database connections according to the instructions in the Oracle Business Intelligence Applications Installation Guide for Informatica PowerCenter Users.
- Make a copy of your preconfigured source system container. (You cannot change the metadata in the preconfigured container. You must make a copy of it in order to be able to modify the objects it contains.) For instructions, see the Oracle Business Intelligence Data Warehouse Administration Console Guide

To manually move your customizations to the DAC repository

- **1.** Open the copy of the source system container into which you want to move your customizations.
- **2.** Import the custom data warehouse tables:
 - **a.** Navigate to the Tables tab in the Design view.
 - **b.** Right-click and select Import from Database, and then click Import Database Tables.
 - c. In the Data Sources drop-down list, select DataWarehouse.
 - d. Click Read Tables.
 - e. Select the tables you want to import, and then click Import Tables.
- **3.** Import the custom columns for the tables you imported in Step 2:
 - **a.** In the Tables tab, query for the tables you imported in Step 2.
 - **b.** Right-click and select Import from Database, and then click Import Database Columns.
 - **c.** In the Importing Columns... dialog box, select "All records in the list," and click OK.
 - d. In the Data Sources drop-down list, select DataWarehouse.
 - e. Click Read Columns.
 - f. Select the columns you want to import, and then click Import Columns.

- **g.** Navigate to the Tables tab, and then click the Columns child tab, and add the Foreign Key to Table and Foreign Key to Column attributes for the newly imported columns.
- 4. Import the indices for the custom data warehouse tables.
 - **a.** In the Tables tab, query for the tables you imported in Step 2.
 - **b.** Right-click and select Import Indices.
 - **c.** In the Importing Indices... dialog box, select "All records in the list," and click OK.
 - d. In the Data Sources drop-down list, select DataWarehouse.
 - e. Click Read Indices.
 - f. Select the indices you want to import, and then click Import Indices.
- **5.** Import the custom source tables:
 - **a.** Navigate to the Tables tab in the Design view.
 - **b.** Right-click and select Import from Database, and then click Import Database Tables.
 - **c.** In the Data Sources drop-down list, select the appropriate source.
 - d. Click Read Tables.
 - e. Select the tables you want to import, and then click Import Tables.

You do not have to import columns for the custom source tables. Columns for source tables are not required.

- **6.** Import columns for any standard data warehouse tables that were extended, and add the appropriate attributes in the DAC.
- 7. Create new custom logical and physical task folders.
 - a. In the DAC, from the Tools menu, select Seed Data, then select Task Folders.
 - **b.** To create a custom logical folder, click New.
 - **c.** In the Name field, enter a name for the custom logical folder, for example, Custom Logical.
 - **d.** In the Type field, select Logical.
 - **e.** To create a custom physical folder, click New.
 - f. In the Name field, enter a name for the custom physical folder, for example, Custom Physical.
 - **g.** In the Type field, select Physical.
- 8. Register the folders you created in Step 7 in the Source System Folders tab.
 - a. In the Design view, select the Source System Folders tab.
 - **b.** Click New.
 - **c.** Enter the name of the Custom Logical folder in the Logical Folder field.
 - **d.** Enter the name of the Custom Physical folder in the Physical Folder field, and save the record.
- **9.** Modify the task attributes for workflows in the custom folder that are modified standard mappings, that is, standard (out-of-the-box) mappings from the previous release that you copied into the Informatica custom folder.

a. Navigate to the Tasks tab and query for the Informatica workflow names that are in the Informatica custom folder under Command for Incremental Load or Command for Full Load.

You must review the workflows in the custom folder in Informatica Workflow Manager.

- **b.** For each task, change the Folder Name (in the Edit child tab) to the Custom Logical folder name.
- c. For each task, right-click and select Synchronize Tasks.
- **d.** In the Task Synchronization dialog box, select Selected Record Only, and click OK.

This step adds source and target tables to the task.

e. Click Yes in the Synchronizing Task(s)... dialog box to proceed.

An informational message will indicate the results of the process.

- f. Click OK.
- 10. Add tasks that were created as new tasks in the current implementation.
 - **a.** In the Design view, select the Tasks tab, and then select the Edit child tab.
 - **b.** For each new task, copy the names of the Informatica workflows into the fields Command for Incremental Load and Command for Full Load.
 - **c.** Assign the appropriate values for the remaining fields in the Edit child tab.
 - **d.** In the Tasks tab, query for the tasks you entered in Step b.
 - **e.** Right-click the list of query results, and in the Task Synchronization dialog box, select "All records in the list," and click OK.

This step adds source tables and target tables to the task.

f. Click Yes in the Synchronizing Task(s)... dialog box to proceed.

An informational message will indicate the results of the process.

g. Click OK.

Note: If your customizations included new fact tables, you will need to create and assemble new subject areas as well as create and build new execution plans. If your customizations included extending dimension tables, you will need to reassemble your existing subject areas and rebuild your existing execution plans. You will also need to set the appropriate execution plan attributes, such as Prune Days. For instructions, see *Oracle Business Intelligence Data Warehouse Administration Console Guide*.

3.7 Overview of Upgrading the Data Warehouse Schema and Migrating Data

The process for upgrading the data warehouse schema and migrating data for Siebel Business Analytics releases 7.5.x involves multiple phases, as described below.

Phase 1

In phase 1, you will upgrade the data warehouse schema to version 7.7 and migrate data into the upgraded data warehouse. For instructions, see Section 3.8.

Phase 2

In phase 2, you will perform the following steps:

- **1.** Upgrade the data warehouse schema to version 7.9.0. For instructions, see Section 3.9.
- **2.** Import new schema definitions into the Siebel transactional database. For instructions, see Section 3.10.
- **3.** Migrate data into the data warehouse upgraded to version 7.9.0. For instructions, see Section 3.11.
- Phase 3

In phase 3, you will upgrade your data warehouse schema to version 7.9.4 and migrate data into the upgraded data warehouse. For instructions, see Section 3.12.

Phase 4

In phase 4, you will upgrade your data warehouse schema to version 7.9.5 and migrate data into the upgraded data warehouse. For instructions, see Section 3.13.

Phase 5

In phase 5, you will upgrade your data warehouse schema to version 7.9.5.1. For instructions, see Section 3.14.

3.8 Upgrading the Data Warehouse Schema to Version 7.7 and Migrating Data

This procedure adds new tables, columns, and indexes to the existing data warehouse schema. It also modifies the existing data warehouse schema objects.

To upgrade the data warehouse schema

- 1. Run the schema upgrade script.
 - **a.** Navigate to the folder OracleBI\dwrep\Upgrade\CTLFiles.
 - **b.** Use the DDLimp utility to run one of the following scripts:

For Siebel Applications (Horizontal), run ddlsme_HOR_77.ctl.

For Siebel Industry Applications (Vertical), run ddlsme_SIA_77.ctl.

Use the following command, substituting the correct script name where appropriate.

..\OracleBI\dwrep\bin\DDLIMP /U <USER> /P <PASSWORD> /C <ODBC connect string> /G SSE_ROLE /I N /R Y /F <..\OracleBI\dwrep\ddlsme_HOR_77.ctl> /L <..\oracleBI\dwrep\ddlsme_HOR_77.log>

For example:

DDLIMP /U SADMIN /P SADMIN /C SIEBEL_OLTP /G SSE_ROLE /I N /R Y /F C:\OracleBI\dwrep\ddlsme_HOR_77.ctl /L C:\OracleBI\dwrep\ddlsme_HOR_77.log

Notes:

- * /P <PASSWORD> The password for the data warehouse.
- * /C <ODBC connect string> The name of the ODBC connect string.

- * /I N Tells DDLimp to ignore the indexes DDL defined in the CTL file if any exist. It does not change existing indexes. (The default is /I Y, which tells DDLimp to create and merge indexes from the CTL file with the indexes in the database.
- * For Oracle databases, use the Data Direct drivers.
- * In addition, you can use the following commands:
- * /W Y If the OLAP database is Oracle and Unicode.
- * /ZY If the OLAP database is DB2 or SQL Server and Unicode.
- * /B <TABLE_SPACE_NAME> If you want to create these tables in a separate table space. For DB2, This must be specified as 32K tablespace.
- /X <INDEX_TABLE_SPACE_NAME> If you want to create the indexes in a separate tablespace. For DB2, This must be specified as 32K tablespace.
- * /Y Storage File for DB2/390.
- * /R Regrant tables.
- 2. Copy the file Upgrade.rep file from the folder OracleBI\dwrep\Upgrade\Informatica\Repository into the folder Informatica PowerCenter 8.1.1\server\infa_shared\Backup.
- **3.** Launch the Informatica PowerCenter Administration Console and restore Upgrade.rep (located in Informatica PowerCenter 8.1.1\server\infa_ shared\Backup) into a database other than the database in which you restored Oracle_BI_DW_Base.rep.
- **4.** Navigate to the folder OracleBI\dwrep\Upgrade\Informatica\ParameterFiles and copy the file 753_TENERIFE_UPG_PARAMS.txt into the SrcFiles folder on the Informatica Server machine, for example, C:\Program Files\Informatica PowerCenter 8.1.1\server\infa_shared\SrcFiles.
- 5. Rename 753_TENERIFE_UPG_PARAMS.txt to TENERIFE_UPG_PARAMS.txt.
- **6.** In the Informatica Workflow Manager, open the Relational Connection Browser by selecting Connections from the toolbar, and then selecting Relational. Do the following.

Note: If you are connected to an Oracle database, use the Oracle Native driver instead of ODBC.

If you are connected to a SQL Server database, use the ODBC driver rather than the native SQL Server driver.

- **a.** Create a relational connection with the name PARAM_OLTP_SIEBEL to point to the Siebel transactional database.
- **b.** Create a relational connection with the name DataWarehouse to point to the newly upgraded data warehouse database.
- **c.** Create a relational connection with the name PARAM_DAC_OLD to point to the previous DAC repository database (the version from which you are upgrading).
- **d.** Create a relational connection with the name PARAM_DAC_NEW to point to the DAC repository database.

- **7.** For Siebel Applications (Horizontal), in Informatica Workflow Manager, navigate to the folder UPGRADE_753_to_770_HOR, and execute the following workflows in the order indicated:
 - a. Upgrade_R_Image
 - **b.** Upgrade_Unspecifieds
 - c. Upgrade_Agree
 - d. Upgrade_Asset
 - e. Upgrade_Opty
 - f. Upgrade_Order
 - g. Upgrade_Quote
 - h. Upgrade_Response
 - i. Upgrade_ServiceRequest
 - j. Upgrade_Others
 - k. Upgrade_Visibility
 - I. UpgradeSlowlyChangingDimensionStartDates
 - m. DAC_Metadata_Upgrade_Workflow
- **8.** For Siebel Industry Applications (Vertical), in Informatica Workflow Manager, navigate to the folder UPGRADE_753_to_770_SIA, and execute the following workflows in the order indicated
 - **a.** Upgrade_R_Image
 - b. Upgrade_Unspecifieds
 - c. Upgrade_Agree
 - d. Upgrade_Asset
 - e. Upgrade_Opty
 - f. Upgrade_Order
 - g. Upgrade_Quote
 - h. Upgrade_Response
 - i. Upgrade_ServiceRequest
 - j. Upgrade_Others
 - k. Upgrade_Visibility
 - I. UpgradeSlowlyChangingDimensionStartDates
 - **m.** Upgrade_Industry_R_Image
 - n. Upgrade_Industry_Unspecified
 - o. Upgrade_LS_ActivityProduct
 - p. Upgrade_LS_Others
 - **q.** Upgrade_Industry_Household
 - r. Upgrade_FINS_Visibility
 - s. UpgradeSlowlyChangingDimensionStartDates_Industry

t. DAC_Metadata_Upgrade_Workflow

3.9 Upgrading the Data Warehouse Schema to Version 7.9.0

This procedure adds new tables, columns, and indexes to the existing data warehouse schema. It also modifies the existing data warehouse schema objects.

To upgrade the data warehouse schema

- 1. Run the UPGRADE.ctl script.
 - a. Navigate to the folder OracleBI\dwrep\Upgrade\CTLFiles.
 - **b.** Use the DDLimp utility to run the UPGRADE.ctl script. Use the following command:

```
..\OracleBI\dwrep\bin\DDLIMP /U <USER> /P <PASSWORD> /C <ODBC connect
string>
/G SSE_ROLE /I N /R Y /F <..\OracleBI\dwrep\UPGRADE.CTL>
/L <..\oracleBI\dwrep\UPGRADE.log>
```

For example:

DDLIMP /U SADMIN /P SADMIN /C SIEBEL_OLTP /G SSE_ROLE /I N /R Y /F C:\OracleBI\dwrep\UPGRADE.CTL /L C:\OracleBI\dwrep\UPGRADE.log

Notes:

- * /P <PASSWORD> The password for the data warehouse.
- * /C <ODBC connect string> The name of the ODBC connect string.
- * /I N Tells DDLimp to ignore the indexes DDL defined in the CTL file if any exist. It does not change existing indexes. (The default is /I Y, which tells DDLimp to create and merge indexes from the CTL file with the indexes in the database.
- * For Oracle databases, use the Data Direct drivers.
 - In addition, you can use the following commands:
- * /W Y If the OLAP database is Oracle and Unicode.
- * /ZY If the OLAP database is DB2 or SQL Server and Unicode.
- * /B <TABLE_SPACE_NAME> If you want to create these tables in a separate table space. For DB2, This must be specified as 32K tablespace.
- * /X <INDEX_TABLE_SPACE_NAME> If you want to create the indexes in a separate tablespace. For DB2, This must be specified as 32K tablespace.
- * /Y Storage File for DB2/390.
- * /R Regrant tables.
- 2. Run the 790_UPGRADE_PRE_CTL_SCRIPT.sql script.
 - **a.** Open the SQL client for your database type, for example, SQLPLUS for Oracle, Query Analyzer for SQL Server, or a command window for DB2.
 - **b.** Navigate to the folder OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **c.** Open the 790_UPGRADE_PRE_CTL_SCRIPT.sql file, and copy the contents into the SQL client.

- d. Execute the script.
- **3.** Run the DW.ctl script.
 - a. Navigate to the folder OracleBI\dwrep\Upgrade\CTLFiles.
 - **b.** Use the DDLimp utility to run the DW.ctl script.

Use the command provided in Step 1, but substitute the correct script name.

- 4. Run the 790_UPGRADE_PRE_DIMENSION_SCRIPT.sql script.
 - **a.** Open the SQL client for your database type.
 - **b.** Navigate to the folder OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **c.** Open the 790_UPGRADE_PRE_DIMENSION_SCRIPT.sql file, and copy the contents into the SQL client.
 - **d.** Execute the script.

3.10 Importing New Schema Definitions into the Siebel Transactional Database

This procedure upgrades transactional database objects that relate to Oracle Business Intelligence Applications. It does not upgrade transactional database objects for CRM applications.

To import new schema definitions into the Siebel transactional database

 Use the DDLimp utility to run the DDL_OLTP.ctl script that is located in the OracleBI\dwrep\Upgrade\CTLFiles folder.

3.10.1 Verifying the Siebel Transactional Database Upgrade

Follow this procedure to verify the following tables were created in the Siebel transactional database.

To verify the transactional database upgrade

- For all upgrade paths, verify the following tables were created in the Siebel transactional database:
 - S_ETL_R_IMG_1 through S_ETL_R_IMG_166
 - S_ETL_I_IMG_1 through S_ETL_I_IMG_166
 - S_ETL_D_IMG_1 through S_ETL_D_IMG_166
 - S_ETL_PARAM
 - S_ETL_PRD_ATTR
 - S_ETL_PRD_REL

3.11 Migrating Data into the Data Warehouse Upgraded to Version 7.9.0

Follow this procedure to migrate data into the data warehouse upgraded to version 7.9.0.

To migrate data into the upgraded data warehouse

1. Navigate to the folder OracleBI\dwrep\Upgrade\Informatica\SrcFiles and copy the *.csv files into the SrcFiles folder on the Informatica Server machine, for

example, C:\Program Files\Informatica PowerCenter 8.1.1\server\infa_shared\SrcFiles.

- 2. Navigate to the folder OracleBI\dwrep\Upgrade\Informatica\ParameterFiles and copy the file 770_TENERIFE_UPG_PARAMS.txt into the SrcFiles folder on the Informatica Server machine, for example, C:\Program Files\Informatica PowerCenter 8.1.1\server\infa_shared\SrcFiles.
- **3.** Rename 770_TENERIFE_UPG_PARAMS.txt to TENERIFE_UPG_PARAMS.txt.
- 4. In the file TENERIFE_UPG_PARAMS.txt:
 - a. Search for the parameter \$\$SourceConnection.
 - **b.** Set the value to one of the following options, based on your Siebel applications (OLTP) version:
 - * SEBL_63
 - * SEBL_753
 - * SEBL_771
 - * SEBL_78
 - * SEBL_80 (use this value for OLTP versions 8.0 and 8.1)
 - * SEBL_VERT_753
 - * SEBL_VERT_771
 - * SEBL_VERT_78
 - * SEBL_VERT_80 (use this value for OLTP versions 8.0 and 8.1)

For example, if your Siebel applications (OLTP) version is Siebel Industry Applications 7.5.x, the parameter should appear as:

\$\$SourceConnection=SEBL_VERT_753

5. In the file TENERIFE_UPG_PARAMS.txt:

- a. Search for the parameter \$\$Source_Container.
- **b.** Set the value to one of the following options, based on your Siebel applications (OLTP) version:
 - * Siebel 6.3
 - * Siebel 7.5.3
 - * Siebel 7.5.3 Vertical
 - * Siebel 7.7.1
 - * Siebel 7.7.1 Vertical
 - * Siebel 7.8
 - * Siebel 7.8 Vertical
 - * Siebel 8.0 (use this value for OLTP versions 8.0 and 8.1)
 - * Siebel 8.0 Vertical (use this value for OLTP versions 8.0 and 8.1)

For example, if your Siebel applications (OLTP) version is Siebel Industry Applications 7.5.x, the parameter should appear as:

\$\$Source_Container=Siebel 7.5.3 Vertical

6. In the file TENERIFE_UPG_PARAMS.txt, edit the ETL_PROC_WID parameter as follows:

```
MPLT_GET_ETL_PROC_WID.$$ETL_PROC_WID=<latest ETL_PROC_WID value from your
database>
```

You can get this value from W_PARAM_G.ETL_PROC_WID.

7. If you are running Siebel Industry Applications (Vertical), in the file TENERIFE_UPG_PARAMS.txt, set the VERTICAL_UPGRADE parameter to 1. For example:

\$\$VERTICAL_UPGRADE=1

- **8.** For Siebel Industry Applications (Vertical), define the alignment rule to be used for ETL loads.
 - **a.** Navigate to the folder OracleBI\dwrep\Upgrade\Informatica\SrcFiles and copy the file AlignmentType_LS_782.csv into the SrcFiles folder on the Informatica Server machine, for example, C:\Program Files\Informatica PowerCenter 8.1.1\server\infa_shared\SrcFiles.
 - **b.** Rename the file AlignmentType_LS_782.csv to AlignmentType.csv.
 - **c.** Open the file AlignmentType.csv, and enter one of the following alignment item types under the ALIGN_TYPE field:
 - * Zipcode
 - * Account/Contact
 - * Brick
 - **d.** Save the file.

The Oracle Business Analytics Warehouse allows only one alignment type to be used for ETL loads during upgrade.

- **9.** In Informatica Workflow Manager, navigate to the folder UPGRADE_770_to_79, and execute the following workflows in the order indicated:
 - a. MARKETING_LOAD
 - b. Upgrade_Dimensions_Industry
 - **c.** Update_Dimensions
 - d. Update_Dimension_Unspecified
 - e. Update_Facts
 - f. (For Siebel Industry Applications only) Upgrade_LS_Dimensions
 - g. (For Siebel Industry Applications only) Upgrade_LS_Facts
 - h. SIL_PositionDimensionHierarchy_Full
 - i. Load_INT_ORG_DH
 - j. DIMENSION_LOAD

Note: If you are using the SCD version of the dimension, replace the corresponding TENN_UPG_W_XXX_D_784_To_W_XXX_D session with TENN_UPG_W_XXX_D_784_SCD_To_W_XXX_D. This will upgrade the data from the W_XXX_SCD version of the dimension to the new SCD-enabled W_XXX_D dimension.

- **k.** DIMENSION_UNSPECIFIED_UPDATE
- I. FACT_UPDATE
- m. DAC_Metadata_Upgrade_Workflow

Note: You need to run this workflow for upgrading to the data warehouse schema version 7.9.0 even though you ran a workflow with the same name during the upgrade to version 7.7.

- **10.** If you upgraded your transactional database to Siebel Applications 8.0 or 8.1, navigate to the folder UPGRADE_790_to_791_SBL80UPG and run the following workflows in the order indicated:
 - a. UPGRADE_DIMENSIONS
 - **b.** UPGRADE_FACTS
- **11.** Use the reset_infa_seq_gen.bat script to initialize the Informatica sequence generator for incremental runs on the main Informatica repository (Oracle_BI_DW_Base.rep).
 - a. Navigate to OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **b.** Open the reset_infa_seq_gen.bat file.

The file opens a command prompt, which will prompt you for the parameters listed below.

c. Enter the appropriate parameter values to reflect your environment (the parameters are database specific).

For Oracle databases:

Parameter	Setting
OLAP USERNAME	Enter the data warehouse database user ID
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database
INFORMATICA DB USERNAME	Enter the user ID of the main Informatica Repository database
INFORMATICA DB	Enter the password@connection string of the main Informatica
PASSWORD	Repository database
INFORMATICA REPOSITORY	Enter the name of the main Informatica Repository
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the main Informatica Repository
INFORMATICA REPOSITORY PASSWORD	Enter the password for the main Informatica Repository
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.

Parameter	Setting
INFA_FOLDER	Enter the value HOR for Horizontal Applications or VERT for Vertical Applications

For Microsoft SQL Server databases:

Parameter	Setting
OLAP_SERVER	Enter the name of the SQL Server for the OLAP database
OLAP DATABASE	Enter the name of the database on which OLAP data is available
OLAP USERNAME	Enter the user ID of the data warehouse database
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database
INFORMATICA SERVER ADDRESS	Enter the name of the SQL Server for the Informatica Repository database.
INFORMATICA DATABASE	Enter the name of the database on which the Informatica Repository metadata is available
INFORMATICA DB USERNAME	Enter the user ID of the main Informatica Repository database
INFORMATICA DB PASSWORD	Enter the password@connection string of the main Informatica Repository database
INFORMATICA REPOSITORY	Enter the name of the main Informatica Repository
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the main Informatica Repository
INFORMATICA REPOSITORY PASSWORD	Enter the password of the main Informatica Repository
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value HOR for Horizontal Applications or VERT for Vertical Applications

For IBM DB2 databases:

Parameter	Setting
OLAP USERNAME	Enter the user ID of the data warehouse database
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database
INFORMATICA DB USERNAME	Enter the user ID of the Upgrade Informatica Repository database
INFORMATICA DB PASSWORD	Enter the password @connection string of the main Informatica Repository database

Parameter	Setting
INFA DATABASE ALIAS	Enter the name of the database in which Informatica Repository metadata is available
INFORMATICA REPOSITORY	Enter the name of the main Informatica Repository
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the main Informatica Repository
INFORMATICA REPOSITORY PASSWORD	Enter the password for the Informatica Repository
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value HOR for Horizontal Applications or VERT for Vertical Applications

12. To verify the data migrated successfully:

- **a.** Check whether any of the Informatica mapping log files stored in the directory \Informatica PowerCenter 8.1.1\Server\SessLogs indicates errors or failures.
- **b.** Check whether the SQL scripts (790_UPGRADE_PRE_CTL_SCRIPT.sql and 790_UPGRADE_PRE_DIMENSION_SCRIPT.sql) that you ran in the SQL client of the database failed or errored out while executing.
- **c.** Check the log files for the CTL files (Upgrade.ctl and DW.ctl) that you ran using the DDLimp command to determine whether any of the runs failed.

If you did not detect any errors or failures in the steps above, then the data migration was successful.

Note: Ignore any error messages that indicate tables or indexes could not be dropped from the database. These error messages are displayed when the specified objects do not exist in the database. This can occur because each source system container holds a subset of all data warehouse tables.

13. If the data migration was successful, drop the tables that were created during the upgrade process, such as, W_xxxx_x_784 tables, LKP_xxxx_x, and W_ASSET_D_TMP.

This step frees the space occupied by these backup tables.

3.12 Upgrading the Data Warehouse Schema to Version 7.9.4 and Migrating Data

Follow this procedure to upgrade the data warehouse schema to version 7.9.5 and migrate data.

This procedure adds new tables, columns, and indexes to the existing data warehouse schema. It also modifies the existing data warehouse schema objects.
To upgrade the data warehouse schema to version 7.9.4 and migrate data

- 1. Run the 792_UPGRADE_PRE_CTL_SCRIPT.sql script.
 - **a.** Open the SQL client for your database type, for example, SQLPLUS for Oracle, Query Analyzer for SQL Server, or a command window for DB2.
 - **b.** Navigate to the folder OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **c.** Open the 792_UPGRADE_PRE_CTL_SCRIPT.sql file, and copy the contents into the SQL client.
 - **d.** Execute the script.
- **2.** Use the DDLimp utility to run the ddl_794.ctl script, which is located in the OracleBI\dwrep\Upgrade\CTLFiles folder. Use the following command:

```
..\OracleBI\dwrep\bin\DDLIMP /U <USER> /P <PASSWORD> /C <ODBC connect string>
/G SSE_ROLE /I N /R Y /F <..\OracleBI\dwrep\ddl_794.ctl>
/L <..\oracleBI\dwrep\ddl_794.log>
```

For example:

DDLIMP /U SADMIN /P SADMIN /C OBIA /G SSE_ROLE /I N /R Y /F C:\OracleBI\dwrep\ddl_794.ctl /L C:\OracleBI\dwrep\ddl_794.log

- 3. Run the 792_UPGRADE_PRE_DIMENSION_SCRIPT.sql script.
 - **a.** Open the SQL client for your database type.
 - **b.** Navigate to the folder OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **c.** Open the 792_UPGRADE_PRE_DIMENSION_SCRIPT.sql file, and copy the contents into the SQL client.
 - **d.** Execute the script.
- **4.** If you upgraded your transactional database to Siebel Applications 8.0 or 8.1, run the workflows to migrate your data into the upgraded data warehouse.
 - **a.** In Informatica Workflow Manager, navigate to the folder UPGRADE_790_TO_ 791_SBL80UPG.
 - **b.** Run the following workflows in the order indicated:

UPGRADE_DIMENSIONS

UPGRADE_FACTS

- **5.** Verify the data migrated successfully by checking whether any of the Informatica mapping log files stored in the \Informatica PowerCenter 8.1.1\server\infa_ shared\SessLogs directory indicate errors or failures.
- **6.** If the data migration was successful, drop the tables that were created during the upgrade process, such as, W_xxxx_x_79x tables, LKP_xxxx_x and 79x_XXXX_TMP.

This step frees the space occupied by these backup tables.

- Use the reset_infa_seq_gen.bat script to initialize the Informatica sequence generator for incremental runs on the main Informatica repository (Oracle_BI_ DW_Base.rep).
 - **a.** Navigate to OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **b.** Open the reset_infa_seq_gen.bat file.

The file opens a command prompt, which will prompt you for the parameters listed below.

c. Enter the appropriate parameter values to reflect your environment (the parameters are database specific).

For Oracle databases:

Parameter	Setting
OLAP USERNAME	Enter the data warehouse database user ID
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database
INFORMATICA DB USERNAME	Enter the user ID of the main Informatica Repository database
INFORMATICA DB	Enter the password@connection string of the main Informatica
PASSWORD	Repository database
INFORMATICA REPOSITORY	Enter the name of the main Informatica Repository
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the main Informatica Repository
INFORMATICA REPOSITORY PASSWORD	Enter the password for the main Informatica Repository
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value HOR for Horizontal Applications or VERT for Vertical Applications

For Microsoft SQL Server databases:

Parameter	Setting
OLAP_SERVER	Enter the name of the SQL Server for the OLAP database
OLAP DATABASE	Enter the name of the database on which OLAP data is available
OLAP USERNAME	Enter the user ID of the data warehouse database
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database
INFORMATICA SERVER ADDRESS	Enter the name of the SQL Server for the Informatica Repository database.
INFORMATICA DATABASE	Enter the name of the database on which the Informatica Repository metadata is available
INFORMATICA DB USERNAME	Enter the user ID of the main Informatica Repository database
INFORMATICA DB PASSWORD	Enter the password@connection string of the main Informatica Repository database

Parameter	Setting
INFORMATICA REPOSITORY	Enter the name of the main Informatica Repository
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the main Informatica Repository
INFORMATICA REPOSITORY PASSWORD	Enter the password of the main Informatica Repository
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value HOR for Horizontal Applications or VERT for Vertical Applications

For IBM DB2 databases:

Parameter	Setting
OLAP USERNAME	Enter the user ID of the data warehouse database
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database
INFORMATICA DB USERNAME	Enter the user ID of the Upgrade Informatica Repository database
INFORMATICA DB PASSWORD	Enter the password @connection string of the main Informatica Repository database
INFA DATABASE ALIAS	Enter the name of the database in which Informatica Repository metadata is available
INFORMATICA REPOSITORY	Enter the name of the main Informatica Repository
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the main Informatica Repository
INFORMATICA REPOSITORY PASSWORD	Enter the password for the Informatica Repository
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value HOR for Horizontal Applications or VERT for Vertical Applications

3.13 Upgrading the Data Warehouse Schema to Version 7.9.5 and Migrating Data

Follow this procedure to upgrade the data warehouse schema to version 7.9.5 and migrate data.

This procedure adds new tables, columns, and indexes to the existing data warehouse schema. It also modifies the existing data warehouse schema objects.

To upgrade the data warehouse schema to version 7.9.5 and migrate data

- **1.** Use the reset_infa_seq_gen.bat script to initialize the Informatica sequence generator for incremental runs on the Upgrade repository.
 - a. Navigate to OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **b.** Open the reset_infa_seq_gen.bat file.

The file opens a command prompt, which will prompt you for the parameters listed below.

c. Enter the appropriate parameter values to reflect your environment (the parameters are database specific).

For Oracle databases:

Parameter	Setting
OLAP USERNAME	Enter the data warehouse database user ID.
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.
INFORMATICA DB USERNAME	Enter the user ID of the Upgrade Informatica Repository database.
INFORMATICA DB PASSWORD	Enter the password@connection string of the Upgrade Informatica Repository database.
INFORMATICA REPOSITORY	Enter the name of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY PASSWORD	Enter the password for the Upgrade Informatica Repository.
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value UPGRADE.

For Microsoft SQL Server databases:

Parameter	Setting
OLAP_SERVER	Enter the name of the SQL Server for the OLAP database.
OLAP DATABASE	Enter the name of the database on which OLAP data is available.

Parameter	Setting
OLAP USERNAME	Enter the user ID of the data warehouse database.
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.
INFORMATICA SERVER ADDRESS	Enter the name of the SQL Server for the Informatica Repository database.
INFORMATICA DATABASE	Enter the name of the database in which the Informatica Repository metadata is available.
INFORMATICA DB USERNAME	Enter the user ID of the Upgrade Informatica Repository database.
INFORMATICA DB PASSWORD	Enter the password @connection string of the Upgrade Informatica Repository database.
INFORMATICA REPOSITORY	Enter the name of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY PASSWORD	Enter the password of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value UPGRADE.

For IBM DB2 databases:

Parameter	Setting
OLAP USERNAME	Enter the user ID of the data warehouse database.
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.
INFORMATICA DB USERNAME	Enter the user ID of the Upgrade Informatica Repository database.
INFORMATICA DB PASSWORD	Enter the password @connection string of the Upgrade Informatica Repository database.
INFA DATABASE ALIAS	Enter the name of the database in which Informatica Repository metadata is available.
INFORMATICA REPOSITORY	Enter the name of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY PASSWORD	Enter the password for the Informatica Repository.

Parameter	Setting
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value UPGRADE.

- 2. Run the 795_UPGRADE_PRE_CTL_SCRIPT.sql script.
 - **a.** Open the SQL client for your database type, for example, SQLPLUS for Oracle, Query Analyzer for SQL Server, or a command window for DB2.
 - **b.** Navigate to the folder OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **c.** Open the 795_UPGRADE_PRE_CTL_SCRIPT.sql file, and copy the contents into the SQL client.
 - **d.** Execute the script.
- 3. Run the UPGRADE_795.ctl script.

This script adds temp tables for the upgrade process.

- **a.** Navigate to the folder OracleBI\dwrep\Upgrade\CTLFiles.
- **b.** Use the DDLimp utility to run the UPGRADE_795.ctl script. Use the following command:

```
..\OracleBI\dwrep\bin\DDLIMP /U <USER> /P <PASSWORD> /C <ODBC connect
string>
/G SSE_ROLE /I N /R Y /F <..\OracleBI\dwrep\UPGRADE_795.CTL>
/L <..\oracleBI\dwrep\UPGRADE.log>
```

For example:

```
DDLIMP /U SADMIN /P SADMIN /C OBIA /G SSE_ROLE
/I N /R Y /F C:\OracleBI\dwrep\UPGRADE_795.CTL /L
C:\OracleBI\dwrep\UPGRADE.log
```

Notes:

- * /P <PASSWORD> The password for the data warehouse.
- * /C <ODBC connect string> The name of the ODBC connect string.
- * /I N Tells DDLimp to ignore the indexes DDL defined in the CTL file if any exist. It does not change existing indexes. (The default is /I Y, which tells DDLimp to create and merge indexes from the CTL file with the indexes in the database.
- * For Oracle databases, use the Data Direct drivers.

In addition, you can use the following commands:

- * /W Y If the OLAP database is Oracle and Unicode.
- * /Z Y If the OLAP database is DB2 or SQL Server and Unicode.
- * /B <TABLE_SPACE_NAME> If you want to create these tables in a separate table space. For DB2, This must be specified as 32K tablespace.

- /X <INDEX_TABLE_SPACE_NAME> If you want to create the indexes in a separate tablespace. For DB2, This must be specified as 32K tablespace.
- * /Y Storage File for DB2/390.
- * /R Regrant tables.
- **4.** Use the DDLimp utility to run the ddl_795.ctl script, which is located in the OracleBI\dwrep\Upgrade\CTLFiles folder. Use the following command:

```
..\OracleBI\dwrep\bin\DDLIMP /U <USER> /P <PASSWORD> /C <ODBC connect string>
/G SSE_ROLE /I N /R Y /F <..\OracleBI\dwrep\ddl_795.ctl>
/L <..\oracleBI\dwrep\ddl_795.log>
```

For example:

```
DDLIMP /U SADMIN /P SADMIN /C OBIA /G SSE_ROLE
/I N /R Y /F C:\OracleBI\dwrep\ddl_795.ctl /L C:\OracleBI\dwrep\ddl_795.log
```

- 5. Run the 795_UPGRADE_PRE_DIMENSION_SCRIPT.sql script.
 - a. Open the SQL client for your database type.
 - **b.** Navigate to the folder OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **c.** Open the 795_UPGRADE_PRE_DIMENSION_SCRIPT.sql file, and copy the contents into the SQL client.
 - **d.** Execute the script.
- Copy all of the domain value files in the folder \OracleBI\dwrep\Informatica\LkpFiles into the folder \Informatica PowerCenter 8.1.1\server\infa_shared\LkpFiles.
- 7. Migrate data into the upgraded data warehouse.
 - **a.** Copy the file Upgrade.rep file from the folder OracleBI\dwrep\Upgrade\Informatica\Repository into the folder Informatica PowerCenter 8.1.1\server\infa_shared\Backup.
 - **b.** Launch the Informatica PowerCenter Administration Console and restore Upgrade.rep (located in Informatica PowerCenter 8.1.1\server\infa_shared\Backup).
 - **c.** Navigate to the folder OracleBI\dwrep\Upgrade\Informatica\ParameterFiles and copy the file 795_UPG_PARAMS.txt into the SrcFiles folder on the Informatica Server machine, for example, C:\Program Files\Informatica PowerCenter 8.1.1\server\infa_shared\SrcFiles.
 - **d.** Set the parameter \$\$ETL_PROC_WID to the latest ETL_PROC_WID value from the database. You can get this value from W_PARAM_G.ETL_PROC_WID.
 - **e.** Set the parameter \$\$DATASOURCE_NUM_ID to the relevant value from the adapter setup.
 - f. In Informatica Workflow Manager, open the Relational Connection Browser (in the menu bar, select Connections, and then select Relational), and create one relational connection based on the appropriate database platform for your OLTP database. Create the connection with the name PARAM_OLTP.

Note: If you are connected to an Oracle database, use the Oracle Native driver instead of ODBC.

If you are connected to a SQL Server database, use the ODBC driver rather than the native SQL Server driver.

g. In Informatica Workflow Manager, open the Relational Connection Browser (in the menu bar, select Connections, and then select Relational), and create one relational connection based on the appropriate database platform for your OLAP database. Create the connection with the name PARAM_OLAP.

Note: If you are connected to an Oracle database, use the Oracle Native driver instead of ODBC.

If you are connected to a SQL Server database, use the ODBC driver rather than the native SQL Server driver.

- **h.** In Informatica Workflow Manager, navigate to the folder UPGRADE_794_to_795_SBL and execute the UPGRADE_DIMENSIONS workflow.
- **8.** Verify the data migrated successfully.
 - **a.** Check whether any of the Informatica mapping log files stored in the \Informatica PowerCenter 8.1.1\serva\infa_shared\Sesslogs directory indicates errors or failures.
 - **b.** Check whether the script 795_UPGRADE_PRE_DIMENSION_SCRIPT.sql that you ran in the SQL client of the database failed or errored out while executing.
 - **c.** Check the log file for the script Upgrade_795.ctl that you ran using the DDLimp command to determine whether any of the runs failed.

