



Agile PLM Business Intelligence

Installation and Setup Guide

Version 3.1.2

October 2009

E15041-02

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Preface

The Agile PLM documentation set includes Adobe® Acrobat PDF files. The [Oracle Technology Network \(OTN\) Web site](http://www.oracle.com/technology/documentation/agile.html) <http://www.oracle.com/technology/documentation/agile.html> contains the latest versions of the Agile PLM PDF files. You can view or download these manuals from the Web site, or you can ask your Agile administrator if there is an Agile PLM Documentation folder available on your network from which you can access the Agile PLM documentation (PDF) files.

Note To read the PDF files, you must use the free Adobe Acrobat Reader version 7.0 or later. This program can be downloaded from the [Adobe Web site](http://www.adobe.com) <http://www.adobe.com>.

The [Oracle Technology Network \(OTN\) Web site](http://www.oracle.com/technology/documentation/agile.html) <http://www.oracle.com/technology/documentation/agile.html> can be accessed through **Help > Manuals** in both Agile Web Client and Agile Java Client. If you need additional assistance or information, please contact [support](http://www.oracle.com/agile/support.html) <http://www.oracle.com/agile/support.html> (<http://www.oracle.com/agile/support.html>) for assistance.

Note Before calling Oracle Support about a problem with an Agile PLM manual, please have the full part number, which is located on the title page.

TTY Access to Oracle Support Services

Oracle provides dedicated Text Telephone (TTY) access to Oracle Support Services within the United States of America 24 hours a day, 7 days a week. For TTY support, call 800.446.2398. Outside the United States, call +1.407.458.2479.

Readme

Any last-minute information about Agile PLM can be found in the Readme file on the [Oracle Technology Network \(OTN\) Web site](http://www.oracle.com/technology/documentation/agile.html) <http://www.oracle.com/technology/documentation/agile.html>

Agile Training Aids

Go to the [Oracle University Web page](http://www.oracle.com/education/chooser/selectcountry_new.html) http://www.oracle.com/education/chooser/selectcountry_new.html for more information on Agile Training offerings.

Accessibility of Code Examples in Documentation

Screen readers may not always correctly read the code examples in this document. The conventions for writing code require that closing braces should appear on an otherwise empty line; however, some screen readers may not always read a line of text that consists solely of a bracket or brace.

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Overview of Agile PLM Business Intelligence Installation

This chapter includes the following:

▪ Tasks Overview	1
▪ Downloading Agile PLM Business Intelligence Software.....	2
▪ Acronyms	3

This guide provides instructions and guidelines to successfully install or upgrade the Agile PLM Business Intelligence 3.1.2 application. You should be familiar with or have working knowledge of Oracle Data Integrator, Oracle Business Intelligence Enterprise Edition, Agile Product Lifecycle Management (PLM), PLM Data Mart (DM) and the Oracle Database Server to work with Agile PLM Business Intelligence software.

Note This document does not explain the basics of Oracle Business Intelligence (OBI), Oracle Data Integrator (ODI), and Oracle Databases. Refer to the Oracle Technology Network <http://www.oracle.com/technology/documentation/index.html> <http://www.oracle.com/technology/documentation/index.html> for documentation related to these products.

This chapter outlines the tasks for installation of the Agile PLM Business Intelligence software. In addition, it provides the information required to access the necessary software.

Tasks Overview

The Agile PLM Business Intelligence installation requires you to:

1. Verify the capacity planning requirements specific to your deployment configuration. For information, see the Agile PLM BI Capacity Planning Guide.
2. Verify hardware and software requirements. For information, see [System Requirements](#) on page 9 in this guide.
3. Ensure that Agile PLM Data Mart installation is complete. Follow instructions provided in the Agile PLM Data Mart Setup Guide.
4. Download the Agile PLM Business Intelligence software. For information, see Downloading Agile PLM Business Intelligence Software in this guide.
5. Install PLM Business Intelligence software. For information, see Installation in this guide.

Downloading Agile PLM Business Intelligence Software

This section provides information on downloading Agile PLM Business Intelligence software from the Oracle distribution locations.

Obtaining Software from Oracle E-Delivery

Major Oracle product releases are distributed as Media Packs on **Oracle E-Delivery** (<http://edelivery.oracle.com>). A Media Pack is an electronic version of the software. Refer to the Media Pack description or the list of products that you purchased on your Oracle Ordering Document. Then, view the Quick Install Guide License List to help you decide which Product Pack you need to select in order to search for the appropriate Media Pack(s) to download. Prior to downloading, verify that the product you are looking for is in the License and Options section of the E-Pack README. Oracle recommends that you print the README for reference.

There will be an itemized part list within each of the packs and you will need to download all items in order to have the complete download for the desired Oracle Agile release.

All Oracle E-Delivery files have been archived using Info-ZIP's highly portable Zip utility. After downloading one or more of the archives, you will need the UnZip utility or the WinZip utility to extract the files. You must unzip the archive on the platform for which it was intended. Verify that the file size of your downloaded file matches the file size displayed on E-Delivery. Unzip each Zip file to its own temporary directory.