If you did not detect any errors or failures in the steps above, then the data migration was successful.

Note: Ignore any error messages that indicate tables or indexes could not be dropped from the database. These error messages are displayed when the specified objects do not exist in the database. This can occur because each source system container holds a subset of all data warehouse tables

9. If the data migration was successful, drop the tables that were created during the upgrade process, such as W_xxxx_X_79x, LKP_xxxx_x and 79x_xxxx_TMP.

This step frees the space occupied by these backup tables.

- **10.** Once the data migration steps above are complete, you can delete the Upgrade repository to avoid any accidental use or confusion.
 - **a.** In the Informatica PowerCenter Administration Console, select the Upgrade repository service.
 - b. In the General Properties area of the Properties tab, click Edit.
 - c. Make sure the operating mode of the repository service is set to Exclusive.
 - d. Click OK.

- **e.** Choose Actions, and then click Delete Contents.
- **f.** In the Delete contents for <repository name> dialog, enter the repository username and password (for example, Administrator/Administrator), then click OK.
- **11.** Use the reset_infa_seq_gen.bat script to initialize the Informatica sequence generator for incremental runs on the main Informatica repository (Oracle_BI_DW_Base.rep).
 - **a.** Navigate to OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **b.** Open the reset_infa_seq_gen.bat file.

The file opens a command prompt, which will prompt you for the parameters listed below.

c. Enter the appropriate parameter values to reflect your environment (the parameters are database specific).

For Oracle databases:

Parameter	Setting
OLAP USERNAME	Enter the data warehouse database user ID.
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.
INFORMATICA DB USERNAME	Enter the user ID of the main Informatica Repository database.
INFORMATICA DB	Enter the password@connection string of the main Informatica
PASSWORD	Repository database.
INFORMATICA REPOSITORY	Enter the name of the main Informatica Repository.
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the main Informatica Repository.
INFORMATICA REPOSITORY PASSWORD	Enter the password for the main Informatica Repository.
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value HOR.

For Microsoft SQL Server databases:

Parameter	Setting
OLAP_SERVER	Enter the name of the SQL Server for the OLAP database.
OLAP DATABASE	Enter the name of the database on which OLAP data is available.
OLAP USERNAME	Enter the user ID of the data warehouse database.
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.

Parameter	Setting
INFORMATICA SERVER ADDRESS	Enter the name of the SQL Server for the Informatica Repository database.
INFORMATICA DATABASE	Enter the name of the database on which the Informatica Repository metadata is available.
INFORMATICA DB USERNAME	Enter the user ID of the main Informatica Repository database.
INFORMATICA DB PASSWORD	Enter the password@connection string of the main Informatica Repository database.
INFORMATICA REPOSITORY	Enter the name of the main Informatica Repository.
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the main Informatica Repository.
INFORMATICA REPOSITORY PASSWORD	Enter the password of the main Informatica Repository.
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value HOR.

For IBM DB2 databases:

Parameter	Setting
OLAP USERNAME	Enter the user ID of the data warehouse database.
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.
INFORMATICA DB USERNAME	Enter the user ID of the Upgrade Informatica Repository database.
INFORMATICA DB PASSWORD	Enter the password @connection string of the main Informatica Repository database.
INFA DATABASE ALIAS	Enter the name of the database in which Informatica Repository metadata is available.
INFORMATICA REPOSITORY	Enter the name of the main Informatica Repository.
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the main Informatica Repository.
INFORMATICA REPOSITORY PASSWORD	Enter the password for the Informatica Repository.
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.

Parameter	Setting	
-----------	---------	--

Enter the value HOR. INFA_FOLDER

3.14 Upgrading the Data Warehouse Schema to Version 7.9.5.1

Follow this procedure to upgrade the data warehouse schema to version 7.9.5.1.

To upgrade the data warehouse schema

Use the DDLimp utility to run the ddl_7951.ctl script, which is located in the OracleBI\dwrep\Upgrade\CTLFiles folder. Use the following command:

```
..\OracleBI\dwrep\bin\DDLIMP /U <USER> /P <PASSWORD> /C <ODBC connect string>
/G SSE_ROLE /I N /R Y /F <..\OracleBI\dwrep\ddl_7951.ctl>
/L <..\oracleBI\dwrep\ddl_7951.log>
```

For example:

```
DDLIMP /U SADMIN /P SADMIN /C OBIA /G SSE_ROLE
/I N /R Y /F C:\OracleBI\dwrep\ddl_7951.ctl /L C:\OracleBI\dwrep\ddl_7951.log
```

3.15 Upgrading the Siebel Analytics Repository

This process merges your customizations of a prior release of the Siebel Analytics repository with the new version of the Oracle BI repository. Before you begin this process, make sure you have backed up and renamed your existing repository.

To upgrade the repository, perform the following tasks:

- Section 3.15.1, "Preparing for the Oracle BI Repository Upgrade"
- Section 3.15.2, "Equalizing the Oracle BI Repositories"
- Section 3.15.3, "Comparing the Siebel Analytics and Oracle BI Repositories"
- Section 3.15.4, "Merging the Siebel Analytics and Oracle BI Repositories"
- Section 3.15.5, "Regression Testing the Oracle BI Repository Merge"

The tasks in this section refer to multiple versions of the Siebel Analytics and Oracle BI repositories. Table 3–1 provides the names and descriptions of the repositories used in the examples in this section.

Table 3–1	Names of Analytics Repositories used in Examples

Name of Repository	Description
SiebelAnalytics_7x.rpd	The standard Siebel Analytics repository for the version you are upgrading from. This repository is referred to as the "original" repository in the examples in this section.
	Note: Standard repositories from previous releases are available in the folder \OracleBI\Upgrade.
OracleBIAnalyticsApps.rpd	The standard Oracle BI repository for the version you are upgrading to.
Customer_SiebelAnalytics.rpd	The Siebel Analytics repository that contains your customizations for the version you are upgrading from.
Merged_Repository_OracleBI.rpd	The Oracle BI repository that contains your customizations for the version you are upgrading to.

3.15.1 Preparing for the Oracle BI Repository Upgrade

Follow this procedure to prepare for the repository upgrade.

To prepare for the Analytics repository upgrade

- 1. Set up a directory for the merge process, such as \OracleBIUpgrade, and create the following subfolders:
 - Original
 - AfterEqualize
 - AfterMerge
 - AfterManualWork
 - AfterRegressions
- 2. Copy the original repository (for example, SiebelAnalytics_7x.rpd), the production repository (for example, Customer_SiebelAnalytics.rpd, and the repository from the latest installation (for example, OracleBIAnalyticsApps.rpd) into the folder \OracleBIUpgrade\Original.

If, in your current environment, you are running Siebel Analytics for one or more modules using a Siebel Analytics repository in which you extracted the corresponding projects for the modules from the standard Siebel Analytics repository file you received from the previous release, you need to extract the same projects from the SiebelAnalytics_7x.rpd file and use this as your original repository. (If you have the original repository that you extracted during the last upgrade, you can use it as the original repository file.) This will prevent you from losing any new metadata you would like to add in this upgrade.

Also, if you customized the Siebel Analytics repository by trimming a large number of objects and you would like to get those objects back during the current upgrade, you need to trim the SiebelAnalytics_7x.rpd file in the same way and use the modified version as the original repository file. This will prevent you from losing any new metadata you would like to add in this upgrade.

3.15.2 Equalizing the Oracle BI Repositories

The Merge feature in the Administration Tool relies on a change detection algorithm to determine the changes that need to be made to upgrade repositories correctly. For the algorithm to work correctly, it has to determine which objects in the three repositories (for example, SiebelAnalytics_7x.rpd, OracleBIAnalyticsApps.rpd, and Customer_SiebelAnalytics.rpd) are equivalent.

The point of this step is to determine for every object in the OracleBIAnalyticsApps.rpd and the Customer_SiebelAnalytics.rpd whether it is coming from the SiebelAnalytics_7x.rpd.

Equivalence between objects is established using the Administration Tool's Equalize feature. The file that you specify in the Output option (-0) is the only file that is modified during the equalization process.

The Equalize feature has several mechanisms for determining whether an object in two different repositories is semantically the same:

 Fully Qualified Name. If an object in one repository has the same fully qualified name as another object of the same class in another repository, then the two objects are declared equal.

- **Simple String Substitution.** Equivalence can be declared between two objects of . the same class in two repositories whose only difference is that some key characters in their names differ. The equalizerpds executable file ignores those characters while checking fully qualified names. For example, "Core"."W DAY D" might be considered equivalent to "Core"."W DAY D" if the characters "_" and " " have been declared as equivalent.
- **Rename File.** When none of the preceding rules are applicable, equivalence can be manually declared using a script as input to the equalizerpds executable file. Oracle ships the rename files (MAP) for the major releases. The files are located in the OracleBI\Upgrade folder. You can also create your own rename files for customizations not covered in the files that Oracle ships. You can open and edit the rename files in Microsoft Excel.

The syntax of the equalizerpds command is as follows:

```
equalizerpds.exe -A userid1 [-B [password1]] -C base_repository_name -D userid2
[-E [password2]] -F repository2_name [-J udml_utf8_file_name_equalization] [-0
ouput_repository_name] [-X] [-Y equalStringSet]
-X Treat 'Factxxxx' as 'Fact' in Business Model.
```

```
-Y
         Treat the characters as equals.
```

- /?
- Display this usage information and exit.

To equalize a repository

- Copy the appropriate MAP file from the OracleBI\Upgrade folder into the folder 1. where you will execute equalizerpds.exe, for example, \OracleBIUpgrade\Original.
- **2.** Run equalizerpds.exe to equalize the repository from the latest installation (for example, OracleBIAnalyticsApps.rpd) with the original repository (for example, SiebelAnalytics_7x.rpd). An example of the equalizerpds command is as follows:

```
equalizerpds -A Administrator -B SADMIN
-C \\OracleBIUpgrade\Original\SiebelAnalytics_7x.rpd
-D Administrator -E SADMIN
-F \\OracleBIUpgrade\Original\OracleBIAnalyticsApps.rpd
-0 \\OracleBIAnalyticsUpgrade\AfterEqualize\OracleBIAnalyticsApps.rpd
-X -J rename7x-79.map
```

The MAP files are located in the \OracleBI\Upgrade folder.

If the equalizerpds.exe executable file runs correctly, no errors are returned.

3. Run equalizerpds.exe to equalize your customized repository (for example, Customer_SiebelAnalytics.rpd) with the original repository (for example, SiebelAnalytics_7x.rpd). An example of the equalizerpds command is as follows:

```
equalizerpds -A Administrator -B SADMIN
-C \\OracleBIUpgrade\Original\SiebelAnalytics_7x.rpd
-D Administrator -E SADMIN
-F \\OracleBIUpgrade\Original\Customer_SiebelAnalytics.rpd
-0 \\OracleBIUpgrade\AfterEqualize\Customer_OracleBIAnalyticsApps.rpd
```

The execution of equalizerpds that equalizes the customer repository with the original repository does not use the rename file.

Make sure that the original repository is copied unchanged into its new location so that after running the script, all three repositories are contained within the \OracleBIUpgrade\AfterEqualize directory.

4. To verify the process completed successfully, compare the size of the repositories. The output repository (-O) should be close to the same size as the repository you equalized (-F).

3.15.3 Comparing the Siebel Analytics and Oracle BI Repositories

Follow this procedure to compare your existing repository with the new version to which you are upgrading.

To compare the repositories

 Use the Administration Tool's Compare Repositories feature to analyze the differences between your existing repository and the new version of the repository to which you are upgrading. Note where elements have been created, removed, or changed in the new version. Consider whether you can use the new metadata and retire customizations you made in the existing repository.

For instructions on how to use the Administration Tool's Compare Repositories feature, see *Oracle Business Intelligence Server Administration Guide*.

3.15.4 Merging the Siebel Analytics and Oracle BI Repositories

In this procedure, you execute the main algorithm to upgrade the repository. For more information on merging the repositories, see *Oracle Business Intelligence Server Administration Guide*.

To merge versions of the repositories

- 1. Copy the three repositories (for example, SiebelAnalytics_7x.rpd, OracleBIAnalyticsApps.rpd, and Customer_SiebelAnalytics.rpd) to the AfterMerge folder.
- **2.** Open the repository from the latest installation (for example, OracleBIAnalyticsApps.rpd) in the \OracleBIUpgrade\AfterMerge folder.
- **3.** Save the repository with a new name, for example, Merged_Repository_ OracleBIAnalyticsApps.rpd.

This new repository will contain the final results of the upgrade.

- 4. From the Administration Tool menu bar, select File, then select Merge.
- **5.** In the Select Original Repository dialog box, select the original repository (for example, SiebelAnalytics_7x.rpd).
- 6. Enter the password, and click OK.
- 7. Click Select for the Modified Repository field.
- **8.** In the Select Modified Repository dialog box, select the repository that contains the customizations you made to the previous version of the Analytics repository.
- 9. Click Open, type the password, and then click OK.
- **10.** In the Decision drop-down list, select the action you want to take regarding the repository change, or accept the default action.
- **11.** To locate subsequent rows with empty Decision fields, click the Decision header cell.

When all rows have a value in the Decision field, the Merge button is enabled.

12. Click Merge.

This process can take up to 40 minutes, depending on the size of the repositories you are working with. A message will alert you when the merge is complete.

13. Click Yes when asked if you want to run a consistency check.

The number of errors returned by the consistency check is an indication of how successful the merge process was. If you receive many errors, for example, over 300, you should analyze the reason for the errors. If the merge process failed to recognize that two objects are the same, you may need to edit the rename file if the object is in the Current repository, or add your own rename file if you have renamed many of the objects and the upgrade engine failed to relate them to the original objects.

You also may need to change the actions you selected in the Decision drop-down list before rerunning the merge. This could save you time by reducing the number of errors that you will need to fix manually.

Once you are satisfied with the results of the merge, you should fix the remaining errors manually. It is important that you fix all errors before moving on to the next step. This repository serves as the input for the next stage.

You should also check that all of your customized objects are present and that no duplicate physical tables were introduced. To check for duplicate tables, search for physical tables using a query such as:

where name like '*#1'

14. Copy the repository to the folder \OracleBIUpgrade\AfterManualWork.

3.15.5 Regression Testing the Oracle BI Repository Merge

In performing a regression test for the repository merge, the objective is to collect a set of logical SQL statements that are used for reports and to verify that they continue to work with the new metadata. For this purpose, it is recommended that you perform the following procedure.

To perform regression testing

- 1. Run the reports that are necessary to include in the regression suite. These reports might be a subset of the reports in the Presentation Catalog.
- **2.** Collect the logical SQL generated in the previous step. You can do this using Usage Tracking or by parsing the query log file.

For information about Usage Tracking, see *Oracle Business Intelligence Server Administration Guide*.

3. Execute the logical SQL against the old repository using the command line utility nQCmd.exe located in \OracleBI\server\bin, and save the results to a file.

For information about the nQCmd.exe utility, see *Oracle Business Intelligence Server Administration Guide*.

- **4.** Edit the logical SQL test scripts to account for the name changes or modifications resulting from the upgrade.
- 5. Execute the edited logical SQL against the merged repository, and save the results.
- **6.** Compare the results from the steps above and try to explain the differences. If it is determined that these differences are due to the upgrade process, then you have to correct them manually.

This repository now contains the merged content from the new OracleBIAnalyticsApps.rpd and the production repository.

3.16 Upgrading the Oracle BI Presentation Catalog

You will need to upgrade your current Oracle BI Presentation Catalog if your organization:

- Has prebuilt applications already installed, and
- Has customized the current Oracle BI Presentation Catalog

If you made no changes to the previous Presentation Catalog distributed with previous versions of prebuilt applications, you do not need to upgrade the catalog. You can begin using the newer version of the catalog.

This process includes the following tasks:

- Section 3.16.1, "Trimming the Input Presentation Catalog"
- Section 3.16.2, "Upgrading the Oracle BI Presentation Catalog to a Newer Version"
- Section 3.16.3, "Testing the Results of the Presentation Catalog Upgrade"

Caution: In releases of Oracle BI Applications previous to 7.9, the Presentation Catalog (formerly known as the Siebel Analytics Web Catalog) was stored in a single file rather than in a directory structure of individual files. If you have a previous version of the Presentation Catalog, you will need to convert it to the new format. For more information about how to convert the Presentation Catalog to the new format, see the *Oracle Business Intelligence Infrastructure Upgrade Guide*

3.16.1 Trimming the Input Presentation Catalog

Before you upgrade and merge your current Presentation Catalog with the new Presentation Catalog, determine which of the existing content you want to keep and which new content you want to incorporate. Review your existing Presentation Catalog and determine the usage patterns of reports and dashboards. Note that some of the preconfigured content in the existing catalog may appear in the new version in a redesigned format. In addition, the new version includes completely new content. After you have decided the content that is to make up your enterprise Presentation Catalog, trim the input catalogs using the Catalog Manager. For information on trimming catalogs, see *Oracle Business Intelligence Presentation Services Administration Guide*.

3.16.2 Upgrading the Oracle BI Presentation Catalog to a Newer Version

The Presentation Catalog upgrade process makes use of three catalogs:

- The *original* Presentation Catalog. This is the unmodified Presentation Catalog that you received with the Oracle BI Applications release that you are upgrading from.
- The *new* Presentation Catalog. This is the Presentation Catalog that is installed in the OracleBIData\web\catalog folder with the installation of Oracle BI Applications.
- The *current* Presentation Catalog. This is the Presentation Catalog currently in use at your organization.

You use Catalog Manager for this upgrade process. Catalog Manager compares the content in both the *Current* Presentation Catalog and the *Modified* Presentation Catalog with the content in the Original Presentation Catalog, merges any changes into the *Current* Presentation Catalog, and produces a list of upgrade differences, which you must resolve by indicating how you want the differences handled. If the catalogs have conflicting content, you can choose which catalog the content should be taken from. The end result is a merged Presentation Catalog that contains the site-specific changes, as well as new metadata.

To upgrade your Presentation Catalog to a newer version

- 1. Make a backup copy of the current Presentation Catalog, rename the folder <catalogname>_old, and move it to a temporary location.
- **2.** Copy the original Presentation Catalog into the folder that holds your current Presentation Catalog and rename it <catalogname>_Original.
- **3.** Start Catalog Manager and open the new Presentation Catalog in offline mode.
- 4. Select Tools, then select Upgrade Catalog.
- **5.** In the original Presentation Catalog field, browse to locate the original Presentation Catalog.
- **6.** In the Current Presentation Catalog field, browse to locate your current Web Catalog, <catalogname>_old.
- 7. Click OK.
- **8.** Resolve any upgrade differences as follows:
 - **a.** Review each unresolved difference in the Unresolved differences list.
 - **b.** For each unresolved difference, select the version that you want to keep.
 - c. Click OK.

The log file SiebelAnalyticsMigrationLog.txt holds information about the merge process. This log file is written to \OracleBI\web\catalogmanager. If you get an error logged in the file, this means that the path in question had a problem that did not allow the merge mechanism to resolve the merge. No action was taken. To merge that particular item, go into your original Presentation Catalog and merge it manually.

- **9.** Review the upgraded Presentation Catalog, and, if necessary, set permissions for objects.
- 10. Save the new Presentation Catalog.

3.16.3 Testing the Results of the Presentation Catalog Upgrade

Note: Before you perform this step, you must first migrate the data into the upgraded data warehouse.

The Presentation Catalog upgrade functionality does not automatically carry over object permissions; therefore, you should review the Presentation Catalog object permissions before you perform this step.

This step ensures that the upgraded reports and the new preconfigured reports are functional and render correct results within the new, merged Presentation Catalog.

This step is typically performed by visually inspecting the final results of the complete end-to-end upgrade process.

For upgraded reports, the preferred approach for comparison purposes is to have side-by-side environments, and have users review specific dashboard content between the two environments. Examine not only the look and feel of the application but also the data contained in the reports to make sure the content remains the same. It is recommended that you request users to use various elements of the user interface to validate results, such as global prompts, column selectors, report filters, drills, and navigations, as they normally do on a day-to-day basis.

Also review the overall visibility and administrative settings in the new Presentation Catalog to ensure they are correct. Pay careful attention to the visibility rules that are established for any content that was migrated during the upgrade. You might have to manually adjust these settings.

Upgrading Siebel Business Analytics 7.7, 7.7.x and 7.8.x

This section contains instructions for upgrading Oracle's Siebel Business Analytics releases 7.7, 7.7.x, and 7.8.x.

This section includes the following topics:

- Section 4.1, "Upgrading Oracle BI Infrastructure"
- Section 4.2, "Upgrading Oracle BI Applications"
- Section 4.3, "Upgrading to Informatica PowerCenter Version 8.1.1, SP5"
- Section 4.4, "Configuring Informatica PowerCenter Version 8.1.1, SP5 to Work with the DAC"
- Section 4.5, "Upgrading the Informatica Repository"
- Section 4.6, "Upgrading the DAC Repository"
- Section 4.7, "Overview of Upgrading the Data Warehouse Schema and Migrating Data"
- Section 4.8, "Upgrading the Data Warehouse Schema to Version 7.9.0"
- Section 4.9, "Importing New Schema Definitions into the Siebel Transactional Database"
- Section 4.10, "Migrating Data into the Data Warehouse Upgraded to Version 7.9.0"
- Section 4.11, "Upgrading the Data Warehouse Schema to Versions 7.9.4 and Migrating Data"
- Section 4.12, "Upgrading the Data Warehouse Schema to Version 7.9.5 and Migrating Data"
- Section 4.13, "Upgrading the Data Warehouse Schema to Version 7.9.5.1"
- Section 4.14, "Upgrading the Siebel Analytics Repository"
- Section 4.15, "Upgrading the Oracle BI Presentation Catalog"

4.1 Upgrading Oracle BI Infrastructure

Upgrade the Oracle BI Infrastructure to the version that is supported for this release of Oracle BI Applications. See the *System Requirements and Supported Platforms for Oracle Business Intelligence Applications Fusion Edition* for the current version that is supported. For information on installing the supported version of Oracle BI Infrastructure, see the *Oracle Business Intelligence Infrastructure Upgrade Guide*.

4.2 Upgrading Oracle BI Applications

Run the Oracle BI Applications installer to upgrade your Oracle BI Applications environment to the current version. For instructions on running the installer, see *Oracle Business Intelligence Applications Fusion Edition Installation and Configuration Guide*.

Note: Perform only the step that addresses the running of the installer. Do not perform the configuration instructions that follow the running of the installer.

Note: If you have a previous release of Oracle BI Applications installed, you must uninstall it before you run the installer for the current release. If you do not uninstall the old release, some folders from the current release will not be correctly installed. (Make a back-up of your DAC folder before you uninstall the old release.)

4.3 Upgrading to Informatica PowerCenter Version 8.1.1, SP5

The current version of Oracle BI Applications supports Informatica PowerCenter 8.1.1, Service Pack 5 (SP5). You must install both Informatica PowerCenter 8.1.1 and SP5 to run the current version of Oracle BI Applications.

The components and architecture for Informatica PowerCenter 8.1.1 differ significantly from Informatica PowerCenter 7.x. Oracle recommends that you carefully review the Informatica documentation. The Informatica PowerCenter 8.1.1 SP5 documentation is included in the Informatica PowerCenter DVD provided with Oracle BI Applications.

For a summary of installation instructions for installing Informatica PowerCenter 8.1.1 and SP5 on a single machine in an Oracle BI Applications deployment, see the *Oracle Business Intelligence Applications Fusion Edition Installation and Configuration Guide*. For instructions on configuring Informatica PowerCenter components for use with Oracle BI Applications, see the section in the *Oracle Business Intelligence Applications Fusion Edition Installation and Configuration Guide* that covers configuring Informatica PowerCenter components.

For detailed information about deploying Informatica 8.1.1, refer to the *Informatica PowerCenter Installation and Configuration Guide*, and related documentation.

To upgrade to Informatica PowerCenter version 8.1.1, SP5

- **1.** Perform the pre-upgrade steps documented in the *Informatica PowerCenter Installation and Configuration Guide*.
- **2.** Install Informatica PowerCenter version 8.1.1 and SP5, following the instructions in the *Informatica PowerCenter Installation and Configuration Guide*.
- **3.** Perform the post-upgrade steps documented in the *Informatica PowerCenter Installation and Configuration Guide*.

Note: The Informatica PowerCenter 8.1.1 installation process includes upgrading your current Informatica repository to the version 8.1.1 format. This process is necessary so that you will be able to access your current repository using version 8.1.1 client tools so that you can perform the procedure Section 4.5, "Upgrading the Informatica Repository."

In Section 4.5, "Upgrading the Informatica Repository" you back up and rename your current repository and then restore the Informatica repository (Oracle_BI_DW_Base.rep) that is installed during the Oracle BI Applications installation. You then copy your custom folder from the backed up repository into the newly restored Oracle_BI_ DW_Base repository.

4.4 Configuring Informatica PowerCenter Version 8.1.1, SP5 to Work with the DAC

Informatica PowerCenter version 8.1.1, SP5 requires additional configuration steps in order to work with the DAC. For instructions on performing these steps, see the following sections in the *Oracle Business Intelligence Applications Fusion Edition Installation and Configuration Guide*.

- Enabling DAC client communication with Informatica PowerCenter
- Enabling DAC server communication with Informatica PowerCenter
- Registering Informatica Services in the DAC

4.5 Upgrading the Informatica Repository

Follow this procedure to upgrade the Informatica repository.

To upgrade the Informatica repository

1. Make sure you have backed up and renamed your current Informatica repository.

For instructions, see the Informatica documentation, which is included in the Informatica PowerCenter DVD provided with Oracle BI Applications.

Note: This repository must be upgraded during the procedure in Section 4.3, "Upgrading to Informatica PowerCenter Version 8.1.1, SP5." You must upgrade this repository to the version 8.1.1 format in order to move your custom folder from this repository into the new Oracle_ BI_DW_Base repository that you restore in the steps below.

 Copy the Oracle_BI_DW_Base.rep file from the folder OracleBI\dwrep\Informatica\Repository into the folder \Informatica\PowerCenter8.1.1\server\infa_shared\Backup.

Note: The Oracel_BI_DW_Base.rep file is installed in the OracleBI root directory when you run the Oracle BI Applications installer, as described in Section 4.2, "Upgrading Oracle BI Applications."

3. Restore the Oracle_BI_DW_Base.rep repository.

For instructions, see the *Informatica PowerCenter Installation and Configuration Guide*, which is included in the Informatica PowerCenter DVD provided with Oracle BI Applications.

- **4.** Copy the custom folder from your previous Informatica repository to the newly created Informatica repository:
 - **a.** Launch the Informatica PowerCenter Repository Manager, and connect to both your previous and newly created Informatica repositories.
 - **b.** Copy the Custom folder in your previous repository into the newly created Informatica repository.
 - **c.** Make sure there is an individual workflow for each of the mappings in the Custom folder.

4.6 Upgrading the DAC Repository

Before you begin this procedure, do the following:

- Determine what customizations were made to your existing DAC repository. Moving the customizations in your existing DAC repository into the new DAC repository is a manual process.
- Make sure you have renamed and backed up your existing DAC repository into a different database. When you backup the DAC repository, you export the DAC metadata, in XML format (using the DAC's Export tool), into a folder other than the standard DAC export folder where backups are stored (DAC\export). For instructions on exporting DAC metadata, see the *Oracle Business Intelligence Data Warehouse Administration Console Guide*.
- Create and configure a new DAC repository according to the instructions in *Oracle Business Intelligence Applications Fusion Edition Installation and Configuration Guide.*
- Make sure you have set up the DAC system properties, Informatica PowerCenter Services, and database connections according to the instructions in the Oracle Business Intelligence Applications Fusion Edition Installation and Configuration Guide.
- Make a copy of your preconfigured source system container. (You cannot change the metadata in the preconfigured container. You must make a copy of it in order to be able to modify the objects it contains.) For instructions, see the Oracle Business Intelligence Data Warehouse Administration Console Guide

In the procedure below you will manually move your customizations from your previous DAC repository into the new DAC repository.

To manually move your customizations from the previous DAC repository into the new DAC repository

- **1.** Open the copy of the source system container into which you want to move your customizations.
- **2.** Import the custom data warehouse tables:
 - **a.** Navigate to the Tables tab in the Design view.
 - **b.** Right-click and select Import from Database, and then click Import Database Tables.
 - **c.** In the Data Sources drop-down list, select DataWarehouse.
 - d. Click Read Tables.
 - **e.** Select the tables you want to import, and then click Import Tables.

- **3.** Import the custom columns for the tables you imported in Step 3:
 - **a.** In the Tables tab, query for the tables you imported in Step 3.
 - **b.** Right-click and select Import from Database, and then click Import Database Columns.
 - **c.** In the Importing Columns... dialog box, select "All records in the list," and click OK.
 - d. In the Data Sources drop-down list, select DataWarehouse.
 - e. Click Read Columns.
 - f. Select the columns you want to import, and then click Import Columns.
 - **g.** Navigate to the Tables tab, and then click the Columns child tab, and add the Foreign Key to Table and Foreign Key to Column attributes for the newly imported columns.
- 4. Import the indices for the custom data warehouse tables.
 - **a.** In the Tables tab, query for the tables you imported in Step 3.
 - b. Right-click and select Import Indices.
 - **c.** In the Importing Indices... dialog box, select "All records in the list," and click OK.
 - d. In the Data Sources drop-down list, select DataWarehouse.
 - e. Click Read Indices.
 - f. Select the indices you want to import, and then click Import Indices.
- **5.** Import the custom source tables:
 - **a.** Navigate to the Tables tab in the Design view.
 - **b.** Right-click and select Import from Database, and then click Import Database Tables.
 - c. In the Data Sources drop-down list, select the appropriate source.
 - d. Click Read Tables.
 - e. Select the tables you want to import, and then click Import Tables.

You do not have to import columns for the custom source tables. Columns for source tables are not required.

- **6.** Import columns for any standard data warehouse tables that were extended, and add the appropriate attributes in the DAC.
- 7. Create new custom logical and physical task folders.
 - **a.** In the DAC, from the Tools menu, select Seed Data, then select Task Folders.
 - b. To create a custom logical folder, click New.
 - **c.** In the Name field, enter a name for the custom logical folder, for example, Custom Logical.
 - **d.** In the Type field, select Logical.
 - e. To create a custom physical folder, click New.
 - f. In the Name field, enter a name for the custom physical folder, for example, Custom Physical.

- **g.** In the Type field, select Physical.
- 8. Register the folders you created in Step 8 in the Source System Folders tab.
 - **a.** In the Design view, select the Source System Folders tab.
 - **b.** Click New.
 - c. Enter the name of the Custom Logical folder in the Logical Folder field.
 - **d.** Enter the name of the Custom Physical folder in the Physical Folder field, and save the record.
- **9.** Modify the task attributes for workflows in the custom folder that are modified standard mappings, that is, standard (out-of-the-box) mappings from the previous release that you copied into the Informatica custom folder.
 - **a.** Navigate to the Tasks tab and query for the Informatica workflow names that are in the Informatica custom folder under Command for Incremental Load or Command for Full Load.

You must review the workflows in the custom folder in Informatica Workflow Manager.

- **b.** For each task, change the Folder Name (in the Edit child tab) to the Custom Logical folder name.
- c. For each task, right-click and select Synchronize Tasks.
- **d.** In the Task Synchronization dialog box, select Selected Record Only, and click OK.

This step adds source and target tables to the task.

e. Click Yes in the Synchronizing Task(s)... dialog box to proceed.

An informational message will indicate the results of the process.

- f. Click OK.
- **10.** Add tasks that were created as new tasks in the current implementation.
 - **a.** In the Design view, select the Tasks tab, and then select the Edit child tab.
 - **b.** For each new task, copy the names of the Informatica workflows into the fields Command for Incremental Load and Command for Full Load.
 - **c.** Assign the appropriate values for the remaining fields in the Edit child tab.
 - **d.** In the Tasks tab, query for the tasks you entered in Step b.
 - **e.** Right-click the list of query results, and in the Task Synchronization dialog box, select "All records in the list," and click OK.

This step adds source tables and target tables to the task.

f. Click Yes in the Synchronizing Task(s)... dialog box to proceed.

An informational message will indicate the results of the process.

g. Click OK.

Note: If your customizations included new fact tables, you will need to create and assemble new subject areas as well as create and build new execution plans. If your customizations included extending dimension tables, you will need to reassemble your existing subject areas and rebuild your existing execution plans. You will also need to set the appropriate execution plan attributes, such as Prune Days. For instructions, see *Oracle Business Intelligence Data Warehouse Administration Console Guide*.

4.7 Overview of Upgrading the Data Warehouse Schema and Migrating Data

The process for upgrading the data warehouse schema and migrating data for Siebel Business Analytics releases 7.7, 7.7.x, and 7.8.x involves multiple phases, as described below.

Phase 1

In phase 1, you will perform the following steps:

- 1. Upgrade the data warehouse schema to version 7.9.0. For instructions, see Section 4.8.
- **2.** Import new schema definitions into the Siebel transactional database. For instructions, see Section 4.9.
- **3.** Migrate data into the data warehouse upgraded to version 7.9.0. For instructions, see Section 4.10.
- Phase 2

In phase 2, you will upgrade your data warehouse schema to version 7.9.4 and migrate data into the upgraded data warehouse. For instructions, see Section 4.11.

Phase 3

In phase 3, you will upgrade your data warehouse schema to version 7.9.5 and migrate data into the upgraded data warehouse. For instructions, see Section 4.12.

Phase 4

In phase 4, you will upgrade your data warehouse schema to version 7.9.5.1. For instructions, see Section 4.13.

4.8 Upgrading the Data Warehouse Schema to Version 7.9.0

This procedure adds new tables, columns, and indexes to the existing data warehouse schema. It also modifies the existing data warehouse schema objects.

To upgrade the data warehouse schema

- **1.** Run the UPGRADE.ctl script.
 - **a.** Navigate to the folder OracleBI\dwrep\Upgrade\CTLFiles.
 - **b.** Use the DDLimp utility to run the UPGRADE.ctl script. Use the following command:

..\OracleBI\dwrep\bin\DDLIMP /U <USER> /P <PASSWORD> /C <ODBC connect string>

/G SSE_ROLE /I N /R Y /F <..\OracleBI\dwrep\UPGRADE.CTL> /L <..\oracleBI\dwrep\UPGRADE.log>

For example:

DDLIMP /U SADMIN /P SADMIN /C SIEBEL_OLAP /G SSE_ROLE /I N /R Y /F C:\OracleBI\dwrep\UPGRADE.CTL /L C:\OracleBI\dwrep\UPGRADE.log

Notes:

- * /P <PASSWORD> The password for the data warehouse.
- /C <ODBC connect string> The name of the ODBC connect string.
- * /I N Tells DDLimp to ignore the indexes DDL defined in the CTL file if any exist. It does not change existing indexes. (The default is /I Y, which tells DDLimp to create and merge indexes from the CTL file with the indexes in the database.
- * For Oracle databases, use the Data Direct drivers.

In addition, you can use the following commands:

- * /W Y If the OLAP database is Oracle and Unicode.
- * /ZY If the OLAP database is DB2 or SQL Server and Unicode.
- * /B <TABLE_SPACE_NAME> If you want to create these tables in a separate table space. For DB2, This must be specified as 32K tablespace.
- /X <INDEX_TABLE_SPACE_NAME> If you want to create the indexes in a separate tablespace. For DB2, This must be specified as 32K tablespace.
- * /Y Storage File for DB2/390.
- * /R Regrant tables.
- 2. Run the 790_UPGRADE_PRE_CTL_SCRIPT.sql script.
 - **a.** Open the SQL client for your database type, for example, SQLPLUS for Oracle, Query Analyzer for SQL Server, or a command window for DB2.
 - **b.** Navigate to the folder OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **c.** Open the 790_UPGRADE_PRE_CTL_SCRIPT.sql file, and copy the contents into the SQL client.
 - d. Execute the script.
- **3.** Run the DW.ctl script.
 - **a.** Navigate to the folder OracleBI\dwrep\Upgrade\CTLFiles.
 - **b.** Use the DDLimp utility to run the DW.ctl script.

Use the command provided in Step 1, but substitute the correct script name.

- 4. Run the 790_UPGRADE_PRE_DIMENSION_SCRIPT.sql script.
 - **a.** Open the SQL client for your database type.
 - **b.** Navigate to the folder OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **c.** Open the 790_UPGRADE_PRE_DIMENSION_SCRIPT.sql file, and copy the contents into the SQL client.

d. Execute the script.

4.9 Importing New Schema Definitions into the Siebel Transactional Database

This procedure upgrades transactional database objects that relate to Oracle Business Intelligence Applications. It does not upgrade transactional database objects for CRM applications.

To import new schema definitions into the Siebel transactional database

 Use the DDLimp utility to run the DDL_OLTP.ctl script that is located in the OracleBI\dwrep\Upgrade\CTLFiles folder.

4.9.1 Verifying the Siebel Transactional Database Upgrade

Follow this procedure to verify the following tables were created in the Siebel transactional database.

To verify the transactional database upgrade

- For all upgrade paths, verify the following tables were created in the Siebel transactional database:
 - S_ETL_R_IMG_1 through S_ETL_R_IMG_166
 - S_ETL_I_IMG_1 through S_ETL_I_IMG_166
 - S_ETL_D_IMG_1 through S_ETL_D_IMG_166
 - S_ETL_PARAM
 - S_ETL_PRD_ATTR
 - S_ETL_PRD_REL

4.10 Migrating Data into the Data Warehouse Upgraded to Version 7.9.0

Follow this procedure to migrate data into the upgraded data warehouse

To migrate data into the upgraded data warehouse

- Copy the file Upgrade.rep file from the folder OracleBI\dwrep\Upgrade\Informatica\Repository into the folder Informatica PowerCenter 8.1.1\server\infa_shared\Backup.
- 2. Launch the Informatica PowerCenter Administration Console and restore Upgrade.rep (located in Informatica PowerCenter 8.1.1\server\infa_ shared\Backup) into a database other than the database in which you restored Oracle_BI_DW_Base.rep.
- **3.** Navigate to the folder OracleBI\dwrep\Upgrade\Informatica\SrcFiles and copy the *.csv files into the SrcFiles folder on the Informatica Server machine, for example, C:\Program Files\Informatica PowerCenter 8.1.1\server\infa_shared\SrcFiles.
- 4. Navigate to the folder OracleBI\dwrep\Upgrade\Informatica\ParameterFiles and copy the file <previous version of Siebel Analytics>_TENERIFE_UPG_ PARAMS.txt into the SrcFiles folder on the Informatica Server machine, for example, C:\Program Files\Informatica PowerCenter 8.1.1\server\infa_ shared\SrcFiles.

- **5.** Rename the file <previous version of Siebel Analytics>_TENERIFE_UPG_ PARAMS.txt to TENERIFE_UPG_PARAMS.txt.
- **6.** In the file TENERIFE_UPG_PARAMS.txt:
 - **a.** Search for the parameter \$\$SourceConnection.
 - **b.** Set the value to match your Siebel applications (OLTP) version:
 - * SEBL_63
 - * SEBL_753
 - * SEBL_771
 - * SEBL_78
 - * SEBL_80 (use this value for OLTP versions 8.0 and 8.1)
 - * SEBL_VERT_753
 - * SEBL_VERT_771
 - * SEBL_VERT_78
 - * SEBL_VERT_80 (use this value for OLTP versions 8.0 and 8.1)

For example, if your Siebel applications (OLTP) version is Siebel Industry Applications 7.8, the parameter should appear as:

\$\$SourceConnection=SEBL_VERT_78

- 7. In the file TENERIFE_UPG_PARAMS.txt:
 - a. Search for the parameter \$\$Source_Container.
 - **b.** Set the value to match your Siebel applications (OLTP) version:
 - * Siebel 6.3
 - * Siebel 7.5.3
 - * Siebel 7.7.1
 - * Siebel 7.8
 - * Siebel 8.0
 - * Siebel 7.5.3 Vertical
 - * Siebel 7.7.1 Vertical
 - * Siebel 7.8 Vertical
 - * Siebel 8.0 Vertical

For example, if your Siebel applications (OLTP) version is Siebel Industry Applications 7.8, the parameter should appear as:

\$\$Source_Container=Siebel 7.8 Vertical

8. In the file TENERIFE_UPG_PARAMS.txt, edit the ETL_PROC_WID parameter as follows:

MPLT_GET_ETL_PROC_WID.\$\$ETL_PROC_WID=<latest ETL_PROC_WID value from your database>

You can get this value from W_PARAM_G.ETL_PROC_WID.

- **9.** If you are running Siebel Industry Applications (Vertical), in the file TENERIFE_UPG_PARAMS.txt, set the VERTICAL_UPGRADE parameter to 1. For example:
 - \$\$VERTICAL_UPGRADE=1
- **10.** In the Informatica Workflow Manager, open the Relational Connection Browser by selecting Connections from the toolbar, and then selecting Relational. Do the following.

Note: If you are connected to an Oracle database, use the Oracle Native driver instead of ODBC.

If you are connected to a SQL Server database, use the ODBC driver rather than the native SQL Server driver.

- Create a relational connection with the name PARAM_OLTP_SIEBEL to point to the Siebel transactional database.
- **b.** Create a relational connection with the name DataWarehouse to point to the newly upgraded data warehouse database.
- c. Create a relational connection with the name PARAM_DAC_OLD to point to the previous DAC repository database (the version from which you are upgrading).
- **d.** Create a relational connection with the name PARAM_DAC_NEW to point to the new DAC repository database (the version to which you are upgrading).
- **11.** If you are upgrading from Siebel Industry Applications (Vertical), define the alignment rule to be used for ETL loads.
 - **a.** Navigate to the folder OracleBI\dwrep\Upgrade\Informatica\SrcFiles and copy the file AlignmentType_LS_782.csv into the SrcFiles folder on the Informatica Server machine, for example, C:\Program Files\Informatica PowerCenter 8.1.1\server\infa_shared\SrcFiles.
 - **b.** Rename the file AlignmentType_LS_782.csv to AlignmentType.csv.
 - **c.** Open the file AlignmentType.csv, and enter one of the following alignment item types under the ALIGN_TYPE field:
 - * Zipcode
 - Account/Contact
 - 8 Brick
 - **d.** Save the file.

The Oracle Business Analytics Warehouse allows only one alignment type to be used for ETL loads during upgrade.

12. In Informatica Workflow Manager, navigate to the appropriate folder and execute the workflows in the order specified:

Application Version	Folder Name	Workflow
7.7 to 7.9	UPGRADE_770_to_79	 MARKETING_LOAD
		 Upgrade_Dimensions_Industry
		 Update_Dimensions
		 Update_Dimension_Unspecified
		 Update_Facts
		 Upgrade_LS_Dimensions
		 Upgrade_LS_Facts
		 SIL_PositionDimensionHierarchy_Full
		 Load_INT_ORG_DH
		 DIMENSION_LOAD
		Note: If you are using the SCD version of the dimension, replace the corresponding TENN_UPG_W_XXX_ D_784_To_W_XXX_D session with TENN_UPG_W_XXX_D_784_SCD_To_ W_XXX_D. This will upgrade the data from the W_XXX_SCD version of the dimension to the new SCD-enabled W_ XXX_D dimension.
		 DIMENSION_UNSPECIFIED_UPDATE
		 FACT_UPDATE
		 DAC_Metadata_Upgrade_Workflow
7.7.1.x to 7.9	UPGRADE_771_to_79	 Update_Dimensions
		 Update_Dimension_Unspecified
		 Update_Facts
		 Upgrade_LS_Dimensions
		 Upgrade_LS_Facts
		 SIL_PositionDimensionHierarchy_Full
		 Load_INT_ORG_DH
		 DIMENSION_LOAD
		Note: If you are using the SCD version of the dimension, replace the corresponding TENN_UPG_W_XXX_ D_784_To_W_XXX_D session with TENN_UPG_W_XXX_D_784_SCD_To_ W_XXX_D. This will upgrade the data from the W_XXX_SCD version of the dimension to the new SCD-enabled W_ XXX_D dimension.
		 DIMENSION_UNSPECIFIED_UPDATE
		■ FACT_UPDATE
		 DAC_Metadata_Upgrade_Workflow

Application Version	Folder Name	Workflow
7.8 to 7.9	UPGRADE_78_to_79	SIL_PositionDimensionHierarchy_Full
		 Load_INT_ORG_DH
		 DIMENSION_LOAD
		Note: If you are using the SCD version of the dimension, replace the corresponding TENN_UPG_W_XXX_ D_784_To_W_XXX_D session with TENN_UPG_W_XXX_D_784_SCD_To_ W_XXX_D. This will upgrade the data from W_XXX_SCD version of the dimension to the new SCD enabled W_ XXX_D dimension.
		DIMENSION_UNSPECIFIED_UPDATE
		■ FACT_UPDATE
		 DAC_Metadata_Upgrade_Workflow

- **13.** If you upgraded your transactional database to Siebel Applications 8.0 or 8.1, navigate to the folder UPGRADE_790_to_791_SBL80UPG and run the following workflows in the order indicated:
 - a. UPGRADE_DIMENSIONS
 - **b.** UPGRADE_FACTS
- **14.** Use the reset_infa_seq_gen.bat script to initialize the Informatica sequence generator for incremental runs on the main Informatica repository (Oracle_BI_DW_Base.rep).
 - **a.** Navigate to OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **b.** Open the reset_infa_seq_gen.bat file.

The file opens a command prompt, which will prompt you for the parameters listed below.

c. Enter the appropriate parameter values to reflect your environment (the parameters are database specific).

For Oracle databases:

Parameter	Setting
OLAP USERNAME	Enter the data warehouse database user ID
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database
INFORMATICA DB USERNAME	Enter the user ID of the main Informatica Repository database
INFORMATICA DB PASSWORD	Enter the password@connection string of the main Informatica Repository database
INFORMATICA REPOSITORY	Enter the name of the main Informatica Repository
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the main Informatica Repository

Parameter	Setting
INFORMATICA REPOSITORY PASSWORD	Enter the password for the main Informatica Repository
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value HOR for Horizontal Applications or VERT for Vertical Applications

For Microsoft SQL Server databases:

Parameter	Setting
OLAP_SERVER	Enter the name of the SQL Server for the OLAP database
OLAP DATABASE	Enter the name of the database on which OLAP data is available
OLAP USERNAME	Enter the user ID of the data warehouse database
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database
INFORMATICA SERVER ADDRESS	Enter the name of the SQL Server for the Informatica Repository database.
INFORMATICA DATABASE	Enter the name of the database on which the Informatica Repository metadata is available
INFORMATICA DB USERNAME	Enter the user ID of the main Informatica Repository database
INFORMATICA DB PASSWORD	Enter the password@connection string of the main Informatica Repository database
INFORMATICA REPOSITORY	Enter the name of the main Informatica Repository
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the main Informatica Repository
INFORMATICA REPOSITORY PASSWORD	Enter the password of the main Informatica Repository
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value HOR for Horizontal Applications or VERT for Vertical Applications

For IBM DB2 databases:

Parameter	Setting
OLAP USERNAME	Enter the user ID of the data warehouse database

Parameter	Setting
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database
INFORMATICA DB USERNAME	Enter the user ID of the Upgrade Informatica Repository database
INFORMATICA DB PASSWORD	Enter the password @connection string of the main Informatica Repository database
INFA DATABASE ALIAS	Enter the name of the database in which Informatica Repository metadata is available
INFORMATICA REPOSITORY	Enter the name of the main Informatica Repository
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the main Informatica Repository
INFORMATICA REPOSITORY PASSWORD	Enter the password for the Informatica Repository
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value HOR for Horizontal Applications or VERT for Vertical Applications

15. To verify the data migrated successfully:

- **a.** Check whether any of the Informatica mapping log files stored in the directory \Informatica PowerCenter 8.1.1\server\infa_shared\SessLogs indicates errors or failures.
- **b.** Check whether the SQL scripts (790_UPGRADE_PRE_CTL_SCRIPT.sql and 790_UPGRADE_PRE_DIMENSION_SCRIPT.sql) that you ran in the SQL client of the database failed or errored out while executing.
- **c.** Check the log files for the CTL files (Upgrade.ctl and DW.ctl) that you ran using the DDLimp command to determine whether any of the runs failed.

If you did not detect any errors or failures in the steps above, then the data migration was successful.

Note: Ignore any error messages that indicate tables or indexes could not be dropped from the database. These error messages are displayed when the specified objects do not exist in the database. This can occur because each source system container holds a subset of all data warehouse tables.

16. If the data migration was successful, drop the tables that were created during the upgrade process, such as, W_xxxx_x_784 tables, LKP_xxxx_x, and W_ASSET_D_TMP.

This step frees the space occupied by these backup tables.

4.11 Upgrading the Data Warehouse Schema to Versions 7.9.4 and Migrating Data

Follow this procedure to upgrade the data warehouse schema to version 7.9.4 and migrate data.

To upgrade the data warehouse schema and migrate data

- 1. Run the 792_UPGRADE_PRE_CTL_SCRIPT.sql script.
 - **a.** Open the SQL client for your database type, for example, SQLPLUS for Oracle, Query Analyzer for SQL Server, or a command window for DB2.
 - **b.** Navigate to the folder OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **c.** Open the 792_UPGRADE_PRE_CTL_SCRIPT.sql file, and copy the contents into the SQL client.
 - d. Execute the script.
- **2.** Use the DDLimp utility to run the ddl_794.ctl script, which is located in the OracleBI\dwrep\Upgrade\CTLFiles folder. Use the following command:

```
..\OracleBI\dwrep\bin\DDLIMP /U <USER> /P <PASSWORD> /C <ODBC connect string> /G SSE_ROLE /I N /R Y /F <..\OracleBI\dwrep\ddl_794.ctl> /L <..\oracleBI\dwrep\ddl_794.log>
```

For example:

```
DDLIMP /U SADMIN /P SADMIN /C OBIA /G SSE_ROLE
/I N /R Y /F C:\OracleBI\dwrep\ddl_794.ctl /L C:\OracleBI\dwrep\ddl_794.log
```

- **3.** Run the 792_UPGRADE_PRE_DIMENSION_SCRIPT.sql script.
 - **a.** Open the SQL client for your database type.
 - **b.** Navigate to the folder OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **c.** Open the 792_UPGRADE_PRE_DIMENSION_SCRIPT.sql file, and copy the contents into the SQL client.
 - **d.** Execute the script.
- **4.** If you upgraded your transactional database to Siebel Applications 8.0 or 8.1, run the workflows to migrate your data into the upgraded data warehouse.
 - **a.** In Informatica Workflow Manager, navigate to the folder UPGRADE_790_TO_ 791_SBL80UPG.
 - **b.** Run the following workflows in the order indicated:

UPGRADE_DIMENSIONS

UPGRADE_FACTS

- **5.** Verify the data migrated successfully by checking whether any of the Informatica mapping log files stored in the \Informatica PowerCenter 8.1.1\server\infa_ shared\SessLogs directory indicate errors or failures.
- **6.** If the data migration was successful, drop the tables that were created during the upgrade process, such as, W_xxxx_x_79x tables, LKP_xxxx_x and 79x_XXXX_TMP.

This step frees the space occupied by these backup tables.

- **7.** Use the reset_infa_seq_gen.bat script to initialize the Informatica sequence generator for incremental runs on the main Informatica repository (Oracle_BI_ DW_Base.rep).
 - **a.** Navigate to OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **b.** Open the reset_infa_seq_gen.bat file.

The file opens a command prompt, which will prompt you for the parameters listed below.

c. Enter the appropriate parameter values to reflect your environment (the parameters are database specific).

For Oracle databases:

Parameter	Setting
OLAP USERNAME	Enter the data warehouse database user ID
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database
INFORMATICA DB USERNAME	Enter the user ID of the main Informatica Repository database
INFORMATICA DB PASSWORD	Enter the password@connection string of the main Informatica Repository database
INFORMATICA REPOSITORY	Enter the name of the main Informatica Repository
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the main Informatica Repository
INFORMATICA REPOSITORY PASSWORD	Enter the password for the main Informatica Repository
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value HOR for Horizontal Applications or VERT for Vertical Applications

For Microsoft SQL Server databases:

Parameter	Setting
OLAP_SERVER	Enter the name of the SQL Server for the OLAP database
OLAP DATABASE	Enter the name of the database on which OLAP data is available
OLAP USERNAME	Enter the user ID of the data warehouse database
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database
INFORMATICA SERVER ADDRESS	Enter the name of the SQL Server for the Informatica Repository database.
INFORMATICA DATABASE	Enter the name of the database on which the Informatica Repository metadata is available

Parameter	Setting
INFORMATICA DB USERNAME	Enter the user ID of the main Informatica Repository database
INFORMATICA DB PASSWORD	Enter the password@connection string of the main Informatica Repository database
INFORMATICA REPOSITORY	Enter the name of the main Informatica Repository
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the main Informatica Repository
INFORMATICA REPOSITORY PASSWORD	Enter the password of the main Informatica Repository
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value HOR for Horizontal Applications or VERT for Vertical Applications

For IBM DB2 databases:

Parameter	Setting
OLAP USERNAME	Enter the user ID of the data warehouse database
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database
INFORMATICA DB USERNAME	Enter the user ID of the Upgrade Informatica Repository database
INFORMATICA DB PASSWORD	Enter the password @connection string of the main Informatica Repository database
INFA DATABASE ALIAS	Enter the name of the database in which Informatica Repository metadata is available
INFORMATICA REPOSITORY	Enter the name of the main Informatica Repository
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the main Informatica Repository
INFORMATICA REPOSITORY PASSWORD	Enter the password for the Informatica Repository
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value HOR for Horizontal Applications or VERT for Vertical Applications
4.12 Upgrading the Data Warehouse Schema to Version 7.9.5 and Migrating Data

Follow this procedure to upgrade the data warehouse schema to version 7.9.5 and migrate data.

To upgrade the data warehouse schema and migrate data

- 1. Use the reset_infa_seq_gen.bat script to initialize the Informatica sequence generator for incremental runs on the Upgrade repository.
 - a. Navigate to OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **b.** Open the reset_infa_seq_gen.bat file.

The file opens a command prompt, which will prompt you for the parameters listed below.

c. Enter the appropriate parameter values to reflect your environment (the parameters are database specific).

For Oracle databases:

Parameter	Setting	
OLAP USERNAME	Enter the data warehouse database user ID.	
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.	
INFORMATICA DB USERNAME	Enter the user ID of the Upgrade Informatica Repository database.	
INFORMATICA DB PASSWORD	Enter the password@connection string of the Upgrade Informatica Repository database	
	Repository database.	
INFORMATICA REPOSITORY	Enter the name of the Upgrade Informatica Repository.	
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the Upgrade Informatica Repository.	
INFORMATICA REPOSITORY PASSWORD	Enter the password for the Upgrade Informatica Repository.	
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.	
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.	
INFA_FOLDER	Enter the value UPGRADE.	

For Microsoft SQL Server databases:

Parameter	Setting
OLAP_SERVER	Enter the name of the SQL Server for the OLAP database.
OLAP DATABASE	Enter the name of the database on which OLAP data is available.
OLAP USERNAME	Enter the user ID of the data warehouse database.

Parameter	Setting
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.
INFORMATICA SERVER ADDRESS	Enter the name of the SQL Server for the Informatica Repository database.
INFORMATICA DATABASE	Enter the name of the database in which the Informatica Repository metadata is available.
INFORMATICA DB USERNAME	Enter the user ID of the Upgrade Informatica Repository database.
INFORMATICA DB PASSWORD	Enter the password @connection string of the Upgrade Informatica Repository database.
INFORMATICA REPOSITORY	Enter the name of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY PASSWORD	Enter the password of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value UPGRADE.

For IBM DB2 databases:

Parameter	Setting
OLAP USERNAME	Enter the user ID of the data warehouse database.
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.
INFORMATICA DB USERNAME	Enter the user ID of the Upgrade Informatica Repository database.
INFORMATICA DB PASSWORD	Enter the password @connection string of the Upgrade Informatica Repository database.
INFA DATABASE ALIAS	Enter the name of the database in which Informatica Repository metadata is available.
INFORMATICA REPOSITORY	Enter the name of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY PASSWORD	Enter the password for the Informatica Repository.

	A
Parameter	Setting
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value UPGRADE.

- 2. Run the 795_UPGRADE_PRE_CTL_SCRIPT.sql script.
 - **a.** Open the SQL client for your database type, for example, SQLPLUS for Oracle, Query Analyzer for SQL Server, or a command window for DB2.
 - **b.** Navigate to the folder OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **c.** Open the 795_UPGRADE_PRE_CTL_SCRIPT.sql file, and copy the contents into the SQL client.
 - d. Execute the script.
- **3.** Run the UPGRADE_795.ctl script.

This script adds temp tables for the upgrade process.

- a. Navigate to the folder OracleBI\dwrep\Upgrade\CTLFiles.
- **b.** Use the DDLimp utility to run the UPGRADE_795.ctl script. Use the following command:

..\OracleBI\dwrep\bin\DDLIMP /U <USER> /P <PASSWORD> /C <ODBC connect string> /G SSE_ROLE /I N /R Y /F <..\OracleBI\dwrep\UPGRADE_795.CTL> /L <..\oracleBI\dwrep\UPGRADE.log>

For example:

DDLIMP /U SADMIN /P SADMIN /C OBIA /G SSE_ROLE /I N /R Y /F C:\OracleBI\dwrep\UPGRADE_795.CTL /L C:\OracleBI\dwrep\UPGRADE.log

Notes:

- * /P <PASSWORD> The password for the data warehouse.
- * /C <ODBC connect string> The name of the ODBC connect string.
- * /I N Tells DDLimp to ignore the indexes DDL defined in the CTL file if any exist. It does not change existing indexes. (The default is /I Y, which tells DDLimp to create and merge indexes from the CTL file with the indexes in the database.
- * For Oracle databases, use the Data Direct drivers.

In addition, you can use the following commands:

- * /W Y If the OLAP database is Oracle and Unicode.
- * /Z Y If the OLAP database is DB2 or SQL Server and Unicode.
- /B <TABLE_SPACE_NAME> If you want to create these tables in a separate table space. For DB2, This must be specified as 32K tablespace.

- /X <INDEX_TABLE_SPACE_NAME> If you want to create the indexes in a separate tablespace. For DB2, This must be specified as 32K tablespace.
- * /Y Storage File for DB2/390.
 - /R Regrant tables.
- **4.** Use the DDLimp utility to run the ddl_795.ctl script, which is located in the OracleBI\dwrep\Upgrade\CTLFiles folder. Use the following command:

```
..\OracleBI\dwrep\bin\DDLIMP /U <USER> /P <PASSWORD> /C <ODBC connect string> /G SSE_ROLE /I N /R Y /F <..\OracleBI\dwrep\ddl_795.ctl> /L <..\oracleBI\dwrep\ddl_795.log>
```

For example:

```
DDLIMP /U SADMIN /P SADMIN /C OBIA /G SSE_ROLE
/I N /R Y /F C:\OracleBI\dwrep\ddl_795.ctl /L C:\OracleBI\dwrep\ddl_795.log
```

- 5. Run the 795_UPGRADE_PRE_DIMENSION_SCRIPT.sql script.
 - a. Open the SQL client for your database type.
 - **b.** Navigate to the folder OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **c.** Open the 795_UPGRADE_PRE_DIMENSION_SCRIPT.sql file, and copy the contents into the SQL client.
 - **d.** Execute the script.
- Copy all of the domain value files in the folder \OracleBI\dwrep\Informatica\LkpFiles into the folder \Informatica PowerCenter 8.1.1\server\infa_shared\LkpFiles.
- 7. Migrate data into the upgraded data warehouse.
 - a. Copy the file Upgrade.rep file from the folder OracleBI\dwrep\Upgrade\Informatica\Repository into the folder Informatica PowerCenter 8.1.1\server\infa_shared\Backup.
 - **b.** Launch the Informatica PowerCenter Administration Console and restore Upgrade.rep (located in Informatica PowerCenter 8.1.1\server\infa_shared\Backup).
 - **c.** Navigate to the folder OracleBI\dwrep\Upgrade\Informatica\ParameterFiles and copy the file 795_UPG_PARAMS.txt into the SrcFiles folder on the Informatica Server machine, for example, C:\Program Files\Informatica PowerCenter 8.1.1\server\infa_shared\SrcFiles.
 - **d.** Set the parameter \$\$ETL_PROC_WID to the latest ETL_PROC_WID value from the database. You can get this value from W_PARAM_G.ETL_PROC_WID.
 - **e.** Set the parameter \$\$DATASOURCE_NUM_ID to the relevant value from the adapter setup.
 - f. In Informatica Workflow Manager, open the Relational Connection Browser (in the menu bar, select Connections, and then select Relational), and create one relational connection based on the appropriate database platform for your OLTP database. Create the connection with the name PARAM_OLTP.

Note: If you are connected to an Oracle database, use the Oracle Native driver instead of ODBC.

If you are connected to a SQL Server database, use the ODBC driver rather than the native SQL Server driver.

g. In Informatica Workflow Manager, open the Relational Connection Browser (in the menu bar, select Connections, and then select Relational), and create one relational connection based on the appropriate database platform for your OLAP database. Create the connection with the name PARAM_OLAP.

Note: If you are connected to an Oracle database, use the Oracle Native driver instead of ODBC.

If you are connected to a SQL Server database, use the ODBC driver rather than the native SQL Server driver.

- **h.** In Informatica Workflow Manager, navigate to the folder UPGRADE_794_to_ 795_SBL and execute the UPGRADE_DIMENSIONS workflow.
- 8. Verify the data migrated successfully.
 - **a.** Check whether any of the Informatica mapping log files stored in the \Informatica PowerCenter 8.1.1\serva\infa_shared\Sesslogs directory indicates errors or failures.
 - **b.** Check whether the script 795_UPGRADE_PRE_DIMENSION_SCRIPT.sql that you ran in the SQL client of the database failed or errored out while executing.
 - **c.** Check the log file for the script Upgrade_795.ctl that you ran using the DDLimp command to determine whether any of the runs failed.

If you did not detect any errors or failures in the steps above, then the data migration was successful.

Note: Ignore any error messages that indicate tables or indexes could not be dropped from the database. These error messages are displayed when the specified objects do not exist in the database. This can occur because each source system container holds a subset of all data warehouse tables

9. If the data migration was successful, drop the tables that were created during the upgrade process, such as W_xxxx_x_79x, LKP_xxxx_x and 79x_xxxx_TMP.

This step frees the space occupied by these backup tables.

- **10.** Once the data migration steps above are complete, you can delete the Upgrade repository to avoid any accidental use or confusion.
 - **a.** In the Informatica PowerCenter Administration Console, select the Upgrade repository service.
 - **b.** In the General Properties area of the Properties tab, click Edit .
 - **c.** Make sure the operating mode of the repository service is set to Exclusive.
 - d. Click OK.

- e. Choose Actions, and then click Delete Contents.
- f. In the Delete contents for <repository name> dialog, enter the repository username and password (for example, Administrator/Administrator), then click OK.
- **11.** Use the reset_infa_seq_gen.bat script to initialize the Informatica sequence generator for incremental runs on the main Informatica repository (Oracle_BI_DW_Base.rep).
 - **a.** Navigate to OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **b.** Open the reset_infa_seq_gen.bat file.

The file opens a command prompt, which will prompt you for the parameters listed below.

c. Enter the appropriate parameter values to reflect your environment (the parameters are database specific).

For Oracle databases:

Parameter	Setting
OLAP USERNAME	Enter the data warehouse database user ID.
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.
INFORMATICA DB USERNAME	Enter the user ID of the main Informatica Repository database.
INFORMATICA DB	Enter the password@connection string of the main Informatica
PASSWORD	Repository database.
INFORMATICA REPOSITORY	Enter the name of the main Informatica Repository.
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the main Informatica Repository.
INFORMATICA REPOSITORY PASSWORD	Enter the password for the main Informatica Repository.
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value HOR.

For Microsoft SQL Server databases:

Parameter	Setting
OLAP_SERVER	Enter the name of the SQL Server for the OLAP database.
OLAP DATABASE	Enter the name of the database on which OLAP data is available.
OLAP USERNAME	Enter the user ID of the data warehouse database.
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.

Parameter	Setting
INFORMATICA SERVER ADDRESS	Enter the name of the SQL Server for the Informatica Repository database.
INFORMATICA DATABASE	Enter the name of the database on which the Informatica Repository metadata is available.
INFORMATICA DB USERNAME	Enter the user ID of the main Informatica Repository database.
INFORMATICA DB PASSWORD	Enter the password@connection string of the main Informatica Repository database.
INFORMATICA REPOSITORY	Enter the name of the main Informatica Repository.
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the main Informatica Repository.
INFORMATICA REPOSITORY PASSWORD	Enter the password of the main Informatica Repository.
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value HOR.

For IBM DB2 databases:

Parameter	Setting
OLAP USERNAME	Enter the user ID of the data warehouse database.
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.
INFORMATICA DB USERNAME	Enter the user ID of the Upgrade Informatica Repository database.
INFORMATICA DB PASSWORD	Enter the password @connection string of the main Informatica Repository database.
INFA DATABASE ALIAS	Enter the name of the database in which Informatica Repository metadata is available.
INFORMATICA REPOSITORY	Enter the name of the main Informatica Repository.
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the main Informatica Repository.
INFORMATICA REPOSITORY PASSWORD	Enter the password for the Informatica Repository.
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.

Parameter	Setting
INFA_FOLDER	Enter the value HOR.

4.13 Upgrading the Data Warehouse Schema to Version 7.9.5.1

Follow this procedure to upgrade the data warehouse schema to version 7.9.5.1.

To upgrade the data warehouse schema

 Use the DDLimp utility to run the ddl_7951.ctl script, which is located in the OracleBI\dwrep\Upgrade\CTLFiles folder. Use the following command:

```
..\OracleBI\dwrep\bin\DDLIMP /U <USER> /P <PASSWORD> /C <ODBC connect string>
/G SSE_ROLE /I N /R Y /F <..\OracleBI\dwrep\ddl_7951.ctl>
/L <..\oracleBI\dwrep\ddl_7951.log>
```

For example:

```
DDLIMP /U SADMIN /P SADMIN /C OBIA /G SSE_ROLE
/I N /R Y /F C:\OracleBI\dwrep\ddl_7951.ctl /L C:\OracleBI\dwrep\ddl_7951.log
```

4.14 Upgrading the Siebel Analytics Repository

This process merges your customizations of a prior release of the Siebel Analytics repository with the new version of the Oracle BI repository. Before you begin this process, make sure you have backed up and renamed your existing repository.

To upgrade the repository, perform the following tasks:

- Section 4.14.1, "Preparing for the Oracle BI Repository Upgrade"
- Section 4.14.2, "Equalizing the Oracle BI Repositories"
- Section 4.14.3, "Comparing the Siebel Analytics and Oracle BI Repositories"
- Section 4.14.4, "Merging the Siebel Analytics and Oracle BI Repositories"
- Section 4.14.5, "Regression Testing the Oracle BI Repository Merge"

The tasks in this section refer to multiple versions of the Siebel Analytics and Oracle BI repositories. Table 4–1 provides the names and descriptions of the repositories used in the examples in this section.

Name of Repository	Description
SiebelAnalytics_7x.rpd	The standard Siebel Analytics repository for the version you are upgrading from. This repository is referred to as the "original" repository in the examples in this section.
	Note: Standard repositories from previous releases are available in the folder \OracleBI\Upgrade.
OracleBIAnalyticsApps.rpd	The standard Oracle BI repository for the version you are upgrading to.
Customer_SiebelAnalytics.rpd	The Siebel Analytics repository that contains your customizations for the version you are upgrading from.
Merged_Repository_OracleBI.rpd	The Oracle BI repository that contains your customizations for the version you are upgrading to.

Table 4–1 Names of Analytics Repositories used in Examples

4.14.1 Preparing for the Oracle BI Repository Upgrade

Follow this procedure to prepare for the repository upgrade.

To prepare for the Analytics repository upgrade

- **1.** Set up a directory for the merge process, such as \OracleBIUpgrade, and create the following subfolders:
 - Original
 - AfterEqualize
 - AfterMerge
 - AfterManualWork
 - AfterRegressions
- 2. Copy the original repository (for example, SiebelAnalytics_7x.rpd), the production repository (for example, Customer_SiebelAnalytics.rpd, and the repository from the latest installation (for example, OracleBIAnalyticsApps.rpd) into the folder \OracleBIUpgrade\Original.

If, in your current environment, you are running Siebel Analytics for one or more modules using a Siebel Analytics repository in which you extracted the corresponding projects for the modules from the standard Siebel Analytics repository file you received from the previous release, you need to extract the same projects from the SiebelAnalytics_7x.rpd file and use this as your original repository. (If you have the original repository file.) This will prevent you from losing any new metadata you would like to add in this upgrade.

Also, if you customized the Siebel Analytics repository by trimming a large number of objects and you would like to get those objects back during the current upgrade, you need to trim the SiebelAnalytics_7x.rpd file in the same way and use the modified version as the original repository file. This will prevent you from losing any new metadata you would like to add in this upgrade.

4.14.2 Equalizing the Oracle BI Repositories

The Merge feature in the Administration Tool relies on a change detection algorithm to determine the changes that need to be made to upgrade repositories correctly. For the algorithm to work correctly, it has to determine which objects in the three repositories (for example, SiebelAnalytics_7x.rpd, OracleBIAnalyticsApps.rpd, and Customer_SiebelAnalytics.rpd) are equivalent.

The point of this step is to determine for every object in the OracleBIAnalyticsApps.rpd and the Customer_SiebelAnalytics.rpd whether it is coming from the SiebelAnalytics_7x.rpd.

Equivalence between objects is established using the Administration Tool's Equalize feature. The file that you specify in the Output option (-0) is the only file that is modified during the equalization process.

The Equalize feature has several mechanisms for determining whether an object in two different repositories is semantically the same:

 Fully Qualified Name. If an object in one repository has the same fully qualified name as another object of the same class in another repository, then the two objects are declared equal.

- Simple String Substitution. Equivalence can be declared between two objects of the same class in two repositories whose only difference is that some key characters in their names differ. The equalizerpds executable file ignores those characters while checking fully qualified names. For example, "Core"."W_DAY_D" might be considered equivalent to "Core"."W DAY D" if the characters "_" and " " have been declared as equivalent.
- Rename File. When none of the preceding rules are applicable, equivalence can be manually declared using a script as input to the equalizerpds executable file. Oracle ships the rename files (MAP) for the major releases. The files are located in the OracleBI\Upgrade folder. You can also create your own rename files for customizations not covered in the files that Oracle ships. You can open and edit the rename files in Microsoft Excel.

The syntax of the equalizerpds command is as follows:

```
equalizerpds.exe -A userid1 [-B [password1]] -C base_repository_name -D userid2
[-E [password2]] -F repository2_name [-J udml_utf8_file_name_equalization] [-0
ouput_repository_name] [-X] [-Y equalStringSet]
-X Treat 'Factxxxx' as 'Fact' in Business Model.
-Y Treat the characters as equals.
/? Display this usage information and exit.
```

To equalize a repository

- Copy the appropriate MAP file from the OracleBI\Upgrade folder into the folder where you will execute equalizerpds.exe, for example, \OracleBIUpgrade\Original.
- **2.** Run equalizerpds.exe to equalize the repository from the latest installation (for example, OracleBIAnalyticsApps.rpd) with the original repository (for example, SiebelAnalytics_7x.rpd). An example of the equalizerpds command is as follows:

```
equalizerpds -A Administrator -B SADMIN
-C \\OracleBIUpgrade\Original\SiebelAnalytics_7x.rpd
-D Administrator -E SADMIN
-F \\OracleBIUpgrade\Original\OracleBIAnalyticsApps.rpd
-O \\OracleBIAnalyticsUpgrade\AfterEqualize\OracleBIAnalyticsApps.rpd
-X -J rename7x-79.map
```

The MAP files are located in the \OracleBI\Upgrade folder.

If the equalizerpds.exe executable file runs correctly, no errors are returned.

3. Run equalizerpds.exe to equalize your customized repository (for example, Customer_SiebelAnalytics.rpd) with the original repository (for example, SiebelAnalytics_7x.rpd). An example of the equalizerpds command is as follows:

```
equalizerpds -A Administrator -B SADMIN
-C \\OracleBIUpgrade\Original\SiebelAnalytics_7x.rpd
-D Administrator -E SADMIN
-F \\OracleBIUpgrade\Original\Customer_SiebelAnalytics.rpd
-O \\OracleBIUpgrade\AfterEqualize\Customer_OracleBIAnalyticsApps.rpd
```

The execution of equalizerpds that equalizes the customer repository with the original repository does not use the rename file.

Make sure that the original repository is copied unchanged into its new location so that after running the script, all three repositories are contained within the \OracleBIUpgrade\AfterEqualize directory.

4. To verify the process completed successfully, compare the size of the repositories. The output repository (-O) should be close to the same size as the repository you equalized (-F).

4.14.3 Comparing the Siebel Analytics and Oracle BI Repositories

Follow this procedure to compare your existing repository with the new version to which you are upgrading.

To compare the repositories

 Use the Administration Tool's Compare Repositories feature to analyze the differences between your existing repository and the new version of the repository to which you are upgrading. Note where elements have been created, removed, or changed in the new version. Consider whether you can use the new metadata and retire customizations you made in the existing repository.

For instructions on how to use the Administration Tool's Compare Repositories feature, see *Oracle Business Intelligence Server Administration Guide*.

4.14.4 Merging the Siebel Analytics and Oracle BI Repositories

In this procedure, you execute the main algorithm to upgrade the repository. For more information on merging the repositories, see *Oracle Business Intelligence Server Administration Guide*.

To merge versions of the repositories

- Copy the three repositories (for example, SiebelAnalytics_7x.rpd, OracleBIAnalyticsApps.rpd, and Customer_SiebelAnalytics.rpd) to the AfterMerge folder.
- **2.** Open the repository from the latest installation (for example, OracleBIAnalyticsApps.rpd) in the \OracleBIUpgrade\AfterMerge folder.
- **3.** Save the repository with a new name, for example, Merged_Repository_ OracleBIAnalyticsApps.rpd.

This new repository will contain the final results of the upgrade.

- 4. From the Administration Tool menu bar, select File, then select Merge.
- **5.** In the Select Original Repository dialog box, select the original repository (for example, SiebelAnalytics_7x.rpd).
- 6. Enter the password, and click OK.
- 7. Click Select for the Modified Repository field.
- **8.** In the Select Modified Repository dialog box, select the repository that contains the customizations you made to the previous version of the Analytics repository.
- **9.** Click Open, type the password, and then click OK.
- **10.** In the Decision drop-down list, select the action you want to take regarding the repository change, or accept the default action.
- **11.** To locate subsequent rows with empty Decision fields, click the Decision header cell.

When all rows have a value in the Decision field, the Merge button is enabled.

12. Click Merge.

This process can take up to 40 minutes, depending on the size of the repositories you are working with. A message will alert you when the merge is complete.

13. Click Yes when asked if you want to run a consistency check.

The number of errors returned by the consistency check is an indication of how successful the merge process was. If you receive many errors, for example, over 300, you should analyze the reason for the errors. If the merge process failed to recognize that two objects are the same, you may need to edit the rename file if the object is in the Current repository, or add your own rename file if you have renamed many of the objects and the upgrade engine failed to relate them to the original objects.

You also may need to change the actions you selected in the Decision drop-down list before rerunning the merge. This could save you time by reducing the number of errors that you will need to fix manually.

Once you are satisfied with the results of the merge, you should fix the remaining errors manually. It is important that you fix all errors before moving on to the next step. This repository serves as the input for the next stage.

You should also check that all of your customized objects are present and that no duplicate physical tables were introduced. To check for duplicate tables, search for physical tables using a query such as:

where name like '*#1'

14. Copy the repository to the folder \OracleBIUpgrade\AfterManualWork.

4.14.5 Regression Testing the Oracle BI Repository Merge

In performing a regression test for the repository merge, the objective is to collect a set of logical SQL statements that are used for reports and to verify that they continue to work with the new metadata. For this purpose, it is recommended that you perform the following procedure.

To perform regression testing

- 1. Run the reports that are necessary to include in the regression suite. These reports might be a subset of the reports in the Presentation Catalog.
- **2.** Collect the logical SQL generated in the previous step. You can do this using Usage Tracking or by parsing the query log file.

For information about Usage Tracking, see *Oracle Business Intelligence Server Administration Guide*.

3. Execute the logical SQL against the old repository using the command line utility nQCmd.exe located in \OracleBI\server\bin, and save the results to a file.

For information about the nQCmd.exe utility, see *Oracle Business Intelligence Server Administration Guide*.

- **4.** Edit the logical SQL test scripts to account for the name changes or modifications resulting from the upgrade.
- 5. Execute the edited logical SQL against the merged repository, and save the results.
- **6.** Compare the results from the steps above and try to explain the differences. If it is determined that these differences are due to the upgrade process, then you have to correct them manually.

This repository now contains the merged content from the new OracleBIAnalyticsApps.rpd and the production repository.

4.15 Upgrading the Oracle BI Presentation Catalog

You will need to upgrade your current Oracle BI Presentation Catalog if your organization:

- Has prebuilt applications already installed, and
- Has customized the current Oracle BI Presentation Catalog

If you made no changes to the previous Presentation Catalog distributed with previous versions of prebuilt applications, you do not need to upgrade the catalog. You can begin using the newer version of the catalog.

This process includes the following tasks:

- Section 4.15.2, "Upgrading the Oracle BI Presentation Catalog to a Newer Version"
- Section 4.15.3, "Testing the Results of the Presentation Catalog Upgrade"

Caution: In releases of Oracle BI Applications previous to 7.9, the Presentation Catalog (formerly known as the Siebel Analytics Web Catalog) was stored in a single file rather than in a directory structure of individual files. If you have a previous version of the Presentation Catalog, you will need to convert it to the new format. For more information about how to convert the Presentation Catalog to the new format, see the *Oracle Business Intelligence Infrastructure Upgrade Guide*

4.15.1 Trimming the Input Presentation Catalog

Before you upgrade and merge your current Presentation Catalog with the new Presentation Catalog, determine which of the existing content you want to keep and which new content you want to incorporate. Review your existing Presentation Catalog and determine the usage patterns of reports and dashboards. Note that some of the preconfigured content in the existing catalog may appear in the new version in a redesigned format. In addition, the new version includes completely new content. After you have decided the content that is to make up your enterprise Presentation Catalog, trim the input catalogs using the Catalog Manager. For information on trimming catalogs, see *Oracle Business Intelligence Presentation Services Administration Guide*.

4.15.2 Upgrading the Oracle BI Presentation Catalog to a Newer Version

The Presentation Catalog upgrade process makes use of three catalogs:

- The *original* Presentation Catalog. This is the unmodified Presentation Catalog that you received with the Oracle BI Applications release that you are upgrading from.
- The *new* Presentation Catalog. This is the Presentation Catalog that is installed in the OracleBIData\web\catalog folder with the installation of Oracle BI Applications.
- The *current* Presentation Catalog. This is the Presentation Catalog currently in use at your organization.

You use Catalog Manager for this upgrade process. Catalog Manager compares the content in both the *Current* Presentation Catalog and the *Modified* Presentation Catalog

with the content in the Original Presentation Catalog, merges any changes into the *Current* Presentation Catalog, and produces a list of upgrade differences, which you must resolve by indicating how you want the differences handled. If the catalogs have conflicting content, you can choose which catalog the content should be taken from. The end result is a merged Presentation Catalog that contains the site-specific changes, as well as new metadata.

To upgrade your Presentation Catalog to a newer version

- 1. Make a backup copy of the current Presentation Catalog, rename the folder <catalogname>_old, and move it to a temporary location.
- **2.** Copy the original Presentation Catalog into the folder that holds your current Presentation Catalog and rename it <catalogname>_Original.
- **3.** Start Catalog Manager and open the new Presentation Catalog in offline mode.
- 4. Select Tools, then select Upgrade Catalog.
- **5.** In the original Presentation Catalog field, browse to locate the original Presentation Catalog.
- **6.** In the Current Presentation Catalog field, browse to locate your current Web Catalog, <catalogname>_old.
- 7. Click OK.
- 8. Resolve any upgrade differences as follows:
 - a. Review each unresolved difference in the Unresolved differences list.
 - **b.** For each unresolved difference, select the version that you want to keep.
 - c. Click OK.

The log file SiebelAnalyticsMigrationLog.txt holds information about the merge process. This log file is written to \OracleBI\web\catalogmanager. If you get an error logged in the file, this means that the path in question had a problem that did not allow the merge mechanism to resolve the merge. No action was taken. To merge that particular item, go into your original Presentation Catalog and merge it manually.

- **9.** Review the upgraded Presentation Catalog, and, if necessary, set permissions for objects.
- 10. Save the new Presentation Catalog.

4.15.3 Testing the Results of the Presentation Catalog Upgrade

Note: Before you perform this step, you must first migrate the data into the upgraded data warehouse.

The Presentation Catalog upgrade functionality does not automatically carry over object permissions; therefore, you should review the Presentation Catalog object permissions before you perform this step.

This step ensures that the upgraded reports and the new preconfigured reports are functional and render correct results within the new, merged Presentation Catalog. This step is typically performed by visually inspecting the final results of the complete end-to-end upgrade process.

For upgraded reports, the preferred approach for comparison purposes is to have side-by-side environments, and have users review specific dashboard content between the two environments. Examine not only the look and feel of the application but also the data contained in the reports to make sure the content remains the same. It is recommended that you request users to use various elements of the user interface to validate results, such as global prompts, column selectors, report filters, drills, and navigations, as they normally do on a day-to-day basis.

Also review the overall visibility and administrative settings in the new Presentation Catalog to ensure they are correct. Pay careful attention to the visibility rules that are established for any content that was migrated during the upgrade. You might have to manually adjust these settings.

Upgrading Oracle BI Applications 7.9.x for the Siebel Adapter

This section contains instructions for upgrading Oracle BI Applications releases 7.9.0, 7.9.1, 7.9.2, 7.9.3, and 7.9.4 when you are running Siebel CRM Applications as your source system.

This section includes the following topics:

- Section 5.1, "Upgrading Oracle BI Infrastructure"
- Section 5.2, "Upgrading Oracle BI Applications"
- Section 5.3, "Upgrading to Informatica PowerCenter Release 8.1.1, SP5"
- Section 5.4, "Configuring Informatica PowerCenter Release 8.1.1, SP5 to Work with the DAC"
- Section 5.5, "Upgrading the Informatica Repository"
- Section 5.6, "Upgrading the DAC Repository"
- Section 5.7, "Upgrading the Data Warehouse Schema and Migrating Data"
- Section 5.8, "Upgrading the Oracle BI Repository"
- Section 5.9, "Upgrading the Oracle BI Presentation Catalog"

5.1 Upgrading Oracle BI Infrastructure

Upgrade the Oracle BI Infrastructure to the version that is supported for this release of Oracle BI Applications. See the *System Requirements and Supported Platforms for Oracle Business Intelligence Applications Fusion Edition* for the current version that is supported. For information on installing the supported version of Oracle BI Infrastructure, see the *Oracle Business Intelligence Infrastructure Upgrade Guide*.

5.2 Upgrading Oracle BI Applications

Run the Oracle BI Applications installer to upgrade your Oracle BI Applications environment to the current version. For instructions on running the installer, see the *Oracle Business Intelligence Applications Fusion Edition Installation and Configuration Guide*.

Note: Perform only the step that addresses the running of the installer. Do not perform the configuration instructions that follow the running of the installer.

Note: If you have a previous release of Oracle BI Applications installed, you must uninstall it before you run the installer for the current release. If you do not uninstall the old release, some folders from the current release will not be correctly installed. (Make a back-up of your DAC folder before you uninstall the old release.)

5.3 Upgrading to Informatica PowerCenter Release 8.1.1, SP5

The current release of Oracle BI Applications supports Informatica PowerCenter 8.1.1, Service Pack 5 (SP5). You must install both Informatica PowerCenter 8.1.1 and SP5 to run the current release of Oracle BI Applications.

The components and architecture for Informatica PowerCenter 8.1.1 differ significantly from Informatica PowerCenter 7.x. Oracle recommends that you carefully review the Informatica documentation. The Informatica PowerCenter 8.1.1 SP5 documentation is included in the Informatica PowerCenter DVD provided with Oracle BI Applications.

For a summary of installation instructions for installing Informatica PowerCenter 8.1.1 and SP5 on a single machine in an Oracle BI Applications deployment, see the *Oracle Business Intelligence Applications Fusion Edition Installation and Configuration Guide*. For instructions on configuring Informatica PowerCenter components for use with Oracle BI Applications, see the section in the *Oracle Business Intelligence Applications Fusion Edition Installation and Configuration Fusion Edition Installation and Configuration Guide*. For one with Oracle BI Applications, see the section in the *Oracle Business Intelligence Applications Fusion Edition Installation and Configuration Guide* that covers configuring Informatica PowerCenter components.

For detailed information about deploying Informatica 8.1.1, refer to the *Informatica PowerCenter Installation and Configuration Guide*, and related documentation.

To upgrade to Informatica PowerCenter Release 8.1.1, SP5

- **1.** Perform the pre-upgrade steps documented in the *Informatica PowerCenter Installation and Configuration Guide*.
- **2.** Install Informatica PowerCenter Release 8.1.1 and SP5, following the instructions in the *Informatica PowerCenter Installation and Configuration Guide*.
- **3.** Perform the post-upgrade steps documented in the *Informatica PowerCenter Installation and Configuration Guide*.

Note: The Informatica PowerCenter 8.1.1 installation process includes upgrading your current Informatica repository to the release 8.1.1 format. This process is necessary so that you will be able to access your current repository using release 8.1.1 client tools so that you can perform the procedure Section 5.5, "Upgrading the Informatica Repository."

In Section 5.5, "Upgrading the Informatica Repository" you back up and rename your current repository and then restore the Informatica repository (Oracle_BI_DW_Base.rep) that is installed during the Oracle BI Applications installation. You then copy your custom folder from the backed up repository into the newly restored Oracle_BI_ DW_Base repository.

5.4 Configuring Informatica PowerCenter Release 8.1.1, SP5 to Work with the DAC

Informatica PowerCenter version 8.1.1, SP5 requires additional configuration steps in order to work with the DAC. For instructions on performing these steps, see the following sections in the *Oracle Business Intelligence Applications Fusion Edition Installation and Configuration Guide.*

- Enabling DAC client communication with Informatica PowerCenter
- Enabling DAC server communication with Informatica PowerCenter
- Registering Informatica Services in the DAC

5.5 Upgrading the Informatica Repository

Follow this procedure to upgrade the Informatica repository.

To upgrade the Informatica repository

1. Make sure you have backed up and renamed your current Informatica repository.

For instructions, see the Informatica documentation, which is included in the Informatica PowerCenter DVD provided with Oracle BI Applications.

Note: This repository must be upgraded during the procedure in Section 5.3, "Upgrading to Informatica PowerCenter Release 8.1.1, SP5." You must upgrade this repository to the release 8.1.1 format in order to move your custom folder from this repository into the new Oracle_BI_DW_Base repository that you restore in the steps below.

 Copy the Oracle_BI_DW_Base.rep file from the folder OracleBI\dwrep\Informatica\Repository into the folder \Informatica\PowerCenter8.1.1\server\infa_shared\Backup.

Note: The Oracel_BI_DW_Base.rep file is installed in the OracleBI root directory when you run the Oracle BI Applications installer, as described in Section 5.2, "Upgrading Oracle BI Applications."

3. Restore the Oracle_BI_DW_Base.rep repository.

For instructions, see the *Informatica PowerCenter Installation and Configuration Guide*, which is included in the Informatica PowerCenter DVD provided with Oracle BI Applications.

- **4.** Copy the custom folder from your previous Informatica repository to the newly created Informatica repository:
 - **a.** Launch the Informatica PowerCenter Repository Manager, and connect to both your previous and newly created Informatica repositories.
 - **b.** Copy the Custom folder in your previous repository into the newly created Informatica repository.
 - **c.** Make sure there is an individual workflow for each of the mappings in the Custom folder.

5.6 Upgrading the DAC Repository

Before you begin this procedure, do the following:

- Determine what customizations were made to your existing DAC repository.
- Make sure you have renamed and backed up your existing DAC repository into a different database. When you backup the DAC repository, you export the DAC metadata, in XML format (using the DAC's Export tool), into a folder other than the standard DAC export folder where backups are stored (DAC\export). For instructions on exporting DAC metadata, see the *Oracle Business Intelligence Data Warehouse Administration Console Guide*.

To upgrade the DAC metadata repository

- **1.** Upgrade your current DAC repository tables to be compatible with the new DAC repository release.
 - **a.** Configure the new DAC client version to read the DAC metadata from your existing DAC repository.
 - **b.** Log in to the DAC and select Yes if prompted to upgrade the repository tables.
- **2.** Export all the applications from your custom repository (including the custom applications) to a folder other than the standard DAC export folder (DAC\export) or the folder into which you backed up metadata in the previous format.
- **3.** Import the new DAC metadata for your application from the standard DAC export folder (DAC\export). Select the Truncate Repository Tables check box.

For instructions on importing DAC metadata, see the *Oracle Business Intelligence Data Warehouse Administration Console Guide*.

- **4.** Refresh the source system container to locate any missing objects in your customized application.
 - **a.** In the DAC menu bar, select File, then select Refresh Source System Containers.

A list of available source system containers appears in the container list to the right of the View buttons.

- **b.** Select the appropriate source system container from the list, and click OK.
- c. Confirm that you want to refresh the source system container.
- **5.** Rebuild all the subject areas and execution plans in your customized application to include any new changes in the object dependency. For information about building subject areas and execution plans, see the *Oracle Business Intelligence Data Warehouse Administration Console Guide*.

5.7 Upgrading the Data Warehouse Schema and Migrating Data

This section contains the following topics:

- Section 5.7.1, "Upgrading the Data Warehouse Schema to Version 7.9.4 and Migrating Data"
- Section 5.7.2, "Upgrading the Data Warehouse Schema to Version 7.9.5 and Migrating Data"
- Section 5.7.3, "Upgrading the Data Warehouse Schema to Version 7.9.5.1"

If you are currently running Oracle BI Applications release 7.9.0, 7.9.1, 7.9.2, or 7.9.3, you need to perform the procedures in Section 5.7.1, Section 5.7.2, and Section 5.7.3.

If you are currently running Oracle BI Applications release 7.9.4, you need to perform the procedures in Section 5.7.2 and Section 5.7.3.

If you are currently running Oracle BI Applications release 7.9.5, you need to perform the procedures in Section 5.7.3.

These procedures add new tables, columns, and indexes to the existing data warehouse schema. They also modify the existing data warehouse schema objects.

5.7.1 Upgrading the Data Warehouse Schema to Version 7.9.4 and Migrating Data

You need to perform this procedure if you are upgrading from Oracle BI Applications releases 7.9.0, 7.9.1, 7.9.2, or 7.9.3.

To upgrade the data warehouse schema and migrate data into the upgraded data warehouse

- 1. Run the 792_UPGRADE_PRE_CTL_SCRIPT.sql script.
 - **a.** Open the SQL client for your database type, for example, SQLPLUS for Oracle, Query Analyzer for SQL Server, or a command window for DB2.
 - **b.** Navigate to the folder OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **c.** Open the 792_UPGRADE_PRE_CTL_SCRIPT.sql file, and copy the contents into the SQL client.
 - **d.** Execute the script.
- **2.** Use the DDLimp utility to run the ddl_794.ctl script, which is located in the OracleBI\dwrep\Upgrade\CTLFiles folder. Use the following command:

```
..\OracleBI\dwrep\bin\DDLIMP /U <USER> /P <PASSWORD> /C <ODBC connect string> /G SSE_ROLE /I N /R Y /F <..\OracleBI\dwrep\ddl_794.ctl> /L <..\oracleBI\dwrep\ddl_794.log>
```

For example:

DDLIMP /U SADMIN /P SADMIN /C OBIA /G SSE_ROLE /I N /R Y /F C:\OracleBI\dwrep\ddl_794.ctl /L C:\OracleBI\dwrep\ddl_794.log

- **3.** Run the 792_UPGRADE_PRE_DIMENSION_SCRIPT.sql script.
 - a. Open the SQL client for your database type.
 - **b.** Navigate to the folder OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **c.** Open the 792_UPGRADE_PRE_DIMENSION_SCRIPT.sql file, and copy the contents into the SQL client.
 - **d.** Execute the script.
- **4.** If you upgraded your transactional database to Siebel Applications 8.0 or 8.1, run the workflows to migrate your data into the upgraded data warehouse.
 - **a.** In Informatica Workflow Manager, navigate to the folder UPGRADE_790_TO_ 791_SBL80UPG.
 - **b.** Run the following workflows in the order indicated:

UPGRADE_DIMENSIONS

UPGRADE_FACTS

- **5.** Verify the data migrated successfully by checking whether any of the Informatica mapping log files stored in the \Informatica PowerCenter 8.1.1\server\infa_shared\SessLogs directory indicate errors or failures.
- **6.** If the data migration was successful, drop the tables that were created during the upgrade process, such as, W_xxxx_x_79x tables, LKP_xxxx_x and 79x_XXXX_TMP.

This step frees the space occupied by these backup tables.

- 7. Use the reset_infa_seq_gen.bat script to initialize the Informatica sequence generator for incremental runs on the main Informatica repository (Oracle_BI_DW_Base.rep).
 - a. Navigate to OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **b.** Open the reset_infa_seq_gen.bat file.

The file opens a command prompt, which will prompt you for the parameters listed below.

c. Enter the appropriate parameter values to reflect your environment (the parameters are database specific).

For Oracle databases:

Parameter	Setting	
OLAP USERNAME	Enter the data warehouse database user ID	
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database	
INFORMATICA DB USERNAME	Enter the user ID of the main Informatica Repository database	
INFORMATICA DB	Enter the password@connection string of the main Informatica	
PASSWORD	Repository database	
INFORMATICA REPOSITORY	Enter the name of the main Informatica Repository	
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the main Informatica Repository	
INFORMATICA REPOSITORY PASSWORD	Enter the password for the main Informatica Repository	
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.	
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.	
INFA_FOLDER	Enter the value HOR for Horizontal Applications or VERT for Vertical Applications	

For Microsoft SQL Server databases:

Parameter	Setting
OLAP_SERVER	Enter the name of the SQL Server for the OLAP database
OLAP DATABASE	Enter the name of the database on which OLAP data is available
OLAP USERNAME	Enter the user ID of the data warehouse database
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database
INFORMATICA SERVER ADDRESS	Enter the name of the SQL Server for the Informatica Repository database.
INFORMATICA DATABASE	Enter the name of the database on which the Informatica Repository metadata is available
INFORMATICA DB USERNAME	Enter the user ID of the main Informatica Repository database
INFORMATICA DB PASSWORD	Enter the password@connection string of the main Informatica Repository database
INFORMATICA REPOSITORY	Enter the name of the main Informatica Repository
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the main Informatica Repository
INFORMATICA REPOSITORY PASSWORD	Enter the password of the main Informatica Repository
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value HOR for Horizontal Applications or VERT for Vertical Applications

For IBM DB2 databases:

Parameter	Setting
OLAP USERNAME	Enter the user ID of the data warehouse database
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database
INFORMATICA DB USERNAME	Enter the user ID of the Upgrade Informatica Repository database
INFORMATICA DB PASSWORD	Enter the password @connection string of the main Informatica Repository database
INFA DATABASE ALIAS	Enter the name of the database in which Informatica Repository metadata is available
INFORMATICA REPOSITORY	Enter the name of the main Informatica Repository
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the main Informatica Repository

Parameter	Setting
INFORMATICA REPOSITORY PASSWORD	Enter the password for the Informatica Repository
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value HOR for Horizontal Applications or VERT for Vertical Applications

5.7.2 Upgrading the Data Warehouse Schema to Version 7.9.5 and Migrating Data

You need to perform this procedure if you are upgrading from Oracle BI Applications releases 7.9.0, 7.9.1, 7.9.2, 7.9.3, or 7.9.4.

To upgrade the data warehouse schema and migrate data into the upgraded data warehouse

- 1. Use the reset_infa_seq_gen.bat script to initialize the Informatica sequence generator for incremental runs on the Upgrade repository.
 - **a.** Navigate to OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **b.** Open the reset_infa_seq_gen.bat file.

The file opens a command prompt, which will prompt you for the parameters listed below.

c. Enter the appropriate parameter values to reflect your environment (the parameters are database specific).

For Oracle databases:

Parameter	Setting
OLAP USERNAME	Enter the data warehouse database user ID.
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.
INFORMATICA DB USERNAME	Enter the user ID of the Upgrade Informatica Repository database.
INFORMATICA DB	Enter the password@connection string of the Upgrade Informatica
PASSWORD	Repository database.
INFORMATICA REPOSITORY	Enter the name of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY PASSWORD	Enter the password for the Upgrade Informatica Repository.
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.

Parameter	Setting
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value UPGRADE.

For Microsoft SQL Server databases:

Parameter	Setting
OLAP SERVER	Enter the name of the SOL Server for the OLAP database.
OLAP DATABASE	Enter the name of the database on which OLAP data is available.
OLAP USERNAME	Enter the user ID of the data warehouse database.
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.
INFORMATICA SERVER ADDRESS	Enter the name of the SQL Server for the Informatica Repository database.
INFORMATICA DATABASE	Enter the name of the database in which the Informatica Repository metadata is available.
INFORMATICA DB USERNAME	Enter the user ID of the Upgrade Informatica Repository database.
INFORMATICA DB PASSWORD	Enter the password @connection string of the Upgrade Informatica Repository database.
INFORMATICA REPOSITORY	Enter the name of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY PASSWORD	Enter the password of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value UPGRADE.

For IBM DB2 databases:

Parameter	Setting
OLAP USERNAME	Enter the user ID of the data warehouse database.
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.
INFORMATICA DB USERNAME	Enter the user ID of the Upgrade Informatica Repository database.
INFORMATICA DB PASSWORD	Enter the password @connection string of the Upgrade Informatica Repository database.
INFA DATABASE ALIAS	Enter the name of the database in which Informatica Repository metadata is available.

Parameter	Setting
INFORMATICA REPOSITORY	Enter the name of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY PASSWORD	Enter the password for the Informatica Repository.
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value UPGRADE.

- 2. Run the 795_UPGRADE_PRE_CTL_SCRIPT.sql script.
 - **a.** Open the SQL client for your database type, for example, SQLPLUS for Oracle, Query Analyzer for SQL Server, or a command window for DB2.
 - **b.** Navigate to the folder OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **c.** Open the 795_UPGRADE_PRE_CTL_SCRIPT.sql file, and copy the contents into the SQL client.
 - d. Execute the script.
- 3. Run the UPGRADE_795.ctl script.

This script adds temp tables for the upgrade process.

- a. Navigate to the folder OracleBI\dwrep\Upgrade\CTLFiles.
- **b.** Use the DDLimp utility to run the UPGRADE_795.ctl script. Use the following command:

..\OracleBI\dwrep\bin\DDLIMP /U <USER> /P <PASSWORD> /C <ODBC connect string> /G SSE_ROLE /I N /R Y /F <..\OracleBI\dwrep\UPGRADE_795.CTL> /L <..\oracleBI\dwrep\UPGRADE.log>

For example:

```
DDLIMP /U SADMIN /P SADMIN /C OBIA /G SSE_ROLE
/I N /R Y /F C:\OracleBI\dwrep\UPGRADE_795.CTL /L
C:\OracleBI\dwrep\UPGRADE.log
```

Notes:

- * /P <PASSWORD> The password for the data warehouse.
- * /C <ODBC connect string> The name of the ODBC connect string.
- * /I N Tells DDLimp to ignore the indexes DDL defined in the CTL file if any exist. It does not change existing indexes. (The default is /I Y, which tells DDLimp to create and merge indexes from the CTL file with the indexes in the database.
- * For Oracle databases, use the Data Direct drivers.

In addition, you can use the following commands:

- * /W Y If the OLAP database is Oracle and Unicode.
- * /Z Y If the OLAP database is DB2 or SQL Server and Unicode.
- * /B <TABLE_SPACE_NAME> If you want to create these tables in a separate table space. For DB2, This must be specified as 32K tablespace.
- /X <INDEX_TABLE_SPACE_NAME> If you want to create the indexes in a separate tablespace. For DB2, This must be specified as 32K tablespace.
- * /Y Storage File for DB2/390.
- /R Regrant tables.
- **4.** Use the DDLimp utility to run the ddl_795.ctl script, which is located in the OracleBI\dwrep\Upgrade\CTLFiles folder. Use the following command:

```
..\OracleBI\dwrep\bin\DDLIMP /U <USER> /P <PASSWORD> /C <ODBC connect string>
/G SSE_ROLE /I N /R Y /F <..\OracleBI\dwrep\ddl_795.ctl>
/L <..\oracleBI\dwrep\ddl_795.log>
```

For example:

DDLIMP /U SADMIN /P SADMIN /C OBIA /G SSE_ROLE /I N /R Y /F C:\OracleBI\dwrep\ddl_795.ctl /L C:\OracleBI\dwrep\ddl_795.log

- 5. Run the 795_UPGRADE_PRE_DIMENSION_SCRIPT.sql script.
 - **a.** Open the SQL client for your database type.
 - **b.** Navigate to the folder OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **c.** Open the 795_UPGRADE_PRE_DIMENSION_SCRIPT.sql file, and copy the contents into the SQL client.
 - **d.** Execute the script.
- **6.** Copy all of the domain value files in the folder \OracleBI\dwrep\Informatica\LkpFiles into the folder \Informatica PowerCenter 8.1.1\server\infa_shared\LkpFiles.
- 7. Migrate data into the upgraded data warehouse.
 - a. Copy the file Upgrade.rep file from the folder OracleBI\dwrep\Upgrade\Informatica\Repository into the folder Informatica PowerCenter 8.1.1\server\infa_shared\Backup.
 - **b.** Launch the Informatica PowerCenter Administration Console and restore Upgrade.rep (located in Informatica PowerCenter 8.1.1\server\infa_shared\Backup).
 - **c.** Navigate to the folder OracleBI\dwrep\Upgrade\Informatica\ParameterFiles and copy the file 795_UPG_PARAMS.txt into the SrcFiles folder on the Informatica Server machine, for example, C:\Program Files\Informatica PowerCenter 8.1.1\server\infa_shared\SrcFiles.
 - d. Set the parameter \$\$ETL_PROC_WID to the latest ETL_PROC_WID value from the database. You can get this value from W_PARAM_G.ETL_PROC_ WID.
 - **e.** Set the parameter \$\$DATASOURCE_NUM_ID to the relevant value from the adapter setup.

f. In Informatica Workflow Manager, open the Relational Connection Browser (in the menu bar, select Connections, and then select Relational), and create one relational connection based on the appropriate database platform for your OLTP database. Create the connection with the name PARAM_OLTP.

Note: If you are connected to an Oracle database, use the Oracle Native driver instead of ODBC.

If you are connected to a SQL Server database, use the ODBC driver rather than the native SQL Server driver.

g. In Informatica Workflow Manager, open the Relational Connection Browser (in the menu bar, select Connections, and then select Relational), and create one relational connection based on the appropriate database platform for your OLAP database. Create the connection with the name PARAM_OLAP.

Note: If you are connected to an Oracle database, use the Oracle Native driver instead of ODBC.

If you are connected to a SQL Server database, use the ODBC driver rather than the native SQL Server driver.

- **h.** In Informatica Workflow Manager, navigate to the folder UPGRADE_794_to_795_SBL and execute the UPGRADE_DIMENSIONS workflow.
- **8.** Verify the data migrated successfully.
 - **a.** Check whether any of the Informatica mapping log files stored in the \Informatica PowerCenter 8.1.1\serva\infa_shared\Sesslogs directory indicates errors or failures.
 - **b.** Check whether the script 795_UPGRADE_PRE_DIMENSION_SCRIPT.sql that you ran in the SQL client of the database failed or errored out while executing.
 - **c.** Check the log file for the script Upgrade_795.ctl that you ran using the DDLimp command to determine whether any of the runs failed.

If you did not detect any errors or failures in the steps above, then the data migration was successful.

Note: Ignore any error messages that indicate tables or indexes could not be dropped from the database. These error messages are displayed when the specified objects do not exist in the database. This can occur because each source system container holds a subset of all data warehouse tables

9. If the data migration was successful, drop the tables that were created during the upgrade process, such as W_xxxx_X79x, LKP_xxxx_x and 79x_xxxx_TMP.

This step frees the space occupied by these backup tables.

- **10.** Once the data migration steps above are complete, you can delete the Upgrade repository to avoid any accidental use or confusion.
 - **a.** In the Informatica PowerCenter Administration Console, select the Upgrade repository service.

- **b.** In the General Properties area of the Properties tab, click Edit .
- c. Make sure the operating mode of the repository service is set to Exclusive.
- d. Click OK.
- e. Choose Actions, and then click Delete Contents.
- f. In the Delete contents for <repository name> dialog, enter the repository username and password (for example, Administrator/Administrator), then click OK.
- **11.** Use the reset_infa_seq_gen.bat script to initialize the Informatica sequence generator for incremental runs on the main Informatica repository (Oracle_BI_DW_Base.rep).
 - a. Navigate to OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **b.** Open the reset_infa_seq_gen.bat file.

The file opens a command prompt, which will prompt you for the parameters listed below.

c. Enter the appropriate parameter values to reflect your environment (the parameters are database specific).

For Oracle databases:

Parameter	Setting
OLAP USERNAME	Enter the data warehouse database user ID.
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.
INFORMATICA DB USERNAME	Enter the user ID of the main Informatica Repository database.
INFORMATICA DB	Enter the password@connection string of the main Informatica
PASSWORD	Repository database.
INFORMATICA REPOSITORY	Enter the name of the main Informatica Repository.
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the main Informatica Repository.
INFORMATICA REPOSITORY PASSWORD	Enter the password for the main Informatica Repository.
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value HOR.

For Microsoft SQL Server databases:

Parameter	Setting
OLAP_SERVER	Enter the name of the SQL Server for the OLAP database.

Parameter	Setting
OLAP DATABASE	Enter the name of the database on which OLAP data is available.
OLAP USERNAME	Enter the user ID of the data warehouse database.
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.
INFORMATICA SERVER ADDRESS	Enter the name of the SQL Server for the Informatica Repository database.
INFORMATICA DATABASE	Enter the name of the database on which the Informatica Repository metadata is available.
INFORMATICA DB USERNAME	Enter the user ID of the main Informatica Repository database.
INFORMATICA DB PASSWORD	Enter the password@connection string of the main Informatica Repository database.
INFORMATICA REPOSITORY	Enter the name of the main Informatica Repository.
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the main Informatica Repository.
INFORMATICA REPOSITORY PASSWORD	Enter the password of the main Informatica Repository.
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value HOR.

For IBM DB2 databases:

Parameter	Setting
OLAP USERNAME	Enter the user ID of the data warehouse database.
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.
INFORMATICA DB USERNAME	Enter the user ID of the Upgrade Informatica Repository database.
INFORMATICA DB PASSWORD	Enter the password @connection string of the main Informatica Repository database.
INFA DATABASE ALIAS	Enter the name of the database in which Informatica Repository metadata is available.
INFORMATICA REPOSITORY	Enter the name of the main Informatica Repository.
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the main Informatica Repository.

Parameter	Setting
INFORMATICA REPOSITORY PASSWORD	Enter the password for the Informatica Repository.
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value HOR.

5.7.3 Upgrading the Data Warehouse Schema to Version 7.9.5.1

You need to perform this procedure if you are upgrading from Oracle BI Applications releases 7.9.0, 7.9.1, 7.9.2, 7.9.3, 7.9.4, or 7.9.5.

To upgrade the data warehouse schema

 Use the DDLimp utility to run the ddl_7951.ctl script, which is located in the OracleBI\dwrep\Upgrade\CTLFiles folder. Use the following command:

```
..\OracleBI\dwrep\bin\DDLIMP /U <USER> /P <PASSWORD> /C <ODBC connect string>
/G SSE_ROLE /I N /R Y /F <..\OracleBI\dwrep\ddl_7951.ctl>
/L <..\oracleBI\dwrep\ddl_7951.log>
```

For example:

DDLIMP /U SADMIN /P SADMIN /C OBIA /G SSE_ROLE /I N /R Y /F C:\OracleBI\dwrep\ddl_7951.ctl /L C:\OracleBI\dwrep\ddl_7951.log

5.8 Upgrading the Oracle BI Repository

This process merges your customizations of a prior release of the Oracle BI repository with the new version of the Oracle BI repository. Before you begin this process, make sure you have backed up and renamed your existing repository.

To upgrade the repository, perform the following tasks:

- Section 5.8.1, "Preparing for the Oracle BI Repository Upgrade"
- Section 5.8.2, "Equalizing the Oracle BI Repositories"
- Section 5.8.3, "Comparing the Oracle BI Repositories"
- Section 5.8.4, "Merging the Oracle BI Repositories"
- Section 5.8.5, "Regression Testing the Oracle BI Repository Merge"

The tasks in this section refer to multiple versions of the Oracle BI repository. Table 5–1 provides the names and descriptions of the repositories used in the examples in this section.

 Table 5–1
 Names of Analytics Repositories used in Examples

Name of Repository	Description
OracleBIAnalyticsApps_79x.rpd	The standard Oracle BI repository for the version you are upgrading from.
	Note: Standard repositories from previous releases are available in the folder \OracleBI\Upgrade.

Name of Repository	Description
OracleBIAnalyticsApps.rpd	The standard Oracle BI repository for the version you are upgrading to.
Customer_ OracleBIAnalyticsApps.rpd	The Oracle BI repository that contains your customizations for the version you are upgrading from.
Merged_Repository_OracleBI.rpd	The Oracle BI repository that contains your customizations for the version you are upgrading to.

Table 5–1 (Cont.) Names of Analytics Repositories used in Examples

5.8.1 Preparing for the Oracle BI Repository Upgrade

Follow this procedure to prepare for the repository upgrade.

To prepare for the Analytics repository upgrade

- 1. Set up a directory for the merge process, such as \OracleBIUpgrade, and create the following subfolders:
 - Original
 - AfterEqualize
 - AfterMerge
 - AfterManualWork
 - AfterRegressions
- **2.** Copy the original repository (for example, OracleBIAnalyticsApps_79x.rpd), the production repository (for example, Customer_OracleBIAnalyticsApps.rpd, and the repository from the latest installation (for example, OracleBIAnalyticsApps.rpd) into the folder \OracleBIUpgrade\Original.

If, in your current environment, you are running Oracle BI Applications for one or more modules using a Oracle BI repository in which you extracted the corresponding projects for the modules from the standard Oracle BI repository file you received from the previous release, you need to extract the same projects from the OracleBIAnalyticsApps_79x.rpd file and use this as your original repository. (If you have the original repository that you extracted during the last upgrade, you can use it as the original repository file.) This will prevent you from losing any new metadata you would like to add in this upgrade.

Also, if you customized the Oracle BI repository by trimming a large number of objects and you would like to get those objects back during the current upgrade, you need to trim the OracleBIAnalyticsApps_79x.rpd file in the same way and use the modified version as the original repository file. This will prevent you from losing any new metadata you would like to add in this upgrade.

5.8.2 Equalizing the Oracle BI Repositories

The Merge feature in the Administration Tool relies on a change detection algorithm to determine the changes that need to be made to upgrade repositories correctly. For the algorithm to work correctly, it has to determine which objects in the three repositories (for example, OracleBIAnalyticsApps_79x.rpd, OracleBIAnalyticsApps.rpd, and Customer_OracleBIAnalyticsApps.rpd) are equivalent.

The point of this step is to determine for every object in the OracleBIAnalyticsApps.rpd and the Customer_OracleBIAnalyticsApps.rpd whether it is coming from the OracleBIAnalyticsApps_79x.rpd.

Equivalence between objects is established using the Administration Tool's Equalize feature. The file that you specify in the Output option (-0) is the only file that is modified during the equalization process.

The Equalize feature has several mechanisms for determining whether an object in two different repositories is semantically the same:

- Fully Qualified Name. If an object in one repository has the same fully qualified name as another object of the same class in another repository, then the two objects are declared equal.
- **Simple String Substitution.** Equivalence can be declared between two objects of the same class in two repositories whose only difference is that some key characters in their names differ. The equalizerpds executable file ignores those characters while checking fully qualified names. For example, "Core"."W_DAY_D" might be considered equivalent to "Core"."W DAY D" if the characters "_" and " " have been declared as equivalent.
- **Rename File.** When none of the preceding rules are applicable, equivalence can be . manually declared using a script as input to the equalizerpds executable file. Oracle ships the rename files (MAP) for the major releases. The files are located in the OracleBI\Upgrade folder. You can also create your own rename files for customizations not covered in the files that Oracle ships. You can open and edit the rename files in Microsoft Excel.

The syntax of the equalizerpds command is as follows:

```
equalizerpds.exe -A userid1 [-B [password1]] -C base_repository_name -D userid2
[-E [password2]] -F repository2_name [-J udml_utf8_file_name_equalization] [-0
ouput_repository_name] [-X] [-Y equalStringSet]
          Treat 'Factxxxx' as 'Fact' in Business Model.
-X
```

- -Y Treat the characters as equals.
- Display this usage information and exit. /?

To equalize a repository

- Copy the appropriate MAP file from the OracleBI\Upgrade folder into the folder 1. where you will execute equalizerpds.exe, for example, \OracleBIUpgrade\Original.
- 2. Run equalizerpds.exe to equalize the repository from the latest installation (for example, OracleBIAnalyticsApps.rpd) with the original repository (for example, OracleBIAnalyticsAppss_79x.rpd). An example of the equalizerpds command is as follows:

```
equalizerpds -A Administrator -B SADMIN
-C \\OracleBIUpgrade\Original\OracleBIAnalyticsApps_791.rpd
-D Administrator -E SADMIN
-F \\OracleBIUpgrade\Original\OracleBIAnalyticsApps.rpd
-0 \\OracleBIAnalyticsUpgrade\AfterEqualize\OracleBIAnalyticsApps.rpd
-X -J rename7x-79.map
```

The MAP files are located in the \OracleBI\Upgrade folder.

If the equalizerpds.exe executable file runs correctly, no errors are returned.

3. Run equalizerpds.exe to equalize your customized repository (for example, Customer_OracleBIAnalyticsApps.rpd) with the original repository (for example, OracleBIAnalyticsApps_79x.rpd). An example of the equalizerpds command is as follows:

equalizerpds -A Administrator -B SADMIN -C \\OracleBIUpgrade\Original\OracleBIAnalyticsApps_791.rpd

```
-D Administrator -E SADMIN
```

- -F \\OracleBIUpgrade\Original\Customer_OracleBIAnalyticsApps.rpd
- -0 \\OracleBIUpgrade\AfterEqualize\Customer_OracleBIAnalyticsApps.rpd

The execution of equalizerpds that equalizes the customer repository with the original repository does not use the rename file.

Make sure that the original repository is copied unchanged into its new location so that after running the script, all three repositories are contained within the \OracleBIUpgrade\AfterEqualize directory.

4. To verify the process completed successfully, compare the size of the repositories. The output repository (-O) should be close to the same size as the repository you equalized (-F).

5.8.3 Comparing the Oracle BI Repositories

Follow this procedure to compare your existing repository with the new version to which you are upgrading.

To compare the Analytics repositories

Use the Administration Tool's Compare Repositories feature to analyze the differences between your existing repository and the new version of the repository to which you are upgrading. Note where elements have been created, removed, or changed in the new version. Consider whether you can use the new metadata and retire customizations you made in the existing repository.

For instructions on how to use the Administration Tool's Compare Repositories feature, see *Oracle Business Intelligence Server Administration Guide*.

5.8.4 Merging the Oracle BI Repositories

In this procedure, you execute the main algorithm to upgrade the repository. For more information on merging the repositories, see *Oracle Business Intelligence Server Administration Guide*.

To merge versions of the Oracle BI repositories

- 1. Copy the three repositories (for example, OracleBIAnalyticsApps_79x.rpd, OracleBIAnalyticsApps.rpd, and Customer_OracleBIAnalyticsApps.rpd) to the AfterMerge folder.
- **2.** Open the repository from the latest installation (for example, OracleBIAnalyticsApps.rpd) in the \OracleBIUpgrade\AfterMerge folder.
- **3.** Save the repository with a new name, for example, Merged_Repository_ OracleBIAnalyticsApps.rpd.

This new repository will contain the final results of the upgrade.

- 4. From the Administration Tool menu bar, select File, then select Merge.
- **5.** In the Select Original Repository dialog box, select the original repository (for example, OracleBIAnalyticsApps_79x.rpd).
- 6. Enter the password, and click OK.
- 7. Click Select for the Modified Repository field.
- **8.** In the Select Modified Repository dialog box, select the repository that contains the customizations you made to the previous version of the Analytics repository.
- 9. Click Open, type the password, and then click OK.

- **10.** In the Decision drop-down list, select the action you want to take regarding the repository change, or accept the default action.
- **11.** To locate subsequent rows with empty Decision fields, click the Decision header cell.

When all rows have a value in the Decision field, the Merge button is enabled.

12. Click Merge.

This process can take up to 40 minutes, depending on the size of the repositories you are working with. A message will alert you when the merge is complete.

13. Click Yes when asked if you want to run a consistency check.

The number of errors returned by the consistency check is an indication of how successful the merge process was. If you receive many errors, for example, over 300, you should analyze the reason for the errors. If the merge process failed to recognize that two objects are the same, you may need to edit the rename file if the object is in the Current repository, or add your own rename file if you have renamed many of the objects and the upgrade engine failed to relate them to the original objects.

You also may need to change the actions you selected in the Decision drop-down list before rerunning the merge. This could save you time by reducing the number of errors that you will need to fix manually.

Once you are satisfied with the results of the merge, you should fix the remaining errors manually. It is important that you fix all errors before moving on to the next step. This repository serves as the input for the next stage.

You should also check that all of your customized objects are present and that no duplicate physical tables were introduced. To check for duplicate tables, search for physical tables using a query such as:

where name like '*#1'

14. Copy the repository to the folder \OracleBIUpgrade\AfterManualWork.

5.8.5 Regression Testing the Oracle BI Repository Merge

In performing a regression test for the repository merge, the objective is to collect a set of logical SQL statements that are used for reports and to verify that they continue to work with the new metadata. For this purpose, it is recommended that you perform the following procedure.

To perform regression testing

- 1. Run the reports that are necessary to include in the regression suite. These reports might be a subset of the reports in the Presentation Catalog.
- **2.** Collect the logical SQL generated in the previous step. You can do this using Usage Tracking or by parsing the query log file.

For information about Usage Tracking, see *Oracle Business Intelligence Server Administration Guide*.

3. Execute the logical SQL against the old repository using the command line utility nQCmd.exe located in \OracleBI\server\bin, and save the results to a file.

For information about the nQCmd.exe utility, see *Oracle Business Intelligence Server Administration Guide*.

- **4.** Edit the logical SQL test scripts to account for the name changes or modifications resulting from the upgrade.
- 5. Execute the edited logical SQL against the merged repository, and save the results.
- **6.** Compare the results from the steps above and try to explain the differences. If it is determined that these differences are due to the upgrade process, then you have to correct them manually.

This repository now contains the merged content from the new OracleBIAnalyticsApps.rpd and the production repository.

5.9 Upgrading the Oracle BI Presentation Catalog

You will need to upgrade your current Oracle BI Presentation Catalog if your organization:

- Has prebuilt applications already installed, and
- Has customized the current Oracle BI Presentation Catalog

If you made no changes to the previous Presentation Catalog distributed with previous versions of prebuilt applications, you do not need to upgrade the catalog. You can begin using the newer version of the catalog.

This process includes the following tasks:

- Section 5.9.1, "Trimming the Input Presentation Catalog"
- Section 5.9.2, "Upgrading the Oracle BI Presentation Catalog to a Newer Version"
- Section 5.9.3, "Testing the Results of the Presentation Catalog Upgrade"

Caution: In releases of Oracle BI Applications previous to 7.9, the Presentation Catalog (formerly known as the Siebel Analytics Web Catalog) was stored in a single file rather than in a directory structure of individual files. If you have a previous version of the Presentation Catalog, you will need to convert it to the new format. For more information about how to convert the Presentation Catalog to the new format, see the *Oracle Business Intelligence Infrastructure Upgrade Guide*

5.9.1 Trimming the Input Presentation Catalog

Before you upgrade and merge your current Presentation Catalog with the new Presentation Catalog, determine which of the existing content you want to keep and which new content you want to incorporate. Review your existing Presentation Catalog and determine the usage patterns of reports and dashboards. Note that some of the preconfigured content in the existing catalog may appear in the new version in a redesigned format. In addition, the new version includes completely new content. After you have decided the content that is to make up your enterprise Presentation Catalog, trim the input catalogs using the Catalog Manager. For information on trimming catalogs, see *Oracle Business Intelligence Presentation Services Administration Guide*.

5.9.2 Upgrading the Oracle BI Presentation Catalog to a Newer Version

The Presentation Catalog upgrade process makes use of three catalogs:

• The *original* Presentation Catalog. This is the unmodified Presentation Catalog that you received with the Oracle BI Applications release that you are upgrading from.
- The *new* Presentation Catalog. This is the Presentation Catalog that is installed in the OracleBIData\web\catalog folder with the installation of Oracle BI Applications.
- The *current* Presentation Catalog. This is the Presentation Catalog currently in use at your organization.

You use Catalog Manager for this upgrade process. Catalog Manager compares the content in both the *Current* Presentation Catalog and the *Modified* Presentation Catalog with the content in the Original Presentation Catalog, merges any changes into the *Current* Presentation Catalog, and produces a list of upgrade differences, which you must resolve by indicating how you want the differences handled. If the catalogs have conflicting content, you can choose which catalog the content should be taken from. The end result is a merged Presentation Catalog that contains the site-specific changes, as well as new metadata.

To upgrade your Presentation Catalog to a newer version

- 1. Make a backup copy of the current Presentation Catalog, rename the folder <catalogname>_old, and move it to a temporary location.
- **2.** Copy the original Presentation Catalog into the folder that holds your current Presentation Catalog and rename it <catalogname>_Original.
- **3.** Start Catalog Manager and open the new Presentation Catalog in offline mode.
- 4. Select Tools, then select Upgrade Catalog.
- **5.** In the original Presentation Catalog field, browse to locate the original Presentation Catalog.
- **6.** In the Current Presentation Catalog field, browse to locate your current Web Catalog, <catalogname>_old.
- 7. Click OK.
- 8. Resolve any upgrade differences as follows:
 - **a.** Review each unresolved difference in the Unresolved differences list.
 - **b.** For each unresolved difference, select the version that you want to keep.
 - c. Click OK.

The log file SiebelAnalyticsMigrationLog.txt holds information about the merge process. This log file is written to \OracleBI\web\catalogmanager. If you get an error logged in the file, this means that the path in question had a problem that did not allow the merge mechanism to resolve the merge. No action was taken. To merge that particular item, go into your original Presentation Catalog and merge it manually.

- **9.** Review the upgraded Presentation Catalog, and, if necessary, set permissions for objects.
- **10.** Save the new Presentation Catalog.

5.9.3 Testing the Results of the Presentation Catalog Upgrade

Note: Before you perform this step, you must first migrate the data into the upgraded data warehouse.

The Presentation Catalog upgrade functionality does not automatically carry over object permissions; therefore, you should review the Presentation Catalog object permissions before you perform this step.

This step ensures that the upgraded reports and the new preconfigured reports are functional and render correct results within the new, merged Presentation Catalog. This step is typically performed by visually inspecting the final results of the complete end-to-end upgrade process.

For upgraded reports, the preferred approach for comparison purposes is to have side-by-side environments, and have users review specific dashboard content between the two environments. Examine not only the look and feel of the application but also the data contained in the reports to make sure the content remains the same. It is recommended that you request users to use various elements of the user interface to validate results, such as global prompts, column selectors, report filters, drills, and navigations, as they normally do on a day-to-day basis.

Also review the overall visibility and administrative settings in the new Presentation Catalog to ensure they are correct. Pay careful attention to the visibility rules that are established for any content that was migrated during the upgrade. You might have to manually adjust these settings.

Part II

Upgrading When Your Source System Is Oracle EBS

Part II contains instructions for upgrading to the current release of Oracle BI Applications from previous releases when you are running Oracle EBS as your source system.

Part II contains Chapter 6, "Upgrading Oracle BI Applications for the Oracle Adapter."

Upgrading Oracle BI Applications for the Oracle Adapter

This section contains instructions for upgrading Oracle BI Applications when you are running Oracle EBS as your source system.

This section includes the following topics:

- Section 6.1, "Upgrading Oracle BI Infrastructure"
- Section 6.2, "Upgrading Oracle BI Applications"
- Section 6.3, "Upgrading to Informatica PowerCenter Release 8.1.1, SP5"
- Section 6.4, "Configuring Informatica PowerCenter Release 8.1.1, SP5 to Work with the DAC"
- Section 6.5, "Upgrading the Informatica Repository"
- Section 6.6, "Upgrading the DAC Repository"
- Section 6.7, "Upgrading the Data Warehouse Schema and Migrating Data"
- Section 6.8, "Upgrading the Oracle BI Repository"
- Section 6.9, "Upgrading the Oracle BI Presentation Catalog"

6.1 Upgrading Oracle BI Infrastructure

Upgrade the Oracle BI Infrastructure to the version that is supported for this release of Oracle BI Applications. See the *System Requirements and Supported Platforms for Oracle Business Intelligence Applications* for the current version that is supported. For information on installing the supported version of Oracle BI Infrastructure, see the *Oracle Business Intelligence Infrastructure Upgrade Guide*.

6.2 Upgrading Oracle BI Applications

Run the Oracle BI Applications installer to upgrade your Oracle BI Applications environment to the current version. For instructions on running the installer, see the *Oracle Business Intelligence Applications Installation Guide for Informatica PowerCenter Users*.

Note: Perform only the step that addresses the running of the installer. Do not perform the configuration instructions that follow the running of the installer.

Note: If you have a previous release of Oracle BI Applications installed, you must uninstall it before you run the installer for the current release. If you do not uninstall the old release, some folders from the current release will not be correctly installed. (Make a back-up of your DAC folder before you uninstall the old release.)

6.3 Upgrading to Informatica PowerCenter Release 8.1.1, SP5

The current release of Oracle BI Applications supports Informatica PowerCenter 8.1.1, Service Pack 5 (SP5). You must install both Informatica PowerCenter 8.1.1 and SP5 to run the current release of Oracle BI Applications.

The components and architecture for Informatica PowerCenter 8.1.1 differ significantly from Informatica PowerCenter 7.x. Oracle recommends that you carefully review the Informatica documentation. The Informatica PowerCenter 8.1.1 SP5 documentation is included in the Informatica PowerCenter DVD provided with Oracle BI Applications.

For a summary of installation instructions for installing Informatica PowerCenter 8.1.1 and SP5 on a single machine in an Oracle BI Applications deployment, see the *Oracle Business Intelligence Applications Installation Guide for Informatica PowerCenter Users*. For instructions on configuring Informatica PowerCenter components for use with Oracle BI Applications, see the section in the *Oracle Business Intelligence Applications Installation Guide for Informatica PowerCenter Users* that covers configuring Informatica PowerCenter components.

For detailed information about deploying Informatica 8.1.1, refer to the *Informatica PowerCenter Installation and Configuration Guide*, and related documentation.

To upgrade to Informatica PowerCenter Release 8.1.1, SP5

- **1.** Perform the pre-upgrade steps documented in the *Informatica PowerCenter Installation and Configuration Guide*.
- **2.** Install Informatica PowerCenter release 8.1.1 and SP5, following the instructions in the *Informatica PowerCenter Installation and Configuration Guide*.
- **3.** Perform the post-upgrade steps documented in the *Informatica PowerCenter Installation and Configuration Guide*.

Note: The Informatica PowerCenter 8.1.1 installation process includes upgrading your current Informatica repository to the release 8.1.1 format. This process is necessary so that you will be able to access your current repository using release 8.1.1 client tools so that you can perform the procedure Section 6.5, "Upgrading the Informatica Repository."

In Section 6.5, "Upgrading the Informatica Repository" you back up and rename your current repository and then restore the Informatica repository (Oracle_BI_DW_Base.rep) that is installed during the Oracle BI Applications installation. You then copy your custom folder from the backed up repository into the newly restored Oracle_BI_ DW_Base repository.

6.4 Configuring Informatica PowerCenter Release 8.1.1, SP5 to Work with the DAC

Informatica PowerCenter version 8.1.1, SP5 requires additional configuration steps in order to work with the DAC. For instructions on performing these steps, see the following sections in the *Oracle Business Intelligence Applications Installation Guide for Informatica PowerCenter Users*.

- Enabling DAC client communication with Informatica PowerCenter
- Enabling DAC server communication with Informatica PowerCenter
- Registering Informatica Services in the DAC

6.5 Upgrading the Informatica Repository

Follow this procedure to upgrade the Informatica repository.

To upgrade the Informatica repository

1. Make sure you have backed up and renamed your current Informatica repository.

For instructions, see the Informatica documentation, which is included in the Informatica PowerCenter DVD provided with Oracle BI Applications.

Note: This repository must be upgraded during the procedure in Section 6.3, "Upgrading to Informatica PowerCenter Release 8.1.1, SP5." You must upgrade this repository to the release 8.1.1 format in order to move your custom folder from this repository into the new Oracle_BI_DW_Base repository that you restore in the steps below.

2. Copy the Oracle_BI_DW_Base.rep file from the folder OracleBI\dwrep\Informatica\Repository into the folder \Informatica\PowerCenter8.1.1\server\infa_shared\Backup.

Note: The Oracel_BI_DW_Base.rep file is installed in the OracleBI root directory when you run the Oracle BI Applications installer, as described in Section 6.2, "Upgrading Oracle BI Applications."

3. Restore the Oracle_BI_DW_Base.rep repository.

For instructions, see the *Informatica PowerCenter Installation and Configuration Guide*, which is included in the Informatica PowerCenter DVD provided with Oracle BI Applications.

- **4.** Copy the custom folder from your previous Informatica repository to the newly created Informatica repository:
 - **a.** Launch the Informatica PowerCenter Repository Manager, and connect to both your previous and newly created Informatica repositories.
 - **b.** Copy the Custom folder in your previous repository into the newly created Informatica repository.
 - **c.** Make sure there is an individual workflow for each of the mappings in the Custom folder.

6.6 Upgrading the DAC Repository

Before you begin this procedure, do the following:

- Determine what customizations were made to your existing DAC repository.
- Make sure you have renamed and backed up your existing DAC repository into a different database. When you backup the DAC repository, you export the DAC metadata, in XML format (using the DAC's Export tool), into a folder other than the standard DAC export folder where backups are stored (DAC\export). For instructions on exporting DAC metadata, see the *Oracle Business Intelligence Data Warehouse Administration Console Guide*.

To upgrade the DAC metadata repository

- **1.** Upgrade your current DAC repository tables to be compatible with the new DAC repository release.
 - **a.** Configure the new DAC client version to read the DAC metadata from your existing DAC repository.
 - **b.** Log in to the DAC and select Yes if prompted to upgrade the repository tables.
- **2.** Export all the applications from your custom repository (including the custom applications) to a folder other than the standard DAC export folder (DAC\export) or the folder into which you backed up metadata in the previous format.
- **3.** Import the new DAC metadata for your application from the standard DAC export folder (DAC\export). Select the Truncate Repository Tables check box.

For instructions on importing DAC metadata, see the *Oracle Business Intelligence Data Warehouse Administration Console Guide*.

- **4.** Refresh the source system container to locate any missing objects in your customized application.
 - **a.** In the DAC menu bar, select File, then select Refresh Source System Containers.

A list of available source system containers appears in the container list to the right of the View buttons.

- **b.** Select the appropriate source system container from the list, and click OK.
- c. Confirm that you want to refresh the source system container.
- **5.** Rebuild all the subject areas and execution plans in your customized application to include any new changes in the object dependency. For information about building subject areas and execution plans, see the *Oracle Business Intelligence Data Warehouse Administration Console Guide*.

6.7 Upgrading the Data Warehouse Schema and Migrating Data

This section contains the following topics:

- Section 6.7.1, "Performing Data Warehouse Schema Upgrade Steps Common to All Previous Releases"
- Section 6.7.2, "Upgrading the Data Warehouse Schema to Version 7.9.3 and Migrating Data"
- Section 6.7.3, "Upgrading the Data Warehouse Schema to Version 7.9.4 and Migrating Data"

- Section 6.7.4, "Upgrading the Data Warehouse Schema to Version 7.9.5. and Migrating Data"
- Section 6.7.5, "Upgrading the Data Warehouse Schema to Version 7.9.5.1 and Migrating Data"

If you are currently running Oracle BI Applications release 7.9.0, 7.9.1 or 7.9.2, you need to perform the procedures in Section 6.7.1, Section 6.7.2, Section 6.7.3, Section 6.7.4, and Section 6.7.5.

If you are currently running Oracle BI Applications release 7.9.3, you need to perform the procedures in Section 6.7.1, Section 6.7.3, Section 6.7.4, and Section 6.7.5.

If you are currently running Oracle BI Applications release 7.9.4, you need to perform the procedures in Section 6.7.1, Section 6.7.4, and Section 6.7.5.

If you are currently running Oracle BI Applications release 7.9.5, you need to perform the procedures in Section 6.7.1 and Section 6.7.5.

These procedures add new tables, columns, and indexes to the existing data warehouse schema. They also modify the existing data warehouse schema objects.

6.7.1 Performing Data Warehouse Schema Upgrade Steps Common to All Previous Releases

The steps in this procedure are required for upgrading to Oracle BI Applications release 7.9.5.1 from all previous releases.

To perform common data warehouse upgrade steps

- Copy all of the domain value files in the folder \OracleBI\dwrep\Informatica\LkpFiles into the folder \Informatica PowerCenter 8.1.1\server\infa_shared\LkpFiles.
- 2. Restore the Upgrade repository
 - **a.** Copy the file Upgrade.rep file from the folder OracleBI\dwrep\Upgrade\Informatica\Repository into the folder Informatica PowerCenter 8.1.1\server\infa_shared\Backup.
 - **b.** Launch the Informatica PowerCenter Administration Console and restore Upgrade.rep (located in Informatica PowerCenter 8.1.1\server\infa_shared\Backup).
- **3.** In Informatica Workflow Manager, open the Relational Connection Browser (in the menu bar, select Connections, and then select Relational), and create the following connections:
 - **a.** Create one relational connection based on the appropriate database platform for your OLTP database.

If you are using the Oracle 11i adapter, create the connection with the name PARAM_OLTP_ORA11i.

If you are using the Oracle R12 adapter, create the connection with the name PARAM_OLTP_ORAR12.

b. Create one relational connection based on the appropriate database platform for your OLAP database. Create the connection with the name PARAM_OLAP.

Note: If you are connected to an Oracle database, use the Oracle Native driver instead of ODBC.

If you are connected to a SQL Server database, use the ODBC driver rather than the native SQL Server driver.

6.7.2 Upgrading the Data Warehouse Schema to Version 7.9.3 and Migrating Data

You need to perform this procedure if you are upgrading from Oracle BI Applications releases 7.9.0, 7.9.1, or 7.9.2.

To upgrade the data warehouse schema and migrate data into the upgraded data warehouse

1. Run the UPGRADE_793.ctl script.

This script adds temp tables for the upgrade process.

- a. Navigate to the folder OracleBI\dwrep\Upgrade\CTLFiles.
- **b.** Use the DDLimp utility to run the UPGRADE_793.ctl script. Use the following command:

```
..\OracleBI\dwrep\bin\DDLIMP /U <USER> /P <PASSWORD> /C <ODBC connect
string>
/G SSE_ROLE /I N /R Y /F <..\OracleBI\dwrep\UPGRADE.CTL>
/L <..\oracleBI\dwrep\UPGRADE.log>
```

For example:

```
DDLIMP /U SADMIN /P SADMIN /C OBIA /G SSE_ROLE
/I N /R Y /F C:\OracleBI\dwrep\UPGRADE_793.CTL /L
C:\OracleBI\dwrep\UPGRADE.log
```

Notes:

- * /P <PASSWORD> The password for the data warehouse.
- /C <ODBC connect string> The name of the ODBC connect string.
- * /I N Tells DDLimp to ignore the indexes DDL defined in the CTL file if any exist. It does not change existing indexes. (The default is /I Y, which tells DDLimp to create and merge indexes from the CTL file with the indexes in the database.
- * For Oracle databases, use the Data Direct drivers.

In addition, you can use the following commands:

- * /W Y If the OLAP database is Oracle and Unicode.
- * /Z Y If the OLAP database is DB2 or SQL Server and Unicode.
- /B <TABLE_SPACE_NAME> If you want to create these tables in a separate table space. For DB2, This must be specified as 32K tablespace.
- /X <INDEX_TABLE_SPACE_NAME> If you want to create the indexes in a separate tablespace. For DB2, This must be specified as 32K tablespace.
- * /Y Storage File for DB2/390.
- /R Regrant tables.

2. Use the DDLimp utility to run the ddl_793.ctl script, which is located in the OracleBI\dwrep\Upgrade\CTLFiles folder. Use the following command:

```
..\OracleBI\dwrep\bin\DDLIMP /U <USER> /P <PASSWORD> /C <ODBC connect string>
/G SSE_ROLE /I N /R Y /F <..\OracleBI\dwrep\ddl_793.ctl>
/L <..\oracleBI\dwrep\ddl_793.log>
```

For example:

DDLIMP /U SADMIN /P SADMIN /C OBIA /G SSE_ROLE /I N /R Y /F C:\OracleBI\dwrep\ddl_793.ctl /L C:\OracleBI\dwrep\ddl_793.log

- 3. Run the 793_UPGRADE_PRE_DIMENSION_SCRIPT.sql script.
 - **a.** Open the SQL client for your database type.
 - **b.** Navigate to the folder OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **c.** Open the 793_UPGRADE_PRE_DIMENSION_SCRIPT.sql file, and copy the contents into the SQL client.
 - **d.** Execute the script.
- 4. Migrate data into the upgraded data warehouse.
 - a. Navigate to the folder OracleBI\dwrep\Upgrade\Informatica\ParameterFiles and copy the file 793_UPG_PARAMS.txt into the SrcFiles folder on the Informatica Server machine, for example, C:\Program Files\Informatica PowerCenter 8.1.1\server\infa_shared\SrcFiles.
 - b. Set the parameter \$\$ETL_PROC_WID to the latest ETL_PROC_WID value from the database. You can get this value from W_PARAM_G.ETL_PROC_WID.
 - **c.** Set the parameter \$\$DATASOURCE_NUM_ID to the relevant value from the adapter setup.
 - **d.** In Informatica Workflow Manager, navigate to the folder UPGRADE_790_to_ 793 and run the Update_Dimensions workflow, and then run the Update_ Facts workflow.
 - e. If you are using the Oracle 11.5.10 adapter, navigate to the folder UPGRADE_ 790_to_793_ORA11510, and run the SIL_PurchaseAmount_Patch workflow.
- **5.** Verify the data migrated successfully.
 - a. Check whether any of the Informatica mapping log files stored in the \Informatica PowerCenter 8.1.1\server\infa_shared\SessLogs directory indicate errors or failures.
 - **b.** Check whether the script 793_UPGRADE_PRE_DIMENSION_SCRIPT.sql that you ran in the SQL client of the database failed or errored out while executing.
 - **c.** Check the log file for the script Upgrade_793.ctl that you ran using the DDLimp command to determine whether any of the runs failed.

If you did not detect any errors or failures in the steps above, then the data migration was successful.

Note: Ignore any error messages that indicate tables or indexes could not be dropped from the database. These error messages are displayed when the specified objects do not exist in the database. This can occur because each source system container holds a subset of all data warehouse tables

6. If the data migration was successful, drop the tables that were created during the upgrade process, such as, W_xxxx_x_79x tables, LKP_xxxx_x and 79x_XXXX_TMP.

This step frees the space occupied by these backup tables.

6.7.3 Upgrading the Data Warehouse Schema to Version 7.9.4 and Migrating Data

You need to perform this procedure if you are upgrading from Oracle BI Applications releases 7.9.0, 7.9.1, 7.9.2, or 7.9.3.

To upgrade the data warehouse schema and migrate data into the upgraded data warehouse

- 1. Use the reset_infa_seq_gen.bat script to initialize the Informatica sequence generator for incremental runs on the Upgrade repository.
 - **a.** Navigate to OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **b.** Open the reset_infa_seq_gen.bat file.

The file opens a command prompt, which will prompt you for the parameters listed below.

c. Enter the appropriate parameter values to reflect your environment (the parameters are database specific).

For Oracle databases:

Parameter	Setting
OLAP USERNAME	Enter the data warehouse database user ID.
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.
INFORMATICA DB USERNAME	Enter the user ID of the Upgrade Informatica Repository database.
INFORMATICA DB	Enter the password@connection string of the Upgrade Informatica
PASSWORD	Repository database.
INFORMATICA REPOSITORY	Enter the name of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY PASSWORD	Enter the password for the Upgrade Informatica Repository.
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.

Parameter	Setting
INFA_FOLDER	Enter the value UPGRADE.

For Microsoft SQL Server databases:

_	
Parameter	Setting
OLAP_SERVER	Enter the name of the SQL Server for the OLAP database.
OLAP DATABASE	Enter the name of the database on which OLAP data is available.
OLAP USERNAME	Enter the user ID of the data warehouse database.
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.
INFORMATICA SERVER ADDRESS	Enter the name of the SQL Server for the Informatica Repository database.
INFORMATICA DATABASE	Enter the name of the database in which the Informatica Repository metadata is available.
INFORMATICA DB USERNAME	Enter the user ID of the Upgrade Informatica Repository database.
INFORMATICA DB PASSWORD	Enter the password @connection string of the Upgrade Informatica Repository database.
INFORMATICA REPOSITORY	Enter the name of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY PASSWORD	Enter the password of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value UPGRADE.

For IBM DB2 databases:

Parameter	Setting
OLAP USERNAME	Enter the user ID of the data warehouse database.
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.
INFORMATICA DB USERNAME	Enter the user ID of the Upgrade Informatica Repository database.
INFORMATICA DB PASSWORD	Enter the password @connection string of the Upgrade Informatica Repository database.
INFA DATABASE ALIAS	Enter the name of the database in which Informatica Repository metadata is available.

Parameter	Setting
INFORMATICA REPOSITORY	Enter the name of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY PASSWORD	Enter the password for the Informatica Repository.
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value UPGRADE.

- 2. Run the 794_UPGRADE_PRE_CTL_SCRIPT.sql.
 - **a.** Open the SQL client for your database type.
 - **b.** Navigate to the folder OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **c.** Open the 794_UPGRADE_PRE_CTL_SCRIPT.sql file, and copy the contents into the SQL client.
 - d. Execute the script.
- 3. Run the UPGRADE_794.ctl script.

This script adds temp tables for the upgrade process.

- **a.** Navigate to the folder OracleBI\dwrep\Upgrade\CTLFiles.
- **b.** Use the DDLimp utility to run the UPGRADE_794.ctl script. Use the following command:

```
...\OracleBI\dwrep\bin\DDLIMP /U <USER> /P <PASSWORD> /C <ODBC connect
string>
/G SSE_ROLE /I N /R Y /F <...\OracleBI\dwrep\UPGRADE.CTL>
/L <...\oracleBI\dwrep\UPGRADE.log>
```

For example:

```
DDLIMP /U SADMIN /P SADMIN /C OBIA /G SSE_ROLE
/I N /R Y /F C:\OracleBI\dwrep\UPGRADE_794.CTL /L
C:\OracleBI\dwrep\UPGRADE.log
```

Notes:

- * /P <PASSWORD> The password for the data warehouse.
- * /C <ODBC connect string> The name of the ODBC connect string.
- * /I N Tells DDLimp to ignore the indexes DDL defined in the CTL file if any exist. It does not change existing indexes. (The default is /I Y, which tells DDLimp to create and merge indexes from the CTL file with the indexes in the database.
- * For Oracle databases, use the Data Direct drivers.

In addition, you can use the following commands:

- * /W Y If the OLAP database is Oracle and Unicode.
- * /Z Y If the OLAP database is DB2 or SQL Server and Unicode.
- * /B <TABLE_SPACE_NAME> If you want to create these tables in a separate table space. For DB2, This must be specified as 32K tablespace.
- /X <INDEX_TABLE_SPACE_NAME> If you want to create the indexes in a separate tablespace. For DB2, This must be specified as 32K tablespace.
- * /Y Storage File for DB2/390.
- * /R Regrant tables.
- **4.** Use the DDLimp utility to run the ddl_794.ctl script, which is located in the OracleBI\dwrep\Upgrade\CTLFiles folder. Use the following command:

```
..\OracleBI\dwrep\bin\DDLIMP /U <USER> /P <PASSWORD> /C <ODBC connect string>
/G SSE_ROLE /I N /R Y /F <..\OracleBI\dwrep\ddl_794.ctl>
/L <..\oracleBI\dwrep\ddl_794.log>
```

For example:

DDLIMP /U SADMIN /P SADMIN /C OBIA /G SSE_ROLE /I N /R Y /F C:\OracleBI\dwrep\ddl_794.ctl /L C:\OracleBI\dwrep\ddl_794.log

- 5. Run the 794_UPGRADE_PRE_DIMENSION_SCRIPT.sql script.
 - **a.** Open the SQL client for your database type.
 - **b.** Navigate to the folder OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **c.** Open the 794_UPGRADE_PRE_DIMENSION_SCRIPT.sql file, and copy the contents into the SQL client.
 - **d.** Execute the script.
- 6. Migrate data into the upgraded data warehouse.
 - **a.** Navigate to the folder OracleBI\dwrep\Upgrade\Informatica\ParameterFiles and copy the file 794_UPG_PARAMS.txt into the SrcFiles folder on the Informatica Server machine, for example, C:\Program Files\Informatica PowerCenter 8.1.1\server\infa_shared\SrcFiles.
 - b. Set the parameter \$\$ETL_PROC_WID to the latest ETL_PROC_WID value from the database. You can get this value from W_PARAM_G.ETL_PROC_WID.
 - **c.** Set the parameter \$\$DATASOURCE_NUM_ID to the relevant value from the adapter setup.
 - d. In Informatica Workflow Manager, navigate to the folder UPGRADE_793_to_ 794_ORA11i and execute first the UPGRADE_DIMENSIONS workflow and then the UPGRADE_FACTS workflow.
- 7. Verify the data migrated successfully.
 - a. Check whether any of the Informatica mapping log files stored in the \Informatica PowerCenter 8.1.1\server\infa_shared\SessLogs directory indicate errors or failures.
 - **b.** Check whether the script 794_UPGRADE_PRE_DIMENSION_SCRIPT.sql that you ran in the SQL client of the database failed or errored out while executing.

c. Check the log file for the script Upgrade_794.ctl that you ran using the DDLimp command to determine whether any of the runs failed.

If you did not detect any errors or failures in the steps above, then the data migration was successful.

Note: Ignore any error messages that indicate tables or indexes could not be dropped from the database. These error messages are displayed when the specified objects do not exist in the database. This can occur because each source system container holds a subset of all data warehouse tables

8. If the data migration was successful, drop the tables that were created during the upgrade process, such as, W_xxxx_x_79x tables, LKP_xxxx_x and 79x_XXXX_TMP.

This step frees the space occupied by these backup tables.

- **9.** Use the reset_infa_seq_gen.bat script to initialize the Informatica sequence generator for incremental runs on the main Informatica repository (Oracle_BI_DW_Base.rep).
 - **a.** Navigate to OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **b.** Open the reset_infa_seq_gen.bat file.

The file opens a command prompt, which will prompt you for the parameters listed below.

c. Enter the appropriate parameter values to reflect your environment (the parameters are database specific).

For Oracle databases:

Parameter	Setting
OLAP USERNAME	Enter the data warehouse database user ID .
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.
INFORMATICA DB USERNAME	Enter the user ID of the main Informatica Repository database.
INFORMATICA DB	Enter the password@connection string of the main Informatica
PASSWORD	Repository database.
INFORMATICA REPOSITORY	Enter the name of the main Informatica Repository.
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the main Informatica Repository.
INFORMATICA REPOSITORY PASSWORD	Enter the password for the main Informatica Repository.
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value HOR.

For Microsoft SQL S	erver databases:
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Parameter	Setting
OLAP_SERVER	Enter the name of the SQL Server for the OLAP database.
OLAP DATABASE	Enter the name of the database on which OLAP data is available.
OLAP USERNAME	Enter the user ID of the data warehouse database.
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.
INFORMATICA SERVER ADDRESS	Enter the name of the SQL Server for the Informatica Repository database.
INFORMATICA DATABASE	Enter the name of the database on which the Informatica Repository metadata is available.
INFORMATICA DB USERNAME	Enter the user ID of the main Informatica Repository database.
INFORMATICA DB PASSWORD	Enter the password@connection string of the main Informatica Repository database.
INFORMATICA REPOSITORY	Enter the name of the main Informatica Repository.
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the main Informatica Repository.
INFORMATICA REPOSITORY PASSWORD	Enter the password of the main Informatica Repository.
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value HOR.

For IBM DB2 databases:

Parameter	Setting
OLAP USERNAME	Enter the user ID of the data warehouse database.
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.
INFORMATICA DB USERNAME	Enter the user ID of the Upgrade Informatica Repository database.
INFORMATICA DB PASSWORD	Enter the password @connection string of the main Informatica Repository database.
INFA DATABASE ALIAS	Enter the name of the database in which Informatica Repository metadata is available.
INFORMATICA REPOSITORY	Enter the name of the main Informatica Repository.
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the main Informatica Repository.

Parameter	Setting
INFORMATICA REPOSITORY PASSWORD	Enter the password for the Informatica Repository.
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value HOR.

6.7.4 Upgrading the Data Warehouse Schema to Version 7.9.5. and Migrating Data

You need to perform this procedure if you are upgrading from Oracle BI Applications releases 7.9.0, 7.9.1, 7.9.2, 7.9.3, or 7.9.4.

To upgrade the data warehouse schema and migrate data into the upgraded data warehouse

- 1. Use the reset_infa_seq_gen.bat script to initialize the Informatica sequence generator for incremental runs on the Upgrade repository.
 - **a.** Navigate to OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **b.** Open the reset_infa_seq_gen.bat file.

The file opens a command prompt, which will prompt you for the parameters listed below.

c. Enter the appropriate parameter values to reflect your environment (the parameters are database specific).

For Oracle databases:

Parameter	Setting
OLAP USERNAME	Enter the data warehouse database user ID.
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.
INFORMATICA DB USERNAME	Enter the user ID of the Upgrade Informatica Repository database.
INFORMATICA DB	Enter the password@connection string of the Upgrade Informatica
PASSWORD	Repository database.
INFORMATICA REPOSITORY	Enter the name of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY PASSWORD	Enter the password for the Upgrade Informatica Repository.
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.

Parameter	Setting
INFA_FOLDER	Enter the value UPGRADE.

For Microsoft SQL Server databases:

Parameter	Setting
OLAP_SERVER	Enter the name of the SQL Server for the OLAP database.
OLAP DATABASE	Enter the name of the database on which OLAP data is available.
OLAP USERNAME	Enter the user ID of the data warehouse database.
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.
INFORMATICA SERVER ADDRESS	Enter the name of the SQL Server for the Informatica Repository database.
INFORMATICA DATABASE	Enter the name of the database in which the Informatica Repository metadata is available.
INFORMATICA DB USERNAME	Enter the user ID of the Upgrade Informatica Repository database.
INFORMATICA DB PASSWORD	Enter the password @connection string of the Upgrade Informatica Repository database.
INFORMATICA REPOSITORY	Enter the name of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY PASSWORD	Enter the password of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value UPGRADE.

For IBM DB2 databases:

Parameter	Setting
OLAP USERNAME	Enter the user ID of the data warehouse database.
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.
INFORMATICA DB USERNAME	Enter the user ID of the Upgrade Informatica Repository database.
INFORMATICA DB PASSWORD	Enter the password @connection string of the Upgrade Informatica Repository database.
INFA DATABASE ALIAS	Enter the name of the database in which Informatica Repository metadata is available.

Parameter	Setting
INFORMATICA REPOSITORY	Enter the name of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY PASSWORD	Enter the password for the Informatica Repository.
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value UPGRADE.

- 2. Run the 795_UPGRADE_PRE_CTL_SCRIPT.sql.
 - **a.** Open the SQL client for your database type.
 - **b.** Navigate to the folder OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **c.** Open the 795_UPGRADE_PRE_CTL_SCRIPT.sql file, and copy the contents into the SQL client.
 - **d.** Execute the script.
- 3. Run the UPGRADE_795.ctl script.

This script adds temp tables for the upgrade process.

- **a.** Navigate to the folder OracleBI\dwrep\Upgrade\CTLFiles.
- **b.** Use the DDLimp utility to run the UPGRADE_795.ctl script. Use the following command:

```
...\OracleBI\dwrep\bin\DDLIMP /U <USER> /P <PASSWORD> /C <ODBC connect
string>
/G SSE_ROLE /I N /R Y /F <...\OracleBI\dwrep\UPGRADE_795.CTL>
/L <..\oracleBI\dwrep\UPGRADE.log>
```

For example:

```
DDLIMP /U SADMIN /P SADMIN /C OBIA /G SSE_ROLE
/I N /R Y /F C:\OracleBI\dwrep\UPGRADE_795.CTL /L
C:\OracleBI\dwrep\UPGRADE.log
```

Notes:

- * /P <PASSWORD> The password for the data warehouse.
- * /C <ODBC connect string> The name of the ODBC connect string.
- * /I N Tells DDLimp to ignore the indexes DDL defined in the CTL file if any exist. It does not change existing indexes. (The default is /I Y, which tells DDLimp to create and merge indexes from the CTL file with the indexes in the database.
- * For Oracle databases, use the Data Direct drivers.

In addition, you can use the following commands:

- * /W Y If the OLAP database is Oracle and Unicode.
- * /Z Y If the OLAP database is DB2 or SQL Server and Unicode.
- * /B <TABLE_SPACE_NAME> If you want to create these tables in a separate table space. For DB2, This must be specified as 32K tablespace.
- /X <INDEX_TABLE_SPACE_NAME> If you want to create the indexes in a separate tablespace. For DB2, This must be specified as 32K tablespace.
- * /Y Storage File for DB2/390.
- * /R Regrant tables.
- **4.** Use the DDLimp utility to run the ddl_795.ctl script, which is located in the OracleBI\dwrep\Upgrade\CTLFiles folder. Use the following command:

```
..\OracleBI\dwrep\bin\DDLIMP /U <USER> /P <PASSWORD> /C <ODBC connect string>
/G SSE_ROLE /I N /R Y /F <..\OracleBI\dwrep\ddl_795.ctl>
/L <..\oracleBI\dwrep\ddl_795.log>
```

For example:

DDLIMP /U SADMIN /P SADMIN /C OBIA /G SSE_ROLE /I N /R Y /F C:\OracleBI\dwrep\ddl_795.ctl /L C:\OracleBI\dwrep\ddl_795.log

- 5. Run the 795_UPGRADE_PRE_DIMENSION_SCRIPT.sql script.
 - **a.** Open the SQL client for your database type.
 - **b.** Navigate to the folder OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **c.** Open the 795_UPGRADE_PRE_DIMENSION_SCRIPT.sql file, and copy the contents into the SQL client.
 - **d.** Execute the script.
- 6. Migrate data into the upgraded data warehouse.
 - **a.** Navigate to the folder OracleBI\dwrep\Upgrade\Informatica\ParameterFiles and copy the file 795_UPG_PARAMS.txt into the SrcFiles folder on the Informatica Server machine, for example, C:\Program Files\Informatica PowerCenter 8.1.1\server\infa_shared\SrcFiles.
 - b. Set the parameter \$\$ETL_PROC_WID to the latest ETL_PROC_WID value from the database. You can get this value from W_PARAM_G.ETL_PROC_WID.
 - **c.** Set the parameter \$\$DATASOURCE_NUM_ID to the relevant value from the adapter setup.
 - **d.** If you are using Oracle EBS 11i, in Informatica Workflow Manager, navigate to the folder UPGRADE_794_to_795_ORA11i and execute first the UPGRADE_DIMENSIONS workflow and then the UPGRADE_FACTS workflow.

If you are using Oracle EBS R12, in Informatica Workflow Manager, navigate to the folder UPGRADE_794_to_795_ORAR12 and execute first the UPGRADE_DIMENSIONS workflow and then the UPGRADE_FACTS workflow.

7. Verify the data migrated successfully.

- **a.** Check whether any of the Informatica mapping log files stored in the \Informatica PowerCenter 8.1.1\serva\infa_shared\Sesslogs directory indicates errors or failures.
- **b.** Check whether the script 795_UPGRADE_PRE_DIMENSION_SCRIPT.sql that you ran in the SQL client of the database failed or errored out while executing.
- **c.** Check the log file for the script Upgrade_795.ctl that you ran using the DDLimp command to determine whether any of the runs failed.

If you did not detect any errors or failures in the steps above, then the data migration was successful.

Note: Ignore any error messages that indicate tables or indexes could not be dropped from the database. These error messages are displayed when the specified objects do not exist in the database. This can occur because each source system container holds a subset of all data warehouse tables

8. If the data migration was successful, drop the tables that were created during the upgrade process, such as W_xxxx_X79x, LKP_xxxx_x and 79x_xxxx_TMP.

This step frees the space occupied by these backup tables.

- **9.** Once the data migration steps above are complete, you can delete the Upgrade repository to avoid any accidental use or confusion.
 - **a.** In the Informatica PowerCenter Administration Console, select the Upgrade repository service.
 - **b.** In the General Properties area of the Properties tab, click Edit .
 - c. Make sure the operating mode of the repository service is set to Exclusive.
 - d. Click OK.
 - e. Choose Actions, and then click Delete Contents.
 - f. In the Delete contents for <repository name> dialog, enter the repository username and password (for example, Administrator/Administrator), then click OK.
- **10.** Use the reset_infa_seq_gen.bat script to initialize the Informatica sequence generator for incremental runs on the main Informatica repository (Oracle_BI_DW_Base.rep).
 - a. Navigate to OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **b.** Open the reset_infa_seq_gen.bat file.

The file opens a command prompt, which will prompt you for the parameters listed below.

c. Enter the appropriate parameter values to reflect your environment (the parameters are database specific).

For Oracle databases:

Parameter	Setting
OLAP USERNAME	Enter the data warehouse database user ID.

Parameter	Setting
	Setting
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.
INFORMATICA DB USERNAME	Enter the user ID of the main Informatica Repository database.
INFORMATICA DB	Enter the password@connection string of the main Informatica
PASSWORD	Repository database.
INFORMATICA REPOSITORY	Enter the name of the main Informatica Repository.
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the main Informatica Repository.
INFORMATICA REPOSITORY PASSWORD	Enter the password for the main Informatica Repository.
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value HOR.

For Microsoft SQL Server databases:

Parameter	Setting
OLAP_SERVER	Enter the name of the SQL Server for the OLAP database.
OLAP DATABASE	Enter the name of the database on which OLAP data is available.
OLAP USERNAME	Enter the user ID of the data warehouse database.
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.
INFORMATICA SERVER ADDRESS	Enter the name of the SQL Server for the Informatica Repository database.
INFORMATICA DATABASE	Enter the name of the database on which the Informatica Repository metadata is available.
INFORMATICA DB USERNAME	Enter the user ID of the main Informatica Repository database.
INFORMATICA DB PASSWORD	Enter the password@connection string of the main Informatica Repository database.
INFORMATICA REPOSITORY	Enter the name of the main Informatica Repository.
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the main Informatica Repository.
INFORMATICA REPOSITORY PASSWORD	Enter the password of the main Informatica Repository.

Parameter	Setting
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value HOR.

For IBM DB2 databases:

Parameter	Setting
OLAP USERNAME	Enter the user ID of the data warehouse database.
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.
INFORMATICA DB USERNAME	Enter the user ID of the Upgrade Informatica Repository database.
INFORMATICA DB PASSWORD	Enter the password @connection string of the main Informatica Repository database.
INFA DATABASE ALIAS	Enter the name of the database in which Informatica Repository metadata is available.
INFORMATICA REPOSITORY	Enter the name of the main Informatica Repository.
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the main Informatica Repository.
INFORMATICA REPOSITORY PASSWORD	Enter the password for the Informatica Repository.
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value HOR.

6.7.5 Upgrading the Data Warehouse Schema to Version 7.9.5.1 and Migrating Data

You need to perform this procedure if you are upgrading from Oracle BI Applications releases 7.9.0, 7.9.1, 7.9.2, 7.9.3, 7.9.4, or 7.9.5.

To upgrade the data warehouse schema and migrate data into the upgraded data warehouse

- **1.** Use the reset_infa_seq_gen.bat script to initialize the Informatica sequence generator for incremental runs on the Upgrade repository.
 - a. Navigate to OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **b.** Open the reset_infa_seq_gen.bat file.

The file opens a command prompt, which will prompt you for the parameters listed below.

c. Enter the appropriate parameter values to reflect your environment (the parameters are database specific).

For Oracle databases:

Parameter	Setting
OLAP USERNAME	Enter the data warehouse database user ID.
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.
INFORMATICA DB USERNAME	Enter the user ID of the Upgrade Informatica Repository database.
INFORMATICA DB	Enter the password@connection string of the Upgrade Informatica
PASSWORD	Repository database.
INFORMATICA REPOSITORY	Enter the name of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY PASSWORD	Enter the password for the Upgrade Informatica Repository.
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value UPGRADE.

For Microsoft SQL Server databases:

Parameter	Setting
OLAP_SERVER	Enter the name of the SQL Server for the OLAP database.
OLAP DATABASE	Enter the name of the database on which OLAP data is available.
OLAP USERNAME	Enter the user ID of the data warehouse database.
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.
INFORMATICA SERVER ADDRESS	Enter the name of the SQL Server for the Informatica Repository database.
INFORMATICA DATABASE	Enter the name of the database in which the Informatica Repository metadata is available.
INFORMATICA DB USERNAME	Enter the user ID of the Upgrade Informatica Repository database.
INFORMATICA DB PASSWORD	Enter the password @connection string of the Upgrade Informatica Repository database.
INFORMATICA REPOSITORY	Enter the name of the Upgrade Informatica Repository.

Parameter	Setting
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY PASSWORD	Enter the password of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value UPGRADE.

For IBM DB2 databases:

Parameter	Setting
OLAP USERNAME	Enter the user ID of the data warehouse database.
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.
INFORMATICA DB USERNAME	Enter the user ID of the Upgrade Informatica Repository database.
INFORMATICA DB PASSWORD	Enter the password @connection string of the Upgrade Informatica Repository database.
INFA DATABASE ALIAS	Enter the name of the database in which Informatica Repository metadata is available.
INFORMATICA REPOSITORY	Enter the name of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY PASSWORD	Enter the password for the Informatica Repository.
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value UPGRADE.

- **2.** Run the 7951_UPGRADE_PRE_CTL_SCRIPT.sql.
 - **a.** Open the SQL client for your database type.
 - **b.** Navigate to the folder OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **c.** Open the 7951_UPGRADE_PRE_CTL_SCRIPT.sql file, and copy the contents into the SQL client.
 - **d.** Execute the script.

3. Run the UPGRADE_7951.ctl script.

This script adds temp tables for the upgrade process.

- **a.** Navigate to the folder OracleBI\dwrep\Upgrade\CTLFiles.
- **b.** Use the DDLimp utility to run the UPGRADE_7951.ctl script. Use the following command:

..\OracleBI\dwrep\bin\DDLIMP /U <USER> /P <PASSWORD> /C <ODBC connect string> /G SSE_ROLE /I N /R Y /F <..\OracleBI\dwrep\UPGRADE_7951.CTL> /L <..\oracleBI\dwrep\UPGRADE.log>

For example:

DDLIMP /U SADMIN /P SADMIN /C OBIA /G SSE_ROLE /I N /R Y /F C:\OracleBI\dwrep\UPGRADE_7951.CTL /L C:\OracleBI\dwrep\UPGRADE.log

Notes:

- /P <PASSWORD> The password for the data warehouse.
- * /C <ODBC connect string> The name of the ODBC connect string.
- * /I N Tells DDLimp to ignore the indexes DDL defined in the CTL file if any exist. It does not change existing indexes. (The default is /I Y, which tells DDLimp to create and merge indexes from the CTL file with the indexes in the database.
- * For Oracle databases, use the Data Direct drivers.

In addition, you can use the following commands:

- * /W Y If the OLAP database is Oracle and Unicode.
- * /Z Y If the OLAP database is DB2 or SQL Server and Unicode.
- /B <TABLE_SPACE_NAME> If you want to create these tables in a separate table space. For DB2, This must be specified as 32K tablespace.
- /X <INDEX_TABLE_SPACE_NAME> If you want to create the indexes in a separate tablespace. For DB2, This must be specified as 32K tablespace.
- * /Y Storage File for DB2/390.
- * /R Regrant tables.
- **4.** Use the DDLimp utility to run the ddl_7951.ctl script, which is located in the OracleBI\dwrep\Upgrade\CTLFiles folder. Use the following command:

```
..\OracleBI\dwrep\bin\DDLIMP /U <USER> /P <PASSWORD> /C <ODBC connect string>
/G SSE_ROLE /I N /R Y /F <..\OracleBI\dwrep\ddl_7951.ctl>
/L <..\oracleBI\dwrep\ddl_7951.log>
```

For example:

DDLIMP /U SADMIN /P SADMIN /C OBIA /G SSE_ROLE /I N /R Y /F C:\OracleBI\dwrep\ddl_7951.ctl /L C:\OracleBI\dwrep\ddl_7951.log

- 5. Run the 7951_UPGRADE_PRE_DIMENSION_SCRIPT.sql script.
 - **a.** Open the SQL client for your database type.

- **b.** Navigate to the folder OracleBI\dwrep\Upgrade\DbScripts\<database type>.
- **c.** Open the 7951_UPGRADE_PRE_DIMENSION_SCRIPT.sql file, and copy the contents into the SQL client.
- **d.** Execute the script.
- 6. Migrate data into the upgraded data warehouse.
 - **a.** Navigate to the folder OracleBI\dwrep\Upgrade\Informatica\ParameterFiles and copy the file 7951_UPG_PARAMS.txt into the SrcFiles folder on the Informatica Server machine, for example, C:\Program Files\Informatica PowerCenter 8.1.1\server\infa_shared\SrcFiles.
 - **b.** Set the parameter \$\$ETL_PROC_WID to the latest ETL_PROC_WID value from the database. You can get this value from W_PARAM_G.ETL_PROC_WID.
 - **c.** Set the parameter \$\$DATASOURCE_NUM_ID to the relevant value from the adapter setup.
 - **d.** If you are using Oracle EBS 11i, in Informatica Workflow Manager, navigate to the folder UPGRADE_794_to_7951_ORA11i and execute first the UPGRADE_DIMENSIONS workflow and then the UPGRADE_FACTS workflow.

If you are using Oracle EBS R12, in Informatica Workflow Manager, navigate to the folder UPGRADE_794_to_7951_ORAR12 and execute first the UPGRADE_DIMENSIONS workflow and then the UPGRADE_FACTS workflow.

- 7. Verify the data migrated successfully.
 - **a.** Check whether any of the Informatica mapping log files stored in the \Informatica PowerCenter 8.1.1\serva\infa_shared\Sesslogs directory indicates errors or failures.
 - **b.** Check whether the script 7951_UPGRADE_PRE_DIMENSION_SCRIPT.sql that you ran in the SQL client of the database failed or errored out while executing.
 - **c.** Check the log file for the script Upgrade_7951.ctl that you ran using the DDLimp command to determine whether any of the runs failed.

If you did not detect any errors or failures in the steps above, then the data migration was successful.

Note: Ignore any error messages that indicate tables or indexes could not be dropped from the database. These error messages are displayed when the specified objects do not exist in the database. This can occur because each source system container holds a subset of all data warehouse tables

8. If the data migration was successful, drop the tables that were created during the upgrade process, such as W_xxxx_x_79x, LKP_xxxx_x and 79x_xxxx_TMP.

This step frees the space occupied by these backup tables.

9. Once the data migration steps above are complete, you can delete the Upgrade repository to avoid any accidental use or confusion.

- **a.** In the Informatica PowerCenter Administration Console, select the Upgrade repository service.
- **b.** In the General Properties area of the Properties tab, click Edit .
- **c.** Make sure the operating mode of the repository service is set to Exclusive.
- d. Click OK.
- e. Choose Actions, and then click Delete Contents.
- f. In the Delete contents for <repository name> dialog, enter the repository username and password (for example, Administrator/Administrator), then click OK.
- **10.** Use the reset_infa_seq_gen.bat script to initialize the Informatica sequence generator for incremental runs on the main Informatica repository (Oracle_BI_DW_Base.rep).
 - **a.** Navigate to OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **b.** Open the reset_infa_seq_gen.bat file.

The file opens a command prompt, which will prompt you for the parameters listed below.

c. Enter the appropriate parameter values to reflect your environment (the parameters are database specific).

For Oracle databases:

Parameter	Setting	
OLAP USERNAME	Enter the data warehouse database user ID.	
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.	
INFORMATICA DB USERNAME	Enter the user ID of the main Informatica Repository database.	
INFORMATICA DB PASSWORD	Enter the password@connection string of the main Informatica	
	Repository database.	
INFORMATICA REPOSITORY	Enter the name of the main Informatica Repository.	
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the main Informatica Repository.	
INFORMATICA REPOSITORY PASSWORD	Enter the password for the main Informatica Repository.	
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.	
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.	
INFA_FOLDER	Enter the value HOR.	

For Microsoft SQL Server databases:

Parameter	Setting
OLAP_SERVER	Enter the name of the SQL Server for the OLAP database.
OLAP DATABASE	Enter the name of the database on which OLAP data is available.
OLAP USERNAME	Enter the user ID of the data warehouse database.
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.
INFORMATICA SERVER ADDRESS	Enter the name of the SQL Server for the Informatica Repository database.
INFORMATICA DATABASE	Enter the name of the database on which the Informatica Repository metadata is available.
INFORMATICA DB USERNAME	Enter the user ID of the main Informatica Repository database.
INFORMATICA DB PASSWORD	Enter the password@connection string of the main Informatica Repository database.
INFORMATICA REPOSITORY	Enter the name of the main Informatica Repository.
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the main Informatica Repository.
INFORMATICA REPOSITORY PASSWORD	Enter the password of the main Informatica Repository.
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value HOR.

For IBM DB2 databases:

Parameter	Setting
OLAP USERNAME	Enter the user ID of the data warehouse database.
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.
INFORMATICA DB USERNAME	Enter the user ID of the Upgrade Informatica Repository database.
INFORMATICA DB PASSWORD	Enter the password @connection string of the main Informatica Repository database.
INFA DATABASE ALIAS	Enter the name of the database in which Informatica Repository metadata is available.
INFORMATICA REPOSITORY	Enter the name of the main Informatica Repository.
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the main Informatica Repository.

Parameter	Setting
INFORMATICA REPOSITORY PASSWORD	Enter the password for the Informatica Repository.
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value HOR.

6.8 Upgrading the Oracle BI Repository

This process merges your customizations of a prior release of the Oracle BI repository with the new release of the Oracle BI repository. Before you begin this process, make sure you have backed up and renamed your existing repository.

To upgrade the repository, perform the following tasks:

- Section 6.8.1, "Preparing for the Oracle BI Repository Upgrade"
- Section 6.8.2, "Equalizing the Oracle BI Repositories"
- Section 6.8.3, "Comparing the Oracle BI Repositories"
- Section 6.8.4, "Merging the Oracle BI Repositories"
- Section 6.8.5, "Regression Testing the Oracle BI Repository Merge"

The tasks in this section refer to multiple releases of the Oracle BI repository. Table 6–1 provides the names and descriptions of the repositories used in the examples in this section.

Table 6–1 Names of Analytics Repositories used in Examples

Name of Repository	Description
OracleBIAnalyticsApps_79x.rpd	The standard Oracle BI repository for the version you are upgrading from.
	Note: Standard repositories from previous releases are available in the folder \OracleBI\Upgrade.
OracleBIAnalyticsApps.rpd	The standard Oracle BI repository for the version you are upgrading to.
Customer_ OracleBIAnalyticsApps.rpd	The Oracle BI repository that contains your customizations for the version you are upgrading from.
Merged_Repository_OracleBI.rpd	The Oracle BI repository that contains your customizations for the version you are upgrading to.

6.8.1 Preparing for the Oracle BI Repository Upgrade

Follow this procedure to prepare for the repository upgrade.

To prepare for the Analytics repository upgrade

- **1.** Set up a directory for the merge process, such as \OracleBIUpgrade, and create the following subfolders:
 - Original
 - AfterEqualize

- AfterMerge
- AfterManualWork
- AfterRegressions
- 2. Copy the original repository (for example, OracleBIAnalyticsApps_79x.rpd), the production repository (for example, Customer_OracleBIAnalyticsApps.rpd, and the repository from the latest installation (for example, OracleBIAnalyticsApps.rpd) into the folder \OracleBIUpgrade\Original.

If, in your current environment, you are running Oracle BI Applications for one or more modules using a Oracle BI repository in which you extracted the corresponding projects for the modules from the standard Oracle BI repository file you received from the previous release, you need to extract the same projects from the OracleBIAnalyticsApps_79x.rpd file and use this as your original repository. (If you have the original repository that you extracted during the last upgrade, you can use it as the original repository file.) This will prevent you from losing any new metadata you would like to add in this upgrade.

Also, if you customized the Oracle BI repository by trimming a large number of objects and you would like to get those objects back during the current upgrade, you need to trim the OracleBIAnalyticsApps_79x.rpd file in the same way and use the modified version as the original repository file. This will prevent you from losing any new metadata you would like to add in this upgrade.

6.8.2 Equalizing the Oracle BI Repositories

The Merge feature in the Administration Tool relies on a change detection algorithm to determine the changes that need to be made to upgrade repositories correctly. For the algorithm to work correctly, it has to determine which objects in the three repositories (for example, OracleBIAnalyticsApps_79x.rpd, OracleBIAnalyticsApps.rpd, and Customer_OracleBIAnalyticsApps.rpd) are equivalent.

The point of this step is to determine for every object in the OracleBIAnalyticsApps.rpd and the Customer_OracleBIAnalyticsApps.rpd whether it is coming from the OracleBIAnalyticsApps_79x.rpd.

Equivalence between objects is established using the Administration Tool's Equalize feature. The file that you specify in the Output option (-0) is the only file that is modified during the equalization process.

The Equalize feature has several mechanisms for determining whether an object in two different repositories is semantically the same:

- Fully Qualified Name. If an object in one repository has the same fully qualified name as another object of the same class in another repository, then the two objects are declared equal.
- Simple String Substitution. Equivalence can be declared between two objects of the same class in two repositories whose only difference is that some key characters in their names differ. The equalizerpds executable file ignores those characters while checking fully qualified names. For example, "Core"."W_DAY_D" might be considered equivalent to "Core"."W DAY D" if the characters "_" and " " have been declared as equivalent.
- Rename File. When none of the preceding rules are applicable, equivalence can be
 manually declared using a script as input to the equalizerpds executable file.
 Oracle ships the rename files (MAP) for the major releases. The files are located in
 the OracleBI\Upgrade folder. You can also create your own rename files for

customizations not covered in the files that Oracle ships. You can open and edit the rename files in Microsoft Excel.

The syntax of the equalizerpds command is as follows:

```
equalizerpds.exe -A userid1 [-B [password1]] -C base_repository_name -D userid2
[-E [password2]] -F repository2_name [-J udml_utf8_file_name_equalization] [-0
ouput_repository_name] [-X] [-Y equalStringSet]
-X Treat 'Factxxxx' as 'Fact' in Business Model.
```

-Y Treat the characters as equals.

```
/? Display this usage information and exit.
```

To equalize a repository

- Copy the appropriate MAP file from the OracleBI\Upgrade folder into the folder where you will execute equalizerpds.exe, for example, \OracleBIUpgrade\Original.
- 2. Run equalizerpds.exe to equalize the repository from the latest installation (for example, OracleBIAnalyticsApps.rpd) with the original repository (for example, OracleBIAnalyticsAppss_793.rpd). An example of the equalizerpds command is as follows:

```
equalizerpds -A Administrator -B SADMIN
-C \\OracleBIUpgrade\Original\OracleBIAnalyticsApps_791.rpd
-D Administrator -E SADMIN
-F \\OracleBIUpgrade\Original\OracleBIAnalyticsApps.rpd
-O \\OracleBIAnalyticsUpgrade\AfterEqualize\OracleBIAnalyticsApps.rpd
```

The MAP files are located in the \OracleBI\Upgrade folder.

If the equalizerpds.exe executable file runs correctly, no errors are returned.

3. Run equalizerpds.exe to equalize your customized repository (for example, Customer_OracleBIAnalyticsApps.rpd) with the original repository (for example, OracleBIAnalyticsApps_79x.rpd). An example of the equalizerpds command is as follows:

```
equalizerpds -A Administrator -B SADMIN
-C \\OracleBIUpgrade\Original\OracleBIAnalyticsApps_791.rpd
-D Administrator -E SADMIN
-F \\OracleBIUpgrade\Original\Customer_OracleBIAnalyticsApps.rpd
-O \\OracleBIUpgrade\AfterEqualize\Customer_OracleBIAnalyticsApps.rpd
```

The execution of equalizerpds that equalizes the customer repository with the original repository does not use the rename file.

Make sure that the original repository is copied unchanged into its new location so that after running the script, all three repositories are contained within the \OracleBIUpgrade\AfterEqualize directory.

4. To verify the process completed successfully, compare the size of the repositories. The output repository (-O) should be close to the same size as the repository you equalized (-F).

6.8.3 Comparing the Oracle BI Repositories

Follow this procedure to compare your existing repository with the new version to which you are upgrading.

To compare the Analytics repositories

⁻X -J rename7x-79.map

Use the Administration Tool's Compare Repositories feature to analyze the differences between your existing repository and the new version of the repository to which you are upgrading. Note where elements have been created, removed, or changed in the new version. Consider whether you can use the new metadata and retire customizations you made in the existing repository.

For instructions on how to use the Administration Tool's Compare Repositories feature, see *Oracle Business Intelligence Server Administration Guide*.

6.8.4 Merging the Oracle BI Repositories

In this procedure, you execute the main algorithm to upgrade the repository. For more information on merging the repositories, see *Oracle Business Intelligence Server Administration Guide*.

To merge versions of the Oracle BI repositories

- 1. Copy the three repositories (for example, OracleBIAnalyticsApps_79x.rpd, OracleBIAnalyticsApps.rpd, and Customer_OracleBIAnalyticsApps.rpd) to the AfterMerge folder.
- **2.** Open the repository from the latest installation (for example, OracleBIAnalyticsApps.rpd) in the \OracleBIUpgrade\AfterMerge folder.
- **3.** Save the repository with a new name, for example, Merged_Repository_ OracleBIAnalyticsApps.rpd.

This new repository will contain the final results of the upgrade.

- 4. From the Administration Tool menu bar, select File, then select Merge.
- **5.** In the Select Original Repository dialog box, select the original repository (for example, OracleBIAnalyticsApps_79x.rpd).
- 6. Enter the password, and click OK.
- 7. Click Select for the Modified Repository field.
- **8.** In the Select Modified Repository dialog box, select the repository that contains the customizations you made to the previous version of the Analytics repository.
- 9. Click Open, type the password, and then click OK.
- **10.** In the Decision drop-down list, select the action you want to take regarding the repository change, or accept the default action.
- **11.** To locate subsequent rows with empty Decision fields, click the Decision header cell.

When all rows have a value in the Decision field, the Merge button is enabled.

12. Click Merge.

This process can take up to 40 minutes, depending on the size of the repositories you are working with. A message will alert you when the merge is complete.

13. Click Yes when asked if you want to run a consistency check.

The number of errors returned by the consistency check is an indication of how successful the merge process was. If you receive many errors, for example, over 300, you should analyze the reason for the errors. If the merge process failed to recognize that two objects are the same, you may need to edit the rename file if the object is in the Current repository, or add your own rename file if you have renamed many of the objects and the upgrade engine failed to relate them to the original objects.

You also may need to change the actions you selected in the Decision drop-down list before rerunning the merge. This could save you time by reducing the number of errors that you will need to fix manually.

Once you are satisfied with the results of the merge, you should fix the remaining errors manually. It is important that you fix all errors before moving on to the next step. This repository serves as the input for the next stage.

You should also check that all of your customized objects are present and that no duplicate physical tables were introduced. To check for duplicate tables, search for physical tables using a query such as:

where name like '*#1'

14. Copy the repository to the folder \OracleBIUpgrade\AfterManualWork.

6.8.5 Regression Testing the Oracle BI Repository Merge

In performing a regression test for the repository merge, the objective is to collect a set of logical SQL statements that are used for reports and to verify that they continue to work with the new metadata. For this purpose, it is recommended that you perform the following procedure.

To perform regression testing

- 1. Run the reports that are necessary to include in the regression suite. These reports might be a subset of the reports in the Presentation Catalog.
- **2.** Collect the logical SQL generated in the previous step. You can do this using Usage Tracking or by parsing the query log file.

For information about Usage Tracking, see *Oracle Business Intelligence Server Administration Guide*.

3. Execute the logical SQL against the old repository using the command line utility nQCmd.exe located in \OracleBI\server\bin, and save the results to a file.

For information about the nQCmd.exe utility, see *Oracle Business Intelligence Server Administration Guide*.

- **4.** Edit the logical SQL test scripts to account for the name changes or modifications resulting from the upgrade.
- 5. Execute the edited logical SQL against the merged repository, and save the results.
- **6.** Compare the results from the steps above and try to explain the differences. If it is determined that these differences are due to the upgrade process, then you have to correct them manually.

This repository now contains the merged content from the new OracleBIAnalyticsApps.rpd and the production repository.

6.9 Upgrading the Oracle BI Presentation Catalog

You will need to upgrade your current Oracle BI Presentation Catalog if your organization:

- Has prebuilt applications already installed, and
- Has customized the current Oracle BI Presentation Catalog

If you made no changes to the previous Presentation Catalog distributed with previous versions of prebuilt applications, you do not need to upgrade the catalog. You can begin using the newer version of the catalog.

This process includes the following tasks:

- Section 6.9.1, "Trimming the Input Presentation Catalog"
- Section 6.9.2, "Upgrading the Oracle BI Presentation Catalog to a Newer Version"
- Section 6.9.3, "Testing the Results of the Presentation Catalog Upgrade"

Caution: In releases of Oracle BI Applications previous to 7.9, the Presentation Catalog (formerly known as the Siebel Analytics Web Catalog) was stored in a single file rather than in a directory structure of individual files. If you have a previous version of the Presentation Catalog, you will need to convert it to the new format. For more information about how to convert the Presentation Catalog to the new format, see the *Oracle Business Intelligence Infrastructure Upgrade Guide*

6.9.1 Trimming the Input Presentation Catalog

Before you upgrade and merge your current Presentation Catalog with the new Presentation Catalog, determine which of the existing content you want to keep and which new content you want to incorporate. Review your existing Presentation Catalog and determine the usage patterns of reports and dashboards. Note that some of the preconfigured content in the existing catalog may appear in the new version in a redesigned format. In addition, the new version includes completely new content. After you have decided the content that is to make up your enterprise Presentation Catalog, trim the input catalogs using the Catalog Manager. For information on trimming catalogs, see *Oracle Business Intelligence Presentation Services Administration Guide*.

6.9.2 Upgrading the Oracle BI Presentation Catalog to a Newer Version

The Presentation Catalog upgrade process makes use of three catalogs:

- The *original* Presentation Catalog. This is the unmodified Presentation Catalog that you received with the Oracle BI Applications release that you are upgrading from.
- The *new* Presentation Catalog. This is the Presentation Catalog that is installed in the OracleBIData\web\catalog folder with the installation of Oracle BI Applications.
- The *current* Presentation Catalog. This is the Presentation Catalog currently in use at your organization.

You use Catalog Manager for this upgrade process. Catalog Manager compares the content in both the *Current* Presentation Catalog and the *Modified* Presentation Catalog with the content in the Original Presentation Catalog, merges any changes into the *Current* Presentation Catalog, and produces a list of upgrade differences, which you must resolve by indicating how you want the differences handled. If the catalogs have conflicting content, you can choose which catalog the content should be taken from. The end result is a merged Presentation Catalog that contains the site-specific changes, as well as new metadata.

To upgrade your Presentation Catalog to a newer version
- 1. Make a backup copy of the current Presentation Catalog, rename the folder <catalogname>_old, and move it to a temporary location.
- **2.** Copy the original Presentation Catalog into the folder that holds your current Presentation Catalog and rename it <catalogname>_Original.
- **3.** Start Catalog Manager and open the new Presentation Catalog in offline mode.
- **4.** Select Tools, then select Upgrade Catalog.
- **5.** In the original Presentation Catalog field, browse to locate the original Presentation Catalog.
- **6.** In the Current Presentation Catalog field, browse to locate your current Web Catalog, <catalogname>_old.
- 7. Click OK.
- 8. Resolve any upgrade differences as follows:
 - a. Review each unresolved difference in the Unresolved differences list.
 - **b.** For each unresolved difference, select the version that you want to keep.
 - c. Click OK.

The log file SiebelAnalyticsMigrationLog.txt holds information about the merge process. This log file is written to \OracleBI\web\catalogmanager. If you get an error logged in the file, this means that the path in question had a problem that did not allow the merge mechanism to resolve the merge. No action was taken. To merge that particular item, go into your original Presentation Catalog and merge it manually.

- **9.** Review the upgraded Presentation Catalog, and, if necessary, set permissions for objects.
- **10.** Save the new Presentation Catalog.

6.9.3 Testing the Results of the Presentation Catalog Upgrade

Note: Before you perform this step, you must first migrate the data into the upgraded data warehouse.

The Presentation Catalog upgrade functionality does not automatically carry over object permissions; therefore, you should review the Presentation Catalog object permissions before you perform this step.

This step ensures that the upgraded reports and the new preconfigured reports are functional and render correct results within the new, merged Presentation Catalog. This step is typically performed by visually inspecting the final results of the complete end-to-end upgrade process.

For upgraded reports, the preferred approach for comparison purposes is to have side-by-side environments, and have users review specific dashboard content between the two environments. Examine not only the look and feel of the application but also the data contained in the reports to make sure the content remains the same. It is recommended that you request users to use various elements of the user interface to validate results, such as global prompts, column selectors, report filters, drills, and navigations, as they normally do on a day-to-day basis.

Also review the overall visibility and administrative settings in the new Presentation Catalog to ensure they are correct. Pay careful attention to the visibility rules that are established for any content that was migrated during the upgrade. You might have to manually adjust these settings.

Part III

Upgrading When Your Source System is Peoplesoft

Part III contains instructions for upgrading to the current release of Oracle BI Applications when you are running PeopleSoft Enterprise Applications as your source system.

Part III contains Chapter 7, "Upgrading Oracle BI Applications for the PeopleSoft Adapter."

7

Upgrading Oracle BI Applications for the PeopleSoft Adapter

This section contains instructions for upgrading Oracle BI Applications releases 7.9.3 and 7.9.4 when you are running PeopleSoft Enterprise Applications as your source system.

This section includes the following topics:

- Section 7.1, "Upgrading Oracle BI Infrastructure"
- Section 7.2, "Upgrading Oracle BI Applications"
- Section 7.3, "Upgrading to Informatica PowerCenter Version 8.1.1, SP5"
- Section 7.4, "Configuring Informatica PowerCenter Version 8.1.1, SP5 to Work with the DAC"
- Section 7.5, "Upgrading the Informatica Repository"
- Section 7.6, "Upgrading the DAC Repository"
- Section 7.7, "Upgrading the Data Warehouse Schema and Migrating Data"
- Section 7.8, "Upgrading the Oracle BI Repository"
- Section 7.9, "Upgrading the Oracle BI Presentation Catalog"

7.1 Upgrading Oracle BI Infrastructure

Upgrade the Oracle BI Infrastructure to the version that is supported for this release of Oracle BI Applications. See the *System Requirements and Supported Platforms for Oracle Business Intelligence Applications* for the current version that is supported. For information on installing the supported version of Oracle BI Infrastructure, see the *Oracle Business Intelligence Infrastructure Upgrade Guide*.

7.2 Upgrading Oracle BI Applications

Run the Oracle BI Applications installer to upgrade your Oracle BI Applications environment to the current version. For instructions on running the installer, see Oracle Business Intelligence Applications Installation Guide for Informatica PowerCenter Users.

Note: Perform only the step that addresses the running of the installer. Do not perform the configuration instructions that follow the running of the installer.

Note: If you have a previous release of Oracle BI Applications installed, you must uninstall it before you run the installer for the current release. If you do not uninstall the old release, some folders from the current release will not be correctly installed. (Make a back-up of your DAC folder before you uninstall the old release.)

7.3 Upgrading to Informatica PowerCenter Version 8.1.1, SP5

The current version of Oracle BI Applications supports Informatica PowerCenter 8.1.1, Service Pack 5 (SP5). You must install both Informatica PowerCenter 8.1.1 and SP5 to run the current version of Oracle BI Applications.

The components and architecture for Informatica PowerCenter 8.1.1 differ significantly from Informatica PowerCenter 7.x. Oracle recommends that you carefully review the Informatica documentation. The Informatica PowerCenter 8.1.1 SP5 documentation is included in the Informatica PowerCenter DVD provided with Oracle BI Applications.

For a summary of installation instructions for installing Informatica PowerCenter 8.1.1 and SP5 on a single machine in an Oracle BI Applications deployment, see the *Oracle Business Intelligence Applications Installation Guide for Informatica PowerCenter Users*. For instructions on configuring Informatica PowerCenter components for use with Oracle BI Applications, see the section in the *Oracle Business Intelligence Applications Installation Guide for Informatica PowerCenter Users* that covers configuring Informatica PowerCenter components.

For detailed information about deploying Informatica 8.1.1, refer to the *Informatica PowerCenter Installation and Configuration Guide*, and related documentation.

To upgrade to Informatica PowerCenter version 8.1.1, SP5

- **1.** Perform the pre-upgrade steps documented in the *Informatica PowerCenter Installation and Configuration Guide*.
- **2.** Install Informatica PowerCenter version 8.1.1 and SP5, following the instructions in the *Informatica PowerCenter Installation and Configuration Guide*.
- **3.** Perform the post-upgrade steps documented in the *Informatica PowerCenter Installation and Configuration Guide*.

Note: The Informatica PowerCenter 8.1.1 installation process includes upgrading your current Informatica repository to the version 8.1.1 format. This process is necessary so that you will be able to access your current repository using version 8.1.1 client tools so that you can perform the procedure Section 7.5, "Upgrading the Informatica Repository."

In Section 7.5, "Upgrading the Informatica Repository" you back up and rename your current repository and then restore the Informatica repository (Oracle_BI_DW_Base.rep) that is installed during the Oracle BI Applications installation. You then copy your custom folder from the backed up repository into the newly restored Oracle_BI_ DW_Base repository.

7.4 Configuring Informatica PowerCenter Version 8.1.1, SP5 to Work with the DAC

Informatica PowerCenter version 8.1.1, SP5 requires additional configuration steps in order to work with the DAC. For instructions on performing these steps, see the following sections in the *Oracle Business Intelligence Applications Installation Guide for Informatica PowerCenter Users*.

- Enabling DAC client communication with Informatica PowerCenter
- Enabling DAC server communication with Informatica PowerCenter
- Registering Informatica Services in the DAC

7.5 Upgrading the Informatica Repository

Follow this procedure to upgrade the Informatica repository.

To upgrade the Informatica repository

1. Make sure you have backed up and renamed your current Informatica repository.

For instructions, see the Informatica documentation, which is included in the Informatica PowerCenter DVD provided with Oracle BI Applications.

Note: This repository must be upgraded during the procedure in Section 7.3, "Upgrading to Informatica PowerCenter Version 8.1.1, SP5." You must upgrade this repository to the version 8.1.1 format in order to move your custom folder from this repository into the new Oracle_BI_DW_Base repository that you restore in the steps below.

 Copy the Oracle_BI_DW_Base.rep file from the folder OracleBI\dwrep\Informatica\Repository into the folder \Informatica\PowerCenter8.1.1\server\infa_shared\Backup.

Note: The Oracel_BI_DW_Base.rep file is installed in the OracleBI root directory when you run the Oracle BI Applications installer, as described in Section 7.2, "Upgrading Oracle BI Applications."

3. Restore the Oracle_BI_DW_Base.rep repository.

For instructions, see the *Informatica PowerCenter Installation and Configuration Guide*, which is included in the Informatica PowerCenter DVD provided with Oracle BI Applications.

- **4.** Copy the custom folder from your previous Informatica repository to the newly created Informatica repository:
 - **a.** Launch the Informatica PowerCenter Repository Manager, and connect to both your previous and newly created Informatica repositories.
 - **b.** Copy the Custom folder in your previous repository into the newly created Informatica repository.
 - **c.** Make sure there is an individual workflow for each of the mappings in the Custom folder.

7.6 Upgrading the DAC Repository

Before you begin this procedure, do the following:

- Determine what customizations were made to your existing DAC repository.
- Make sure you have renamed and backed up your existing DAC repository into a different database. When you backup the DAC repository, you export the DAC metadata, in XML format (using the DAC's Export tool), into a folder other than the standard DAC export folder where backups are stored (DAC\export). For instructions on exporting DAC metadata, see the Oracle Business Intelligence Data Warehouse Administration Console Guide.

To upgrade the DAC metadata repository

- **1.** Upgrade your current DAC repository tables to be compatible with the new DAC repository release.
 - **a.** Configure the new DAC client version to read the DAC metadata from your existing DAC repository.
 - **b.** Log in to the DAC and select Yes if prompted to upgrade the repository tables.
- **2.** Export all the applications from your custom repository (including the custom applications) to a folder other than the standard DAC export folder (DAC\export) or the folder into which you backed up metadata in the previous format.
- **3.** Import the new DAC metadata for your application from the standard DAC export folder (DAC\export). Select the Truncate Repository Tables check box.

For instructions on importing DAC metadata, see the *Oracle Business Intelligence Data Warehouse Administration Console Guide*.

- **4.** Refresh the source system container to locate any missing objects in your customized application.
 - **a.** In the DAC menu bar, select File, then select Refresh Source System Containers.

A list of available source system containers appears in the container list to the right of the View buttons.

- **b.** Select the appropriate source system container from the list, and click OK.
- c. Confirm that you want to refresh the source system container.
- **5.** Rebuild all the subject areas and execution plans in your customized application to include any new changes in the object dependency. For information about building subject areas and execution plans, see the *Oracle Business Intelligence Data Warehouse Administration Console Guide*.

7.7 Upgrading the Data Warehouse Schema and Migrating Data

This section contains the following topics:

- Section 7.7.1, "Performing Data Warehouse Schema Upgrade Steps Common to All Previous Releases"
- Section 7.7.2, "Upgrading the Data Warehouse Schema to Version 7.9.4 and Migrating Data"
- Section 7.7.3, "Upgrading the Data Warehouse Schema to Version 7.9.5 and Migrating Data"

Section 7.7.4, "Upgrading the Data Warehouse Schema to Version 7.9.5.1 and Migrating Data"

If you are currently running Oracle BI Applications version 7.9.3, you need to perform the procedures in Section 7.7.1, Section 7.7.2, Section 7.7.3, and Section 7.7.4.

If you are currently running Oracle BI Applications version 7.9.4, you need to perform the procedures in Section 7.7.1, Section 7.7.3, and Section 7.7.4.

If you are currently running Oracle BI Applications version 7.9.5, you need to perform the procedures in Section 7.7.1 and Section 7.7.4.

These procedures add new tables, columns, and indexes to the existing data warehouse schema. They also modify the existing data warehouse schema objects.

7.7.1 Performing Data Warehouse Schema Upgrade Steps Common to All Previous Releases

The steps in this procedure are required for upgrading to Oracle BI Applications release 7.9.5.1 from all previous releases.

To perform common data warehouse upgrade steps

- Copy all of the domain value files in the folder \OracleBI\dwrep\Informatica\LkpFiles into the folder \Informatica PowerCenter 8.1.1\server\infa_shared\LkpFiles.
- 2. Restore the Upgrade repository
 - **a.** Copy the file Upgrade.rep file from the folder OracleBI\dwrep\Upgrade\Informatica\Repository into the folder Informatica PowerCenter 8.1.1\server\infa_shared\Backup.
 - **b.** Launch the Informatica PowerCenter Administration Console and restore Upgrade.rep (located in Informatica PowerCenter 8.1.1\server\infa_shared\Backup).
- **3.** In Informatica Workflow Manager, open the Relational Connection Browser (in the menu bar, select Connections, and then select Relational), and create the following connections:
 - **a.** Create one relational connection based on the appropriate database platform for your OLTP database. Create the connection with the name PARAM_OLTP_PSFT.
 - **b.** Create one relational connection based on the appropriate database platform for your OLAP database. Create the connection with the name PARAM_OLAP.

Note: If you are connected to an Oracle database, use the Oracle Native driver instead of ODBC.

If you are connected to a SQL Server database, use the ODBC driver rather than the native SQL Server driver.

7.7.2 Upgrading the Data Warehouse Schema to Version 7.9.4 and Migrating Data

You need to perform this procedure if you are upgrading from Oracle BI Applications release 7.9.3.

To upgrade the data warehouse schema and migrate data into the upgraded data warehouse

- 1. Use the reset_infa_seq_gen.bat script to initialize the Informatica sequence generator for incremental runs on the Upgrade repository.
 - **a.** Navigate to OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **b.** Open the reset_infa_seq_gen.bat file.

The file opens a command prompt, which will prompt you for the parameters listed below.

c. Enter the appropriate parameter values to reflect your environment (the parameters are database specific).

For Oracle databases:

Parameter	Setting
OLAP USERNAME	Enter the data warehouse database user ID
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database
INFORMATICA DB USERNAME	Enter the user ID of the Upgrade Informatica Repository database
INFORMATICA DB PASSWORD	Enter the password@connection string of the Upgrade Informatica Repository database
INFORMATICA REPOSITORY	Enter the name of the Upgrade Informatica Repository
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the Upgrade Informatica Repository
INFORMATICA REPOSITORY PASSWORD	Enter the password for the Upgrade Informatica Repository
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value UPGRADE

For Microsoft SQL Server databases:

Parameter	Setting
OLAP_SERVER	Enter the name of the SQL Server for the OLAP database
OLAP DATABASE	Enter the name of the database on which OLAP data is available
OLAP USERNAME	Enter the user ID of the data warehouse database
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database
INFORMATICA SERVER ADDRESS	Enter the name of the SQL Server for the Informatica Repository database.

Parameter	Setting
INFORMATICA DATABASE	Enter the name of the database in which the Informatica Repository metadata is available
INFORMATICA DB USERNAME	Enter the user ID of the Upgrade Informatica Repository database
INFORMATICA DB PASSWORD	Enter the password @connection string of the Upgrade Informatica Repository database
INFORMATICA REPOSITORY	Enter the name of the Upgrade Informatica Repository
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the Upgrade Informatica Repository
INFORMATICA REPOSITORY PASSWORD	Enter the password of the Upgrade Informatica Repository
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value UPGRADE

For IBM DB2 databases:

Parameter	Setting
OLAP USERNAME	Enter the user ID of the data warehouse database
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database
INFORMATICA DB USERNAME	Enter the user ID of the Upgrade Informatica Repository database
INFORMATICA DB PASSWORD	Enter the password @connection string of the Upgrade Informatica Repository database
INFA DATABASE ALIAS	Enter the name of the database in which Informatica Repository metadata is available
INFORMATICA REPOSITORY	Enter the name of the Upgrade Informatica Repository
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the Upgrade Informatica Repository
INFORMATICA REPOSITORY PASSWORD	Enter the password for the Informatica Repository
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value UPGRADE

2. Run the UPGRADE_794.ctl script.

This script adds temp tables for the upgrade process.

- a. Navigate to the folder OracleBI\dwrep\Upgrade\CTLFiles.
- **b.** Use the DDLimp utility to run the UPGRADE_794.ctl script. Use the following command:

```
...\OracleBI\dwrep\bin\DDLIMP /U <USER> /P <PASSWORD> /C <ODBC connect
string>
/G SSE_ROLE /I N /R Y /F <...\OracleBI\dwrep\UPGRADE.CTL>
/L <...\oracleBI\dwrep\UPGRADE.log>
```

For example:

```
DDLIMP /U SADMIN /P SADMIN /C OBIA /G SSE_ROLE
/I N /R Y /F C:\OracleBI\dwrep\UPGRADE_794.CTL /L
C:\OracleBI\dwrep\UPGRADE.log
```

Notes:

- * /P <PASSWORD> The password for the data warehouse.
- * /C <ODBC connect string> The name of the ODBC connect string.
- * /I N Tells DDLimp to ignore the indexes DDL defined in the CTL file if any exist. It does not change existing indexes. (The default is /I Y, which tells DDLimp to create and merge indexes from the CTL file with the indexes in the database.
- * For Oracle databases, use the Data Direct drivers.

In addition, you can use the following commands:

- * /W Y If the OLAP database is Oracle and Unicode.
- * /ZY If the OLAP database is DB2 or SQL Server and Unicode.
- * /B <TABLE_SPACE_NAME> If you want to create these tables in a separate table space. For DB2, This must be specified as 32K tablespace.
- /X <INDEX_TABLE_SPACE_NAME> If you want to create the indexes in a separate tablespace. For DB2, This must be specified as 32K tablespace.
- * /Y Storage File for DB2/390.
- * /R Regrant tables.
- **3.** Use the DDLimp utility to run the ddl_794.ctl script, which is located in the OracleBI\dwrep\Upgrade\CTLFiles folder. Use the following command:

```
..\OracleBI\dwrep\bin\DDLIMP /U <USER> /P <PASSWORD> /C <ODBC connect string>
/G SSE_ROLE /I N /R Y /F <..\OracleBI\dwrep\ddl_794.ctl>
/L <..\oracleBI\dwrep\ddl_794.log>
```

For example:

```
DDLIMP /U SADMIN /P SADMIN /C OBIA /G SSE_ROLE
/I N /R Y /F C:\OracleBI\dwrep\ddl_794.ctl /L C:\OracleBI\dwrep\ddl_794.log
```

- 4. Run the 794_UPGRADE_PRE_DIMENSION_SCRIPT.sql script.
 - **a.** Open the SQL client for your database type.

- **b.** Navigate to the folder OracleBI\dwrep\Upgrade\DbScripts\<database type>.
- **c.** Open the 794_UPGRADE_PRE_DIMENSION_SCRIPT.sql file, and copy the contents into the SQL client.
- **d.** Execute the script.
- 5. Migrate data into the upgraded data warehouse.
 - **a.** Navigate to the folder OracleBI\dwrep\Upgrade\Informatica\ParameterFiles and copy the file 794_UPG_PARAMS.txt into the SrcFiles folder on the Informatica Server machine, for example, C:\Program Files\Informatica PowerCenter 8.1.1\server\infa_shared\SrcFiles.
 - **b.** Set the parameter \$\$ETL_PROC_WID to the latest ETL_PROC_WID value from the database. You can get this value from W_PARAM_G.ETL_PROC_WID.
 - **c.** Set the parameter \$\$DATASOURCE_NUM_ID to the relevant value from the adapter setup.
 - **d.** In Informatica Workflow Manager, navigate to the folder UPGRADE_793_to_ 794_PSFT88, and execute first the UPGRADE_DIMENSIONS workflow and then the UPGRADE_FACTS workflow.
- **6.** Verify the data migrated successfully.
 - **a.** Check whether any of the Informatica mapping log files stored in the \Informatica PowerCenter 8.1.1\server\infa_shared\SessLogs directory indicate errors or failures.
 - **b.** Check whether the script 794_UPGRADE_PRE_DIMENSION_SCRIPT.sql that you ran in the SQL client of the database failed or errored out while executing.
 - **c.** Check the log file for the script Upgrade_794.ctl that you ran using the DDLimp command to determine whether any of the runs failed.

If you did not detect any errors or failures in the steps above, then the data migration was successful.

Note: Ignore any error messages that indicate tables or indexes could not be dropped from the database. These error messages are displayed when the specified objects do not exist in the database. This can occur because each source system container holds a subset of all data warehouse tables

7. If the data migration was successful, drop the tables that were created during the upgrade process, such as, W_xxxx_x_79x tables, LKP_xxxx_x and 79x_XXXX_TMP.

This step frees the space occupied by these backup tables.

7.7.3 Upgrading the Data Warehouse Schema to Version 7.9.5 and Migrating Data

You need to perform this procedure if you are upgrading from Oracle BI Applications releases 7.9.3 or 7.9.4.

To upgrade the data warehouse schema and migrate data into the upgraded data warehouse

- **1.** Use the reset_infa_seq_gen.bat script to initialize the Informatica sequence generator for incremental runs on the Upgrade repository.
 - a. Navigate to OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **b.** Open the reset_infa_seq_gen.bat file.

The file opens a command prompt, which will prompt you for the parameters listed below.

c. Enter the appropriate parameter values to reflect your environment (the parameters are database specific).

For Oracle databases:

Parameter	Setting
OLAP USERNAME	Enter the data warehouse database user ID
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database
INFORMATICA DB USERNAME	Enter the user ID of the Upgrade Informatica Repository database
INFORMATICA DB PASSWORD	Enter the password@connection string of the Upgrade Informatica Repository database
INFORMATICA REPOSITORY	Enter the name of the Upgrade Informatica Repository
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the Upgrade Informatica Repository
INFORMATICA REPOSITORY PASSWORD	Enter the password for the Upgrade Informatica Repository
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value UPGRADE

For Microsoft SQL Server databases:

Parameter	Setting
OLAP_SERVER	Enter the name of the SQL Server for the OLAP database
OLAP DATABASE	Enter the name of the database on which OLAP data is available
OLAP USERNAME	Enter the user ID of the data warehouse database
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database
INFORMATICA SERVER ADDRESS	Enter the name of the SQL Server for the Informatica Repository database.
INFORMATICA DATABASE	Enter the name of the database in which the Informatica Repository metadata is available

Parameter	Setting
INFORMATICA DB USERNAME	Enter the user ID of the Upgrade Informatica Repository database
INFORMATICA DB PASSWORD	Enter the password @connection string of the Upgrade Informatica Repository database
INFORMATICA REPOSITORY	Enter the name of the Upgrade Informatica Repository
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the Upgrade Informatica Repository
INFORMATICA REPOSITORY PASSWORD	Enter the password of the Upgrade Informatica Repository
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value UPGRADE

For IBM DB2 databases:

Parameter	Setting
OLAP USERNAME	Enter the user ID of the data warehouse database
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database
INFORMATICA DB USERNAME	Enter the user ID of the Upgrade Informatica Repository database
INFORMATICA DB PASSWORD	Enter the password @connection string of the Upgrade Informatica Repository database
INFA DATABASE ALIAS	Enter the name of the database in which Informatica Repository metadata is available
INFORMATICA REPOSITORY	Enter the name of the Upgrade Informatica Repository
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the Upgrade Informatica Repository
INFORMATICA REPOSITORY PASSWORD	Enter the password for the Informatica Repository
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value UPGRADE

2. Run the 795_UPGRADE_PRE_CTL_SCRIPT.sql.

a. Open the SQL client for your database type.

- **b.** Navigate to the folder OracleBI\dwrep\Upgrade\DbScripts\<database type>.
- **c.** Open the 795_UPGRADE_PRE_CTL_SCRIPT.sql file, and copy the contents into the SQL client.
- **d.** Execute the script.
- 3. Run the UPGRADE_795.ctl script.

This script adds temp tables for the upgrade process.

- a. Navigate to the folder OracleBI\dwrep\Upgrade\CTLFiles.
- **b.** Use the DDLimp utility to run the UPGRADE_795.ctl script. Use the following command:

```
..\OracleBI\dwrep\bin\DDLIMP /U <USER> /P <PASSWORD> /C <ODBC connect
string>
/G SSE_ROLE /I N /R Y /F <..\OracleBI\dwrep\UPGRADE_795.CTL>
/L <..\oracleBI\dwrep\UPGRADE.log>
```

For example:

```
DDLIMP /U SADMIN /P SADMIN /C OBIA /G SSE_ROLE
/I N /R Y /F C:\OracleBI\dwrep\UPGRADE_795.CTL /L
C:\OracleBI\dwrep\UPGRADE.log
```

Notes:

- * /P <PASSWORD> The password for the data warehouse.
- * /C <ODBC connect string> The name of the ODBC connect string.
- * /I N Tells DDLimp to ignore the indexes DDL defined in the CTL file if any exist. It does not change existing indexes. (The default is /I Y, which tells DDLimp to create and merge indexes from the CTL file with the indexes in the database.
- * For Oracle databases, use the Data Direct drivers.

In addition, you can use the following commands:

- * /W Y If the OLAP database is Oracle and Unicode.
- * /Z Y If the OLAP database is DB2 or SQL Server and Unicode.
- * /B <TABLE_SPACE_NAME> If you want to create these tables in a separate table space. For DB2, This must be specified as 32K tablespace.
- * /X <INDEX_TABLE_SPACE_NAME> If you want to create the indexes in a separate tablespace. For DB2, This must be specified as 32K tablespace.
- * /Y Storage File for DB2/390.
- * /R Regrant tables.
- **4.** Use the DDLimp utility to run the ddl_795.ctl script, which is located in the OracleBI\dwrep\Upgrade\CTLFiles folder. Use the following command:

```
..\OracleBI\dwrep\bin\DDLIMP /U <USER> /P <PASSWORD> /C <ODBC connect string>
/G SSE_ROLE /I N /R Y /F <..\OracleBI\dwrep\ddl_795.ctl>
/L <..\oracleBI\dwrep\ddl_795.log>
```

For example:

DDLIMP /U SADMIN /P SADMIN /C OBIA /G SSE_ROLE /I N /R Y /F C:\OracleBI\dwrep\ddl_795.ctl /L C:\OracleBI\dwrep\ddl_795.log

- 5. Run the 795_UPGRADE_PRE_DIMENSION_SCRIPT.sql script.
 - **a.** Open the SQL client for your database type.
 - **b.** Navigate to the folder OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **c.** Open the 795_UPGRADE_PRE_DIMENSION_SCRIPT.sql file, and copy the contents into the SQL client.
 - **d.** Execute the script.
- 6. Migrate data into the upgraded data warehouse.
 - a. Navigate to the folder OracleBI\dwrep\Upgrade\Informatica\ParameterFiles and copy the file 795_UPG_PARAMS.txt into the SrcFiles folder on the Informatica Server machine, for example, C:\Program Files\Informatica PowerCenter 8.1.1\server\infa_shared\SrcFiles.
 - **b.** Set the parameter \$\$ETL_PROC_WID to the latest ETL_PROC_WID value from the database. You can get this value from W_PARAM_G.ETL_PROC_WID.
 - **c.** Set the parameter \$\$DATASOURCE_NUM_ID to the relevant value from the adapter setup.
 - d. In Informatica Workflow Manager, navigate to the folder UPGRADE_794_to_ 795_PSFT88 and execute first the UPGRADE_DIMENSIONS workflow and then the UPGRADE_FACTS workflow.
- **7.** Verify the data migrated successfully.
 - **a.** Check whether any of the Informatica mapping log files stored in the \Informatica PowerCenter 8.1.1\serva\infa_shared\Sesslogs directory indicates errors or failures.
 - **b.** Check whether the script 795_UPGRADE_PRE_DIMENSION_SCRIPT.sql that you ran in the SQL client of the database failed or errored out while executing.
 - **c.** Check the log file for the script Upgrade_795.ctl that you ran using the DDLimp command to determine whether any of the runs failed.

If you did not detect any errors or failures in the steps above, then the data migration was successful.

8. If the data migration was successful, drop the tables that were created during the upgrade process, such as W_xxxx_X_79x, LKP_xxxx_x and 79x_xxxx_TMP.

This step frees the space occupied by these backup tables.

- **9.** Once the data migration steps above are complete, you can delete the Upgrade repository to avoid any accidental use or confusion.
 - **a.** In the Informatica PowerCenter Administration Console, select the Upgrade repository service.
 - **b.** In the General Properties area of the Properties tab, click Edit .
 - **c.** Make sure the operating mode of the repository service is set to Exclusive.
 - d. Click OK.
 - e. Choose Actions, and then click Delete Contents.

- f. In the Delete contents for <repository name> dialog, enter the repository username and password (for example, Administrator/Administrator), then click OK.
- **10.** Use the reset_infa_seq_gen.bat script to initialize the Informatica sequence generator for incremental runs on the main Informatica repository (Oracle_BI_DW_Base.rep).
 - a. Navigate to OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **b.** Open the reset_infa_seq_gen.bat file.

The file opens a command prompt, which will prompt you for the parameters listed below.

c. Enter the appropriate parameter values to reflect your environment (the parameters are database specific).

For Oracle databases:

Parameter	Setting
OLAP USERNAME	Enter the data warehouse database user ID
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database
INFORMATICA DB USERNAME	Enter the user ID of the main Informatica Repository database
INFORMATICA DB	Enter the password@connection string of the main Informatica
PASSWORD	Repository database
INFORMATICA REPOSITORY	Enter the name of the main Informatica Repository
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the main Informatica Repository
INFORMATICA REPOSITORY PASSWORD	Enter the password for the main Informatica Repository
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value HOR

For Microsoft SQL Server databases:

Parameter	Setting
OLAP_SERVER	Enter the name of the SQL Server for the OLAP database
OLAP DATABASE	Enter the name of the database on which OLAP data is available
OLAP USERNAME	Enter the user ID of the data warehouse database
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database

Parameter	Setting
INFORMATICA SERVER ADDRESS	Enter the name of the SQL Server for the Informatica Repository database.
INFORMATICA DATABASE	Enter the name of the database on which the Informatica Repository metadata is available
INFORMATICA DB USERNAME	Enter the user ID of the main Informatica Repository database
INFORMATICA DB PASSWORD	Enter the password@connection string of the main Informatica Repository database
INFORMATICA REPOSITORY	Enter the name of the main Informatica Repository
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the main Informatica Repository
INFORMATICA REPOSITORY PASSWORD	Enter the password of the main Informatica Repository
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value HOR

For IBM DB2 databases:

Parameter	Setting
OLAP USERNAME	Enter the user ID of the data warehouse database
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database
INFORMATICA DB USERNAME	Enter the user ID of the Upgrade Informatica Repository database
INFORMATICA DB PASSWORD	Enter the password @connection string of the main Informatica Repository database
INFA DATABASE ALIAS	Enter the name of the database in which Informatica Repository metadata is available
INFORMATICA REPOSITORY	Enter the name of the main Informatica Repository
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the main Informatica Repository
INFORMATICA REPOSITORY PASSWORD	Enter the password for the Informatica Repository
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.

Parameter	Setting
INFA_FOLDER	Enter the value HOR

7.7.4 Upgrading the Data Warehouse Schema to Version 7.9.5.1 and Migrating Data

You need to perform this procedure if you are upgrading from Oracle BI Applications releases 7.9.3, 7.9.4, or 7.9.5.

To upgrade the data warehouse schema and migrate data

- 1. Use the reset_infa_seq_gen.bat script to initialize the Informatica sequence generator for incremental runs on the Upgrade repository.
 - a. Navigate to OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **b.** Open the reset_infa_seq_gen.bat file.

The file opens a command prompt, which will prompt you for the parameters listed below.

c. Enter the appropriate parameter values to reflect your environment (the parameters are database specific).

For Oracle databases:

Parameter	Setting	
OLAP USERNAME	Enter the data warehouse database user ID.	
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.	
INFORMATICA DB USERNAME	Enter the user ID of the Upgrade Informatica Repository database.	
INFORMATICA DB PASSWORD	Enter the password@connection string of the Upgrade Informatica Repository database.	
INFORMATICA REPOSITORY	Enter the name of the Upgrade Informatica Repository.	
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the Upgrade Informatica Repository.	
INFORMATICA REPOSITORY PASSWORD	Enter the password for the Upgrade Informatica Repository.	
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.	
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.	
INFA_FOLDER	Enter the value UPGRADE.	

For Microsoft SQL Server databases:

Parameter	Setting
OLAP_SERVER	Enter the name of the SQL Server for the OLAP database.
OLAP DATABASE	Enter the name of the database on which OLAP data is available.

Parameter	Setting
OLAP USERNAME	Enter the user ID of the data warehouse database.
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.
INFORMATICA SERVER ADDRESS	Enter the name of the SQL Server for the Informatica Repository database.
INFORMATICA DATABASE	Enter the name of the database in which the Informatica Repository metadata is available.
INFORMATICA DB USERNAME	Enter the user ID of the Upgrade Informatica Repository database.
INFORMATICA DB PASSWORD	Enter the password @connection string of the Upgrade Informatica Repository database.
INFORMATICA REPOSITORY	Enter the name of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY PASSWORD	Enter the password of the Upgrade Informatica Repository.
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value UPGRADE.

For IBM DB2 databases:

Parameter	Setting	
OLAP USERNAME	Enter the user ID of the data warehouse database.	
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.	
INFORMATICA DB USERNAME	Enter the user ID of the Upgrade Informatica Repository database.	
INFORMATICA DB PASSWORD	Enter the password @connection string of the Upgrade Informatica Repository database.	
INFA DATABASE ALIAS	Enter the name of the database in which Informatica Repository metadata is available.	
INFORMATICA REPOSITORY	Enter the name of the Upgrade Informatica Repository.	
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the Upgrade Informatica Repository.	
INFORMATICA REPOSITORY PASSWORD	Enter the password for the Informatica Repository.	

Deremeter	Catting
Parameter	Setting
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value UPGRADE.

2. Run the 7951_UPGRADE_PRE_CTL_SCRIPT.sql.

- **a.** Open the SQL client for your database type.
- **b.** Navigate to the folder OracleBI\dwrep\Upgrade\DbScripts\<database type>.
- **c.** Open the 7951_UPGRADE_PRE_CTL_SCRIPT.sql file, and copy the contents into the SQL client.
- d. Execute the script.
- 3. Run the UPGRADE_7951.ctl script.

This script adds temp tables for the upgrade process.

- a. Navigate to the folder OracleBI\dwrep\Upgrade\CTLFiles.
- **b.** Use the DDLimp utility to run the UPGRADE_7951.ctl script. Use the following command:

..\OracleBI\dwrep\bin\DDLIMP /U <USER> /P <PASSWORD> /C <ODBC connect string> /G SSE_ROLE /I N /R Y /F <..\OracleBI\dwrep\UPGRADE_7951.CTL> /L <..\oracleBI\dwrep\UPGRADE.log>

For example:

```
DDLIMP /U SADMIN /P SADMIN /C OBIA /G SSE_ROLE
/I N /R Y /F C:\OracleBI\dwrep\UPGRADE_7951.CTL /L
C:\OracleBI\dwrep\UPGRADE.log
```

Notes:

- * /P <PASSWORD> The password for the data warehouse.
- * /C <ODBC connect string> The name of the ODBC connect string.
- * /I N Tells DDLimp to ignore the indexes DDL defined in the CTL file if any exist. It does not change existing indexes. (The default is /I Y, which tells DDLimp to create and merge indexes from the CTL file with the indexes in the database.
- * For Oracle databases, use the Data Direct drivers.

In addition, you can use the following commands:

- * /W Y If the OLAP database is Oracle and Unicode.
- * /Z Y If the OLAP database is DB2 or SQL Server and Unicode.
- * /B <TABLE_SPACE_NAME> If you want to create these tables in a separate table space. For DB2, This must be specified as 32K tablespace.

- /X <INDEX_TABLE_SPACE_NAME> If you want to create the indexes in a separate tablespace. For DB2, This must be specified as 32K tablespace.
- * /Y Storage File for DB2/390.
- * /R Regrant tables.
- **4.** Use the DDLimp utility to run the ddl_7951.ctl script, which is located in the OracleBI\dwrep\Upgrade\CTLFiles folder. Use the following command:

```
..\OracleBI\dwrep\bin\DDLIMP /U <USER> /P <PASSWORD> /C <ODBC connect string>
/G SSE_ROLE /I N /R Y /F <..\OracleBI\dwrep\ddl_7951.ctl>
/L <..\oracleBI\dwrep\ddl_7951.log>
```

For example:

```
DDLIMP /U SADMIN /P SADMIN /C OBIA /G SSE_ROLE
/I N /R Y /F C:\OracleBI\dwrep\ddl_7951.ctl /L C:\OracleBI\dwrep\ddl_7951.log
```

- 5. Run the 7951_UPGRADE_PRE_DIMENSION_SCRIPT.sql script.
 - **a.** Open the SQL client for your database type.
 - **b.** Navigate to the folder OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **c.** Open the 7951_UPGRADE_PRE_DIMENSION_SCRIPT.sql file, and copy the contents into the SQL client.
 - **d.** Execute the script.
- 6. Migrate data into the upgraded data warehouse.
 - a. Navigate to the folder OracleBI\dwrep\Upgrade\Informatica\ParameterFiles and copy the file 7951_UPG_PARAMS.txt into the SrcFiles folder on the Informatica Server machine, for example, C:\Program Files\Informatica PowerCenter 8.1.1\server\infa_shared\SrcFiles.
 - b. Set the parameter \$\$ETL_PROC_WID to the latest ETL_PROC_WID value from the database. You can get this value from W_PARAM_G.ETL_PROC_WID.
 - **c.** Set the parameter \$\$DATASOURCE_NUM_ID to the relevant value from the adapter setup.
 - **d.** In Informatica Workflow Manager, navigate to the folder UPGRADE_795_to_ 7951_PSFT88 and execute first the UPGRADE_DIMENSIONS workflow and then the UPGRADE_FACTS workflow.
- 7. Verify the data migrated successfully.
 - **a.** Check whether any of the Informatica mapping log files stored in the \Informatica PowerCenter 8.1.1\serva\infa_shared\Sesslogs directory indicates errors or failures.
 - **b.** Check whether the script 7951_UPGRADE_PRE_DIMENSION_SCRIPT.sql that you ran in the SQL client of the database failed or errored out while executing.
 - **c.** Check the log file for the script Upgrade_7951.ctl that you ran using the DDLimp command to determine whether any of the runs failed.

If you did not detect any errors or failures in the steps above, then the data migration was successful.

Note: Ignore any error messages that indicate tables or indexes could not be dropped from the database. These error messages are displayed when the specified objects do not exist in the database. This can occur because each source system container holds a subset of all data warehouse tables

8. If the data migration was successful, drop the tables that were created during the upgrade process, such as W_xxxx_x_79x, LKP_xxxx_x and 79x_xxxx_TMP.

This step frees the space occupied by these backup tables.

- **9.** Once the data migration steps above are complete, you can delete the Upgrade repository to avoid any accidental use or confusion.
 - **a.** In the Informatica PowerCenter Administration Console, select the Upgrade repository service.
 - b. In the General Properties area of the Properties tab, click Edit.
 - c. Make sure the operating mode of the repository service is set to Exclusive.
 - d. Click OK.
 - e. Choose Actions, and then click Delete Contents.
 - f. In the Delete contents for <repository name> dialog, enter the repository username and password (for example, Administrator/Administrator), then click OK.
- Use the reset_infa_seq_gen.bat script to initialize the Informatica sequence generator for incremental runs on the main Informatica repository (Oracle_BI_ DW_Base.rep).
 - **a.** Navigate to OracleBI\dwrep\Upgrade\DbScripts\<database type>.
 - **b.** Open the reset_infa_seq_gen.bat file.
 - The file opens a command prompt, which will prompt you for the parameters listed below.
 - **c.** Enter the appropriate parameter values to reflect your environment (the parameters are database specific).

For Oracle databases:

Parameter	Setting
OLAP USERNAME	Enter the data warehouse database user ID.
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.
INFORMATICA DB USERNAME	Enter the user ID of the main Informatica Repository database.
INFORMATICA DB	Enter the password@connection string of the main Informatica
PASSWORD	Repository database.
INFORMATICA REPOSITORY	Enter the name of the main Informatica Repository.
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the main Informatica Repository.

Parameter	Setting
INFORMATICA REPOSITORY PASSWORD	Enter the password for the main Informatica Repository.
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value HOR.

For Microsoft SQL Server databases:

Parameter	Setting
OLAP_SERVER	Enter the name of the SQL Server for the OLAP database.
OLAP DATABASE	Enter the name of the database on which OLAP data is available.
OLAP USERNAME	Enter the user ID of the data warehouse database.
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.
INFORMATICA SERVER ADDRESS	Enter the name of the SQL Server for the Informatica Repository database.
INFORMATICA DATABASE	Enter the name of the database on which the Informatica Repository metadata is available.
INFORMATICA DB USERNAME	Enter the user ID of the main Informatica Repository database.
INFORMATICA DB PASSWORD	Enter the password@connection string of the main Informatica Repository database.
INFORMATICA REPOSITORY	Enter the name of the main Informatica Repository.
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the main Informatica Repository.
INFORMATICA REPOSITORY PASSWORD	Enter the password of the main Informatica Repository.
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.
INFA_FOLDER	Enter the value HOR.

For IBM DB2 databases:

Parameter	Setting
OLAP USERNAME	Enter the user ID of the data warehouse database.

Parameter	Setting		Setting	
OLAP PASSWORD	Enter the user ID/password@connection string of the data warehouse database.			
INFORMATICA DB USERNAME	Enter the user ID of the Upgrade Informatica Repository database.			
INFORMATICA DB PASSWORD	Enter the password @connection string of the main Informatica Repository database.			
INFA DATABASE ALIAS	Enter the name of the database in which Informatica Repository metadata is available.			
INFORMATICA REPOSITORY	Enter the name of the main Informatica Repository.			
INFORMATICA REPOSITORY USERNAME	Enter the user ID of the main Informatica Repository.			
INFORMATICA REPOSITORY PASSWORD	Enter the password for the Informatica Repository.			
INFORMATICA REPOSITORY SERVER ADDRESS	Enter the name of the machine that runs the Repository Service for the Upgrade Repository.			
INFA_PORT	Enter the port number for the Repository Service. The default is 6001.			
INFA_FOLDER	Enter the value HOR.			

7.8 Upgrading the Oracle BI Repository

This process merges your customizations of a prior release of the Oracle BI repository with the new version of the Oracle BI repository. Before you begin this process, make sure you have backed up and renamed your existing repository.

To upgrade the repository, perform the following tasks:

- Section 7.8.1, "Preparing for the Oracle BI Repository Upgrade"
- Section 7.8.2, "Equalizing the Oracle BI Repositories"
- Section 7.8.3, "Comparing the Oracle BI Repositories"
- Section 7.8.4, "Merging the Oracle BI Repositories"
- Section 7.8.5, "Regression Testing the Oracle BI Repository Merge"

The tasks in this section refer to multiple versions of the Oracle BI repository. Table 7–1 provides the names and descriptions of the repositories used in the examples in this section.

Name of Repository	Description	
OracleBIAnalyticsApps_793.rpd	The standard Oracle BI repository for the version you are upgrading from.	
	Note: Standard repositories from previous releases are available in the folder \OracleBI\Upgrade.	
OracleBIAnalyticsApps.rpd	The standard Oracle BI repository for the version you are upgrading to.	

Table 7–1 Names of Analytics Repositories used in Examples

Name of Repository	Description			
Customer_ OracleBIAnalyticsApps.rpd	The Oracle BI repository that contains your customizations for the version you are upgrading from.			
Merged_Repository_OracleBI.rpd	The Oracle BI repository that contains your customizations for the version you are upgrading to.			

Table 7–1 (Cont.) Names of Analytics Repositories used in Examples

7.8.1 Preparing for the Oracle BI Repository Upgrade

Follow this procedure to prepare for the repository upgrade.

To prepare for the Analytics repository upgrade

- 1. Set up a directory for the merge process, such as \OracleBIUpgrade, and create the following subfolders:
 - Original
 - AfterEqualize
 - AfterMerge
 - AfterManualWork
 - AfterRegressions
- 2. Copy the original repository (for example, OracleBIAnalyticsApps_793.rpd), the production repository (for example, Customer_OracleBIAnalyticsApps.rpd, and the repository from the latest installation (for example, OracleBIAnalyticsApps.rpd) into the folder \OracleBIUpgrade\Original.

If, in your current environment, you are running Oracle BI Applications for one or more modules using a Oracle BI repository in which you extracted the corresponding projects for the modules from the standard Oracle BI repository file you received from the previous release, you need to extract the same projects from the OracleBIAnalyticsApps_793.rpd file and use this as your original repository. (If you have the original repository that you extracted during the last upgrade, you can use it as the original repository file.) This will prevent you from losing any new metadata you would like to add in this upgrade.

Also, if you customized the Oracle BI repository by trimming a large number of objects and you would like to get those objects back during the current upgrade, you need to trim the OracleBIAnalyticsApps_793.rpd file in the same way and use the modified version as the original repository file. This will prevent you from losing any new metadata you would like to add in this upgrade.

7.8.2 Equalizing the Oracle BI Repositories

The Merge feature in the Administration Tool relies on a change detection algorithm to determine the changes that need to be made to upgrade repositories correctly. For the algorithm to work correctly, it has to determine which objects in the three repositories (for example, OracleBIAnalyticsApps_793.rpd, OracleBIAnalyticsApps.rpd, and Customer_OracleBIAnalyticsApps.rpd) are equivalent.

The point of this step is to determine for every object in the OracleBIAnalyticsApps.rpd and the Customer_OracleBIAnalyticsApps.rpd whether it is coming from the OracleBIAnalyticsApps_793.rpd.

Equivalence between objects is established using the Administration Tool's Equalize feature. The file that you specify in the Output option (-0) is the only file that is modified during the equalization process.

The Equalize feature has several mechanisms for determining whether an object in two different repositories is semantically the same:

- Fully Qualified Name. If an object in one repository has the same fully qualified name as another object of the same class in another repository, then the two objects are declared equal.
- Simple String Substitution. Equivalence can be declared between two objects of the same class in two repositories whose only difference is that some key characters in their names differ. The equalizerpds executable file ignores those characters while checking fully qualified names. For example, "Core"."W_DAY_D" might be considered equivalent to "Core"."W DAY D" if the characters "_" and " " have been declared as equivalent.
- Rename File. When none of the preceding rules are applicable, equivalence can be
 manually declared using a script as input to the equalizerpds executable file.
 Oracle ships the rename files (MAP) for the major releases. The files are located in
 the OracleBI\Upgrade folder. You can also create your own rename files for
 customizations not covered in the files that Oracle ships. You can open and edit
 the rename files in Microsoft Excel.

The syntax of the equalizerpds command is as follows:

```
equalizerpds.exe -A userid1 [-B [password1]] -C base_repository_name -D userid2
[-E [password2]] -F repository2_name [-J udml_utf8_file_name_equalization] [-0
ouput_repository_name] [-X] [-Y equalStringSet]
-X Treat 'Factxxxx' as 'Fact' in Business Model.
-Y Treat the characters as equals.
/? Display this usage information and exit.
```

, and a second second

To equalize a repository

- Copy the appropriate MAP file from the OracleBI\Upgrade folder into the folder where you will execute equalizerpds.exe, for example, \OracleBIUpgrade\Original.
- **2.** Run equalizerpds.exe to equalize the repository from the latest installation (for example, OracleBIAnalyticsApps.rpd) with the original repository (for example, OracleBIAnalyticsAppss_793.rpd). An example of the equalizerpds command is as follows:

```
equalizerpds -A Administrator -B SADMIN
-C \\OracleBIUpgrade\Original\OracleBIAnalyticsApps_793.rpd
-D Administrator -E SADMIN
-F \\OracleBIUpgrade\Original\OracleBIAnalyticsApps.rpd
-O \\OracleBIAnalyticsUpgrade\AfterEqualize\OracleBIAnalyticsApps.rpd
-X -J rename7x-79.map
```

The MAP files are located in the \OracleBI\Upgrade folder.

If the equalizerpds.exe executable file runs correctly, no errors are returned.

3. Run equalizerpds.exe to equalize your customized repository (for example, Customer_OracleBIAnalyticsApps.rpd) with the original repository (for example, OracleBIAnalyticsApps_7x.rpd). An example of the equalizerpds command is as follows:

```
equalizerpds -A Administrator -B SADMIN
-C \\OracleBIUpgrade\Original\OracleBIAnalyticsApps_7x.rpd
```

- -D Administrator -E SADMIN
- -F \\OracleBIUpgrade\Original\Customer_OracleBIAnalyticsApps.rpd
- -0 \\OracleBIUpgrade\AfterEqualize\Customer_OracleBIAnalyticsApps.rpd

The execution of equalizerpds that equalizes the customer repository with the original repository does not use the rename file.

Make sure that the original repository is copied unchanged into its new location so that after running the script, all three repositories are contained within the \OracleBIUpgrade\AfterEqualize directory.

4. To verify the process completed successfully, compare the size of the repositories. The output repository (-O) should be close to the same size as the repository you equalized (-F).

7.8.3 Comparing the Oracle BI Repositories

Follow this procedure to compare your existing repository with the new version to which you are upgrading.

To compare the Analytics repositories

 Use the Administration Tool's Compare Repositories feature to analyze the differences between your existing repository and the new version of the repository to which you are upgrading. Note where elements have been created, removed, or changed in the new version. Consider whether you can use the new metadata and retire customizations you made in the existing repository.

For instructions on how to use the Administration Tool's Compare Repositories feature, see *Oracle Business Intelligence Server Administration Guide*.

7.8.4 Merging the Oracle BI Repositories

In this procedure, you execute the main algorithm to upgrade the repository. For more information on merging the repositories, see *Oracle Business Intelligence Server Administration Guide*.

To merge versions of the Oracle BI repositories

- 1. Copy the three repositories (for example, OracleBIAnalyticsApps_793.rpd, OracleBIAnalyticsApps.rpd, and Customer_OracleBIAnalyticsApps.rpd) to the AfterMerge folder.
- 2. Open the repository from the latest installation (for example, OracleBIAnalyticsApps.rpd) in the \OracleBIUpgrade\AfterMerge folder.
- **3.** Save the repository with a new name, for example, Merged_Repository_ OracleBIAnalyticsApps.rpd.

This new repository will contain the final results of the upgrade.

- 4. From the Administration Tool menu bar, select File, then select Merge.
- **5.** In the Select Original Repository dialog box, select the original repository (for example, OracleBIAnalyticsApps_793.rpd).
- 6. Enter the password, and click OK.
- 7. Click Select for the Modified Repository field.
- **8.** In the Select Modified Repository dialog box, select the repository that contains the customizations you made to the previous version of the Analytics repository.
- **9.** Click Open, type the password, and then click OK.

- **10.** In the Decision drop-down list, select the action you want to take regarding the repository change, or accept the default action.
- **11.** To locate subsequent rows with empty Decision fields, click the Decision header cell.

When all rows have a value in the Decision field, the Merge button is enabled.

12. Click Merge.

This process can take up to 40 minutes, depending on the size of the repositories you are working with. A message will alert you when the merge is complete.

13. Click Yes when asked if you want to run a consistency check.

The number of errors returned by the consistency check is an indication of how successful the merge process was. If you receive many errors, for example, over 300, you should analyze the reason for the errors. If the merge process failed to recognize that two objects are the same, you may need to edit the rename file if the object is in the Current repository, or add your own rename file if you have renamed many of the objects and the upgrade engine failed to relate them to the original objects.

You also may need to change the actions you selected in the Decision drop-down list before rerunning the merge. This could save you time by reducing the number of errors that you will need to fix manually.

Once you are satisfied with the results of the merge, you should fix the remaining errors manually. It is important that you fix all errors before moving on to the next step. This repository serves as the input for the next stage.

You should also check that all of your customized objects are present and that no duplicate physical tables were introduced. To check for duplicate tables, search for physical tables using a query such as:

where name like '*#1'

14. Copy the repository to the folder \OracleBIUpgrade \AfterManualWork.

7.8.5 Regression Testing the Oracle BI Repository Merge

In performing a regression test for the repository merge, the objective is to collect a set of logical SQL statements that are used for reports and to verify that they continue to work with the new metadata. For this purpose, it is recommended that you perform the following procedure.

To perform regression testing

- 1. Run the reports that are necessary to include in the regression suite. These reports might be a subset of the reports in the Presentation Catalog.
- **2.** Collect the logical SQL generated in the previous step. You can do this using Usage Tracking or by parsing the query log file.

For information about Usage Tracking, see *Oracle Business Intelligence Server Administration Guide*.

3. Execute the logical SQL against the old repository using the command line utility nQCmd.exe located in \OracleBI\server\bin, and save the results to a file.

For information about the nQCmd.exe utility, see *Oracle Business Intelligence Server Administration Guide*.

- **4.** Edit the logical SQL test scripts to account for the name changes or modifications resulting from the upgrade.
- 5. Execute the edited logical SQL against the merged repository, and save the results.
- **6.** Compare the results from the steps above and try to explain the differences. If it is determined that these differences are due to the upgrade process, then you have to correct them manually.

This repository now contains the merged content from the new OracleBIAnalyticsApps.rpd and the production repository.

7.9 Upgrading the Oracle BI Presentation Catalog

You will need to upgrade your current Oracle BI Presentation Catalog if your organization:

- Has prebuilt applications already installed, and
- Has customized the current Oracle BI Presentation Catalog

If you made no changes to the previous Presentation Catalog distributed with previous versions of prebuilt applications, you do not need to upgrade the catalog. You can begin using the newer version of the catalog.

This process includes the following tasks:

- Section 7.9.1, "Trimming the Input Presentation Catalog"
- Section 7.9.2, "Upgrading the Oracle BI Presentation Catalog to a Newer Version"
- Section 7.9.3, "Testing the Results of the Presentation Catalog Upgrade"

Caution: In releases of Oracle BI Applications previous to 7.9, the Presentation Catalog (formerly known as the Siebel Analytics Web Catalog) was stored in a single file rather than in a directory structure of individual files. If you have a previous version of the Presentation Catalog, you will need to convert it to the new format. For more information about how to convert the Presentation Catalog to the new format, see the *Oracle Business Intelligence Infrastructure Upgrade Guide*

7.9.1 Trimming the Input Presentation Catalog

Before you upgrade and merge your current Presentation Catalog with the new Presentation Catalog, determine which of the existing content you want to keep and which new content you want to incorporate. Review your existing Presentation Catalog and determine the usage patterns of reports and dashboards. Note that some of the preconfigured content in the existing catalog may appear in the new version in a redesigned format. In addition, the new version includes completely new content. After you have decided the content that is to make up your enterprise Presentation Catalog, trim the input catalogs using the Catalog Manager. For information on trimming catalogs, see *Oracle Business Intelligence Presentation Services Administration Guide*.

7.9.2 Upgrading the Oracle BI Presentation Catalog to a Newer Version

The Presentation Catalog upgrade process makes use of three catalogs:

 The *original* Presentation Catalog. This is the unmodified Presentation Catalog that you received with the Oracle BI Applications release that you are upgrading from.

- The *new* Presentation Catalog. This is the Presentation Catalog that is installed in the OracleBIData\web\catalog folder with the installation of Oracle BI Applications.
- The *current* Presentation Catalog. This is the Presentation Catalog currently in use at your organization.

You use Catalog Manager for this upgrade process. Catalog Manager compares the content in both the *Current* Presentation Catalog and the *Modified* Presentation Catalog with the content in the Original Presentation Catalog, merges any changes into the *Current* Presentation Catalog, and produces a list of upgrade differences, which you must resolve by indicating how you want the differences handled. If the catalogs have conflicting content, you can choose which catalog the content should be taken from. The end result is a merged Presentation Catalog that contains the site-specific changes, as well as new metadata.

To upgrade your Presentation Catalog to a newer version

- 1. Make a backup copy of the current Presentation Catalog, rename the folder <catalogname>_old, and move it to a temporary location.
- **2.** Copy the original Presentation Catalog into the folder that holds your current Presentation Catalog and rename it <catalogname>_Original.
- **3.** Start Catalog Manager and open the new Presentation Catalog in offline mode.
- 4. Select Tools, then select Upgrade Catalog.
- **5.** In the original Presentation Catalog field, browse to locate the original Presentation Catalog.
- **6.** In the Current Presentation Catalog field, browse to locate your current Web Catalog, <catalogname>_old.
- 7. Click OK.
- 8. Resolve any upgrade differences as follows:
 - **a.** Review each unresolved difference in the Unresolved differences list.
 - **b.** For each unresolved difference, select the version that you want to keep.
 - c. Click OK.

The log file SiebelAnalyticsMigrationLog.txt holds information about the merge process. This log file is written to \OracleBI\web\catalogmanager. If you get an error logged in the file, this means that the path in question had a problem that did not allow the merge mechanism to resolve the merge. No action was taken. To merge that particular item, go into your original Presentation Catalog and merge it manually.

- **9.** Review the upgraded Presentation Catalog, and, if necessary, set permissions for objects.
- 10. Save the new Presentation Catalog.

7.9.3 Testing the Results of the Presentation Catalog Upgrade

Note: Before you perform this step, you must first migrate the data into the upgraded data warehouse.

The Presentation Catalog upgrade functionality does not automatically carry over object permissions; therefore, you should review the Presentation Catalog object permissions before you perform this step.

This step ensures that the upgraded reports and the new preconfigured reports are functional and render correct results within the new, merged Presentation Catalog. This step is typically performed by visually inspecting the final results of the complete end-to-end upgrade process.

For upgraded reports, the preferred approach for comparison purposes is to have side-by-side environments, and have users review specific dashboard content between the two environments. Examine not only the look and feel of the application but also the data contained in the reports to make sure the content remains the same. It is recommended that you request users to use various elements of the user interface to validate results, such as global prompts, column selectors, report filters, drills, and navigations, as they normally do on a day-to-day basis.

Also review the overall visibility and administrative settings in the new Presentation Catalog to ensure they are correct. Pay careful attention to the visibility rules that are established for any content that was migrated during the upgrade. You might have to manually adjust these settings.

Upgrading the Oracle BI Repository for Industry-Specific Analytics Applications

This appendix contains instructions for upgrading the Oracle BI repository for Pharma Analytics, Consumer Sector, and Vehicle Sales.

In Oracle BI Applications release 7.9.4, the Pharma Analytics business model and Core business model were merged. In Oracle BI Applications release 7.9.5, the Consumer Sector and Vehicle Sales Analytics business models and Core business model were merged. Because of this merge, the process of upgrading the Oracle BI repository has some steps that differ from the standard Oracle BI repository upgrade process.

This section includes the following topics:

- Section A.1, "Common Dimensions"
- Section A.2, "Merging Siebel Analytics and Oracle BI Repositories"
- Section A.3, "Replacing Common Dimensions After the Repository Merge"

A.1 Common Dimensions

Table A–1, Table A–2, and Table A–3 list the common dimensions of Pharma, Consumer Sector, and Vehicle Sales Analytics and their statuses. Some of the dimensions are not shared with other Core modules because of specific requirements.

Dimensions in Pre-7.9.4 Releases	Dimensions in Release 7.9.4	Status	Comments
Dim - Accounts	Dim - Customer	Shared	None
Dim - Contacts	Dim - Contact	Shared	New name is singular
Dim - Security Dimension	Dim - Security Dimension	Shared	None
Dim - Time Period	Dim - Date	Shared	None
Dim - Geography	Dim - Pharma Geography	Not shared	Use Pharma-specific dimension in Core
Dim - Geography_ Account	Dim - Pharma Geography_Account	Not shared	Use Pharma-specific dimension in Core
Dim - Geography_ Contact	Dim - Pharma Geography_Contact	Not shared	Use Pharma-specific dimension in Core
Dim - Products	Dim - Pharma Products	Not shared	Use Pharma-specific dimension in Core

Table A–1 Common Pharma Analytics Dimensions

Dimensions in Pre-7.9.5 Releases	Dimensions in Release 7.9.5	Status	Comments
Dim - Account Geography	Dim - Account Geography	Shared	None
Dim - Accounts	Dim - Customer	Shared	None
Dim - Accounts Hierarchy	Dim - Accounts Hierarchy	Shared	None
Dim - Employees	Dim - Employees	Shared	None
Dim - End Date	Dim - End Date	Shared	None
Dim - Position Hierarchies	Dim - Position	Shared	Dim - Position in 7.9.5 combines both Position and Position Hierarchy
Dim - Positions	Dim - Position	Shared	Dim - Position in 7.9.5 combines both Position and Position Hierarchy
Dim - Product Categories Hierarchy	Dim - CS Product Category Hierarchy	Not shared	Use CS-specific dimension in Core
Dim - Products	Dim - CS Product	Not shared	Use CS-specific dimension in Core
Dim - Start Date/Date	Dim - Start Date	Shared	None

 Table A-2
 Common Consumer Sector Analytics Dimensions

 Table A–3
 Common Vehicle Sales Analytics Dimensions

Dimensions in Pre-7.9.5 Releases	Dimensions in Release 7.9.5	Status	Comments
Dim - Accounts	Dim - Customer	Shared	None
Dim - Accounts Geography	Dim - Account Geography	Shared	None
Dim - Contacts Geography	Dim - Person Geography	Shared	None
Dim - Date	Dim - Date	Shared	None
Dim - Households	Dim - Households	Shared	None
Dim - Individuals	Dim - Contact	Shared	None
Dim - Lease/Loan Expiry	Dim - End Date	Shared	None
Dim - Product Hierarchy	Dim - Product Hierarchy	Shared	None
Dim - Products	Dim - Product	Shared	None
Dim - Vehicle	Dim - Asset	Shared	None

A.2 Merging Siebel Analytics and Oracle BI Repositories

The Pharma, Consumer Sector, and Vehicle Sales Analytics upgrade process involves merging customizations of prior releases of the Siebel Analytics or Oracle BI
repositories into the current version of the Oracle BI repository. This process follows the same principle as the Core upgrade process but includes some unique steps.

In this section, the upgrade process for Pharma Analytics from pre-7.9.4 releases to release 7.9.4 and higher will be used as an example. The upgrade process for Consumer Sector and Vehicle Sales Analytics from pre-7.9.5 releases to release 7.9.5 and higher are the same as that for the upgrade to Pharma Analytics release 7.9.4 and higher.

As shown in Figure A–1, there are two phases to the Pharma Analytics upgrade process.





Phase 1

As shown in Figure A–1, there are two phases in the Pharma Analytics upgrade process. Phase 1 involves merging the 7.x original Core base repository (the repository that shipped with the release of Siebel Analytics or Oracle BI you are currently running), the 7.x custom Core repository, and the new base repository into one output repository.

Phase 2

Phase 2 involves merging the output repository of Phase 1 with the 7.x original Pharma Analytics base repository and the 7.x custom Pharma Analytics repository. The output repository of Phase 2 is a merged Pharma and Core repository that includes your customizations from prior releases and the new data model.

Note: You need to perform both phases of the upgrade process if your current, customized repository has both Core and Pharma models and the Core model is customized.

If your current, customized repository does not include the Core model or includes the Core model but the Core model is not customized, you only need to perform Phase 2.

If you only perform Phase 2, then you will not have a new Core merged RPD (as shown in Figure A–1). Instead, you will use the new base RPD in place of the new Core merged RPD.

See Table A–4 and Table A–5 for a description of the different RPD file names.

The tasks in this section refer to multiple versions of the Siebel Analytics or Oracle BI repository. Table A–4 provides the names and descriptions of the repositories used in Phase 1. Table A–5 provides the names and descriptions of the repositories used in Phase 2.

Repository File	Description		
7x_original_Core_base.rpd	The trimmed, original (standard) repository for the version you are upgrading from.		
7x_custom_Core.rpd	The trimmed, custom 7.x repository that includes the Core model customizations.		
New_base.rpd	The trimmed, new repository that includes related Core and Pharma modules in one Core model (logical folder).		

Table A-4Phase 1 Repository Files

Table A–5	Phase 2	Repositor	y Files

Repository File	Description		
New_Core_merged.rpd	The output repository from Phase 1.		
	If you do not perform Phase 1, then use the new base RPD in place of the new Core merged RPD.		
7x_original_Pharma_base.rpd	The trimmed, original 7.x repository that includes the Pharma model, which was not customized.		
7x_custom_Pharma.rpd	The trimmed, customized repository that includes a customized Pharma model.		
New_Core_Pharma_merged.rpd	The final, merged new repository that includes a single Core model (logical folder), including all the customized content.		

A.2.1 Creating Working Folders

You will use the working folders to hold the repository files after the different stages of the merge process.

Create a folder for the merge process, such as \OracleBIPharmaUpgrade, and then create the following subfolders:

- Original
- AfterTrimDown
- AfterEqualize
- AfterMerge
- AfterManualWork
- AfterRegressions

A.2.2 Trimming Repository Files

Trimming the repositories so that you upgrade only the content that is in use can narrow the upgrade scope and eliminate unnecessary complexities during the merge process.

You can trim down repository files by extracting projects or manually trimming down repository objects.

Note: The Security Group property controls the presentation catalogs that will be extracted. If a presentation catalog is added to a project for extract but none of the groups in the project has visibility to see the catalog, it will not show up in the extracted repository file.

A.2.2.1 Trimming the Original Base Repository Files

You should trim the original base repository file to meet your business requirements.

To trim the original base repository files

- **1.** If you are performing Phase 1 of the upgrade process, trim the original Core base repository file.
- **2.** Save the file as 7x_original_Core_base.rpd (where 7x represents the release of Siebel Analytics or Oracle BI) in the AfterTrimDown subfolder.
- 3. Trim the original Pharma base repository file.
- **4.** Save the file as 7x_original_Pharma _base.rpd in the AfterTrimDown subfolder.

A.2.2.2 Trimming the New Base Repository File

The new base repository file that you received with the current Oracle BI Applications release, contains one Core model (logical folder), which holds Pharma and Core repository objects.

To trim the new base repository file

- **1.** Trim the new base repository file.
- 2. Save the file as New_base.rpd in the AfterTrimDown subfolder.

A.2.2.3 Trimming the Custom Repository Files

If you are performing Phase 1 of the upgrade process, you will have a 7x custom Core repository file (7x_custom_core.rpd) that contains the 7x original Core base contents and your customizations.

You will also have a 7x custom Pharma repository file (7x_custom_Pharma.rpd) that contains the 7x original Pharma base contents and your customizations.

Save these files in the AfterTrimDown subfolder.

A.2.3 Renaming Objects in the Original Pharma Base Repository File

In the 7x original Pharma base repository file and the 7x custom Pharma repository file, you need to rename some repository objects to be compatible with the new data model.

To rename objects in the Pharma repository files

- 1. In the Server Administration Tool, open the 7x _original_Pharma_base.rpd file.
- **2.** In the Business Model and Mapping layer, rename Business Model Pharma to Core.
- **3.** In the Physical layer, do the following:
 - a. Rename Database Pharma Data Warehouse to Oracle Data Warehouse.
 - **b.** Make sure the Connection Pool is named as Oracle Data Warehouse Connection Pool.

- **c.** Make sure the Catalog entry (below the Connection Pool entry) is named as Catalog.
- d. Make sure the Schema entry (below the Catalog entry) is named as dbo.
- **4.** Repeat Steps 1 through 3 using the 7x_custom_Pharma.rpd file.

A.2.4 Equalizing the Oracle BI Repositories

The equalization process in the standard Oracle BI repository upgrade uses the original base repository from a previous release as a starting point. This type of equalization is referred to as "backward" equalization. The Pharma upgrade uses what is called "forward" equalization, in which you use the repository file from the current release as a starting point and equalize the 7x base repository file and the 7x custom repository file to it.

You will first need to prepare the MAP file for "forward" equalization before you execute the equalization.

To prepare the MAP file for "forward" equalization

1. Copy the appropriate MAP file from the \OracleBI\Upgrade folder into the folder where you will execute equalizerpds.exe.

Note: The naming convention of the MAP files is rename<release from which you are upgrading>-<release to which you are upgrading>.map.

For example if you are upgrading from release 7.8.4 to release 7.9.5, you should use the file rename784_795.map.

- **2.** Open the MAP file in Excel.
- 3. In the Text Import Wizard, accept the default in the Step 1 dialog by clicking Next.
- 4. In the Step 2 dialog of the Text Import Wizard, do the following:
 - **a.** Make sure the Tab check box is selected in the Delimiters region.
 - **b.** In the Text qualifier list, select None.
 - c. Click Next.
- 5. In the Step 3 dialog, click Finish.

The file opens in an Excel spreadsheet window and contains three columns.

- **6.** Switch the order of the second and third columns by cutting the third column and inserting it as the second column.
- **7.** Save the file.
- 8. Check to make sure the string format is correct.

To equalize the repository files

1. Run equalizerpds.exe.

An example of the equalizerpds command is as follows:

equalizerpds -A Administrator -B SADMIN

```
-C \OracleBIPharmaUpgrade\AfterTrimDown\New_base.rpd
```

```
-D Administrator -E SADMIN
```

```
-\texttt{F} \ \texttt{OracleBIPharmaUpgrade} \ \texttt{AfterTrimDown} \ \texttt{7x\_custom\_Pharma.rpd} \ \texttt{F} \ \texttt{OracleBIPharmaUpgrade} \ \texttt{AfterTrimDown} \ \texttt{7x\_custom\_Pharma.rpd} \ \texttt{F} \ \texttt{
```

-0 \OracleBIPharmaUpgrade\AfterEqualize\7x_custom_Pharma.rpd -X -J rename784-795.map

If the equalizerpds.exe executable file runs correctly, no errors are returned.

- 2. Repeat Step 1 to equalize each of the files in AfterTrimDown to New_base.rpd.
- **3.** To verify the process completed successfully, compare the size of the repositories. The output repository (-O) should be close to the same size as the repository you equalized (-F).

A.2.5 Merging the Core Repository Files

Note: You need to perform this procedure if your customized repository has both Core and Pharma models and the Core model is customized. If the customized repository does not include the Core model or includes the Core model but the Core model is not customized, you do not need to perform this step.

This step involves a three-way merge on the Core repository. For a description of the files that will be merged in this procedure, see Section A.2, "Merging Siebel Analytics and Oracle BI Repositories."

To merge the core repository files

- 1. Copy 7x_original_Core_base.rpd, 7x_custom_Core.rpd, and New_base.rpd to the AfterMerge folder.
- **2.** In the Server Administration Tool, open the New_base.rpd file.
- From the Administration Tool menu bar, select File, then select Merge.
- **4.** In the Select Original Repository dialog, select 7x_original_Core_base.
- Enter the password, and click OK.
- 6. Click Select for the Modified Repository field.
- 7. In the Select Modified Repository dialog, select 7x_custom_Core.rpd.
- **8.** Click Open, type the password, and then click OK.
- **9.** In the Decision list, select the action you want to take regarding the repository change, or accept the default action.

For information about making decisions, see Section A.2.7, "Making Merge Decisions in the Server Admin Tool."

10. To locate subsequent rows with empty Decision fields, click the Decision header cell.

When all rows have a value in the Decision field, the Merge button is enabled.

11. Click Merge.

This process can take up to 40 minutes, depending on the size of the repositories you are working with. A message will alert you when the merge is complete.

12. Click Yes when asked if you want to run a consistency check.

The number of errors returned by the consistency check is an indication of how successful the merge process was. If you receive many errors, for example, over 300 you should analyze the reason for the errors. If the merge process failed to

recognize that two objects are the same, you may need to edit the rename file or add your own rename file if you have renamed many of the objects and the upgrade engine failed to relate them to the original objects.

You also may need to change the actions you selected in the Decision drop-down list before rerunning the merge. This could save you time by reducing the number of errors that you will need to fix manually.

Once you are satisfied with the results of the merge, you should fix the remaining errors manually. It is important that you fix all errors before moving on to the next step. This repository serves as the input for the next stage.

You should also check that all of your customized objects are present and that no duplicate physical tables were introduced. To check for duplicate tables, search for physical tables using a query such as:

```
where name like '*#1'
```

13. Save the merged repository as New_Core_merged.rpd.

A.2.6 Merging the Pharma Repository Files

This step involves a three-way merge on the Pharma repository. For a description of the files that will be merged in this procedure, see Section A.2, "Merging Siebel Analytics and Oracle BI Repositories."

Note: If you did not perform Phase 1 of the upgrade process you will not have a New_Core_merged.rpd file. In place of the New_Core_merged.rpd file, you should use the New_new_base.rpd file.

To merge the Pharma repository files

- Copy New_Core_merged.rpd, 7x_original_Pharma_base.rpd, and 7x_custom_ Pharma.rpd to the AfterMerge folder.
- 2. In the Server Administration Tool, open the New_Core_merged.rpd file.
- **3.** From the Administration Tool menu bar, select File, then select Merge.
- **4.** In the Select Original Repository dialog, select 7x_original_Pharma_base.
- 5. Enter the password, and click OK.
- **6.** Click Select for the Modified Repository field.
- **7.** In the Select Modified Repository dialog, select 7x_custom_Pharma.rpd.
- 8. Click Open, type the password, and then click OK.
- **9.** In the Decision list, select the action you want to take regarding the repository change, or accept the default action.

For information about making decisions, see Section A.2.7, "Making Merge Decisions in the Server Admin Tool."

10. To locate subsequent rows with empty Decision fields, click the Decision header cell.

When all rows have a value in the Decision field, the Merge button is enabled.

11. Click Merge.

This process can take up to 40 minutes, depending on the size of the repositories you are working with. A message will alert you when the merge is complete.

12. Click Yes when asked if you want to run a consistency check.

The number of errors returned by the consistency check is an indication of how successful the merge process was. If you receive many errors, for example, over 300, you should analyze the reason for the errors. If the merge process failed to recognize that two objects are the same, you may need to edit the rename file or add your own rename file if you have renamed many of the objects and the upgrade engine failed to relate them to the original objects.

You also may need to change the actions you selected in the Decision drop-down list before rerunning the merge. This could save you time by reducing the number of errors that you will need to fix manually.

Once you are satisfied with the results of the merge, you should fix the remaining errors manually. It is important that you fix all errors before moving on to the next step. This repository serves as the input for the next stage.

You should also check that all of your customized objects are present and that no duplicate physical tables were introduced. To check for duplicate tables, search for physical tables using a query such as:

where name like '*#1'

13. Save the merged repository as New_Core_Pharma_merged.rpd.

A.2.7 Making Merge Decisions in the Server Admin Tool

When making decisions about merging repository objects in the Server Admin Tool, you should consider the following points:

- For objects that do not appear in the new base repository, you should normally choose "current," which will incorporate the changes into the new base repository.
- For objects added to the new base repository, you should normally choose "current," which will keep the changes.
- For objects in the original repository that were replaced with new objects, you may see decisions for removing the old objects from the current repository and adding the new objects. Choosing "current" will replace the old objects.
- For new customizations that you added to a repository, choose "modified" to keep the changes.
- If an object is changed in both the customized repository and the new base repository, the description "changed in both," may appear. In such cases, choose "current" to keep the object as it is in the new base repository, or choose "modified," to keep the object as it is in the customized repository.

A.3 Replacing Common Dimensions After the Repository Merge

After the repository file merge, all preconfigured presentation dimension tables and columns should be merged properly and sourcing from the new logical dimensions in the Core model. For example, Account Name in the Account presentation table should source from "Core"."Dim - Customer"."Account Name," and Gross Margin in the Product presentation table should source from "Core"."Dim - Pharma Products"."Gross Margin."

However, customized presentation tables and columns may still source from old dimensions. Table A–6, Table A–7, and Table A–8 list the common dimensions that have new names in the new release. If you customized presentation tables or columns from the old dimensions listed in Table A–6, Table A–7, and Table A–8 you need to replace the old logical source tables or table columns with the new ones.

A way to quickly allocate these problematic presentation tables or columns would be to do the following:

- 1. In the Core logical folder in the Server Admin Tool, find the old dimension name as listed in Table A–6, Table A–7, or Table A–8, for example, "Dim Accounts."
- **2.** Right-click the old dimension name, then click Display Related, and then click Presentation Column.
- **3.** Replace the presentation columns with the same columns from the new logical dimension, for example, "Dim Customer"
- 4. To verify you replaced the presentation columns correctly, search for presentation columns on the Core logical dimension, such as "Core Accounts". If the return is empty, then it is safe to delete the old dimension, for example, "Dim Accounts"

The following common dimensions in 7.x need to be reviewed and removed.

Table A–6 Names for Pharma Analytics Common Dimensions in Pre-7.9.4 Releases

Name of Dimension in Pre-7.9.4 Releases	Name of Dimension in Release 7.9.4	Status	Comments
Dim - Accounts	Dim - Customer	Shared	None
Dim - Contacts	Dim - Contact	Shared	New name is singular
Dim - Time Period	Dim - Date	Shared	None

Table A-7Names for Consumer Sector Analytics Common Dimensions in Pre-7.9.5Releases

Name of Dimension in Pre-7.9.5 Releases	Name of Dimension in Release 7.9.5	Status	Comments
Dim - Accounts	Dim - Customer	Shared	None
Dim - End Date	Dim - Contact	Shared	New name is singular
Dim - Position Hierarchies	Dim - Date	Shared	None
Dim - Positions	Dim - Position	Shared	Dim - Position combines both Position and Position Hierarchy
Dim - Start Date/Date	Dim - Start Date	Shared	None

Table A–8Names for Vehicle Sales Analytics Common Dimensions in Pre-7.9.5Releases

Name of Dimension in Pre-7.9.5 Releases	Name of Dimension in Release 7.9.5	Status	Comments
Dim - Accounts	Dim - Customer	Shared	None
Dim - Accounts Geography	Dim - Contact	Shared	None

Name of Dimension in Pre-7.9.5 Releases	Name of Dimension in Release 7.9.5	Status	Comments
Dim - Contacts Geography	Dim - Date	Shared	None
Dim - Individuals	Dim - Contact	Shared	None
Dim - Lease/Loan Expiry	Dim - End Date	Shared	None
Dim - Products	Dim - Product	Shared	None
Dim - Vehicle	Dim - Asset	Shared	None

Table A-8 (Cont.) Names for Vehicle Sales Analytics Common Dimensions in Pre-7.9.5Releases

Index

В

best practices preparing to upgrade, 2-2

С

Consumer Sector upgrading Oracle BI repository, A-1

0

Oracle EBS upgrading, 7-1

Ρ

PeopleSoft upgrading, 7-1 Pharma Analytics upgrading Oracle BI repository, A-1 preupgrade best practices, 2-2 points to consider, 2-2 process flow, 2-3

S

Siebel Analytics upgrading from release 7.5.x, 3-1
Siebel Business Analytics upgrading from releases 7.7, 7.7.x and 7.8.x, 4-1
stages of upgrade process flow, 2-3 sequence of stages, 2-4
supported upgrade paths, 2-1

U

upgrade overview, 2-1 preparing, 2-2 preupgrade considerations, 2-2 process flow, 2-3 sequence of steps, 2-4 supported paths, 2-1 upgrading for PeopleSoft, 7-1 upgrading from Oracle BI Applications 7.9.x for Siebel Adapter, 5-1 upgrading from Siebel Analytics 7.5.x, 3-1 upgrading from Siebel Business Analytics 7.7, 7.7.x, 7.8.x, 4-1 upgrading older releases of Oracle BI for Oracle EBS, 6-1

V

Vehicle Sales upgrading Oracle BI repository, A-1

W

What's New in This Release, 1-1