To download the Agile PLM BI Software from Oracle E-Delivery (<http://edelivery.oracle.com>):

1. On the Oracle E-Delivery Welcome page, choose your language and click **Continue**.
2. Enter required information on the Export Validation screen and click **Continue**.
3. On the Media Pack Search screen, select **Oracle Agile Applications** in the **Select a Product Pack** drop-down list box. Select a **Platform** value. Click **Go** to view the applicable Agile release downloads.
4. Select the appropriate link. Click **Continue**.
5. The Download page displays downloadable release parts, including customer guides. Click **Download** for the appropriate media pack.
6. Extract the contents of the media pack, unzip the contents, and navigate to the BI_3.1.2.0.0 folder. The installers for all platforms are available within the BI_3.1.2.0.0 folder, regardless of the operating system on which you have chosen to install the software.

Obtaining Software from Oracle MetaLink

Oracle minor release products are distributed as a Patchset/Minipack. A Patchset/Minipack is an electronic version of the software. To download the Product Patchset/Minipack, go to the Oracle MetaLink Web site (<https://mlrepau.us.oracle.com/>) and search for the product. Refer to the Patchset/Minipack description and view the Readme. After you review the Readme, download the

Product Patchset/Minipack.

There will be one zip file which contains all Product binaries, documentation, and database files. Follow the installation instructions from the Install Guide to install the product.

All Oracle MetaLink Web site files have been archived using Info-ZIP's highly portable Zip utility. After downloading one or more of the archives, you will need the UnZip utility or a WinZip utility to extract the files. You must unzip the archive on the platform for which it was intended. Verify that the file size of your downloaded file matches the file size displayed on MetaLink. Unzip each Zip file to its own temporary directory.

To download the software from Oracle MetaLink:

1. Log in to MetaLink. Ensure that you select the **Classic MetaLink** option.
2. Click the **Patches and Updates** tab.
3. To download the Agile PLM BI media pack, perform a **Simple Search**.
 1. In the **Search By** field, select **Product or Family**, and select **Agile Product Lifecycle Management** from the list.
 2. Select appropriate values for the **Release** and **Platform and Language** fields and click **Go**.
 3. Click the **Download Now** icon to download the media pack.

Acronyms

Common acronyms used in this document are listed below:

Acronym	Meaning
PLM	Product Lifecycle Management
DM	Data Mart
ETL	Extract Transform Load
OBIEE	Oracle Business Intelligence Enterprise Edition
ODI	Oracle Data Integrator
BI	Business Intelligence
OBI	Oracle Business Intelligence
PQM	Product Quality Management
PC	Product Collaboration

Agile PLM Business Intelligence Overview

This chapter includes the following:

▪ Introduction	5
▪ PLM Business Intelligence Architecture	5
▪ BI Architectural Components	6

Introduction

Oracle Agile PLM Business Intelligence Applications are comprehensive, pre-built Business Intelligence solutions that deliver pervasive intelligence and provide key insights into your Product Lifecycle Management (PLM) data. The Agile PLM Business Intelligence Application provides an integrated view of the product to enable greater alignment of information across product organizations. It is built on Oracle Business Intelligence Enterprise Edition (OBIEE) Analytics and Oracle Data Integrator (ODI) ETL platforms.

Agile PLM Business Intelligence addresses the business use cases specific to Product Quality Management (PQM) and Product Collaboration (PC). The product design supports integration of the Oracle Business Intelligence (OBI) application across subject areas related to Customer Relationship Management (CRM) and Supply Chain Management (SCM) with data from E-business, SAP, Siebel and PeopleSoft sources.

PLM Business Intelligence Architecture

The various components in PLM Business Intelligence Architecture are as follows:

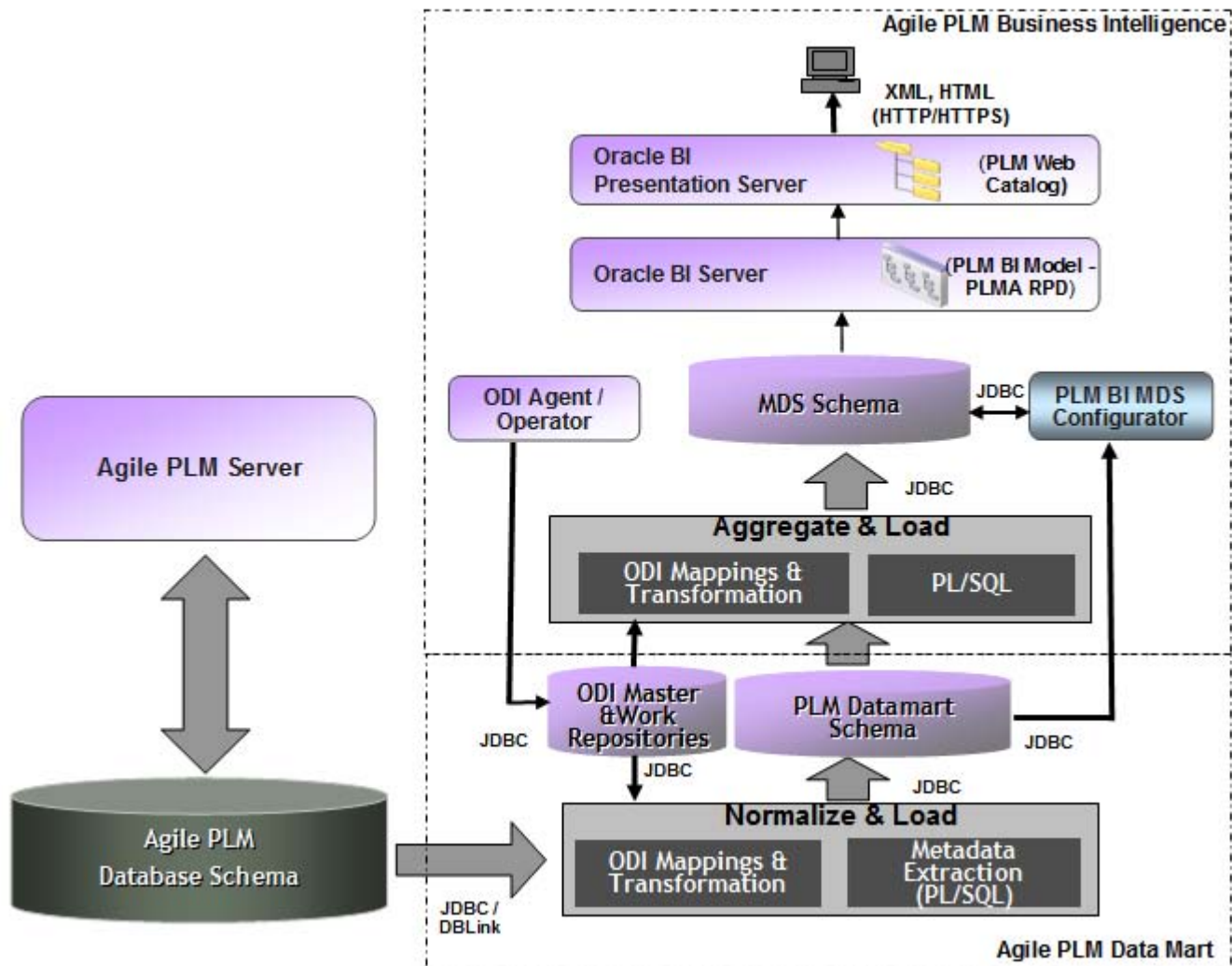
- Oracle Data Integrator (ODI)
- Agile PLM Data Mart Schema
- ODI Repositories
- Agile PLM Multi-Dimensional Schema(MDS)
- PLM BI Configurator
- PLM BI Model (PLMA.RPD)
- PLM BI Web Catalog

BI Architectural Components

The following table describes the major components in Agile PLM Business Intelligence architecture:

Component	Description
Oracle Data Integrator	Oracle Data Integrator (ODI) is an application which uses the Extract-Transform-Load process to transform data from one schema to another. ODI uses the ODI Interface and PL/SQL procedures to implement the Extract-Transform-Load process.
Agile PLM Data Mart Schema	This is an Operational Data Store built from the Agile PLM OLTP (Online Transaction Processing) database.
ODI Repositories	ODI Repositories maintain all information related to the definition and execution of ETL processes.
Agile PLM BI MDS	This Star Schema contains Fact and Dimension tables that enable you to create analytical reports using any reporting application.
PLM BI Configurator	This component enables you to associate configurable PLM data to the MDS depending on various individual user PLM configurations. It gets installed as part of the ETL installation, in the same machine.
PLM BI Model	PLM BI Model is a metadata repository that has metadata of the MDS tables, the business rules such as measure, formulae, hierarchical dimensions, and user-specific roles and privileges that are required to create analytics reports.
PLM BI Web Catalog	PLM BI Web Catalog component presents organized information in the form of reports on PLM BI Interactive Dashboards.

The following illustration depicts the positioning of various components in the Agile PLM Business Intelligence architecture:



System Requirements

This chapter includes the following:

- Software Requirements 9
- Hardware Requirements 10

Agile PLM Business Intelligence software may be deployed in different configurations. The amount of time required to complete an installation depends on the complexity of your deployment. For specifications related to your deployment configuration, see *Agile PLM BI Capacity Planning Guide*.

This chapter describes the minimum software and hardware requirements for Agile PLM BI installation.

Software Requirements

The following are the software requirements for Agile PLM BI installation:

Software Component	Name	Version
Browsers	Internet Explorer	6.0 or 7.0 on Windows
	Firefox	1.5.x or higher. 2.0 for Apple Mac O.S 10.x and Sun Solaris
Oracle Business Intelligence – BI server and Presentation services	Enterprise Edition	10.1.3.4.1
Database server	Oracle Enterprise Edition	10g R2, 11g
Data Integration Component	Oracle Data Integrator	10.1.3.5
Data Mart	Agile PLM Data Mart	3.0.2
Software Development Package	Java Development Kit	1.5
Operating Systems	Microsoft Windows Server	2003 (32 bit and 64 bit)
	Red Hat Linux	AS 5.0 (32 bit and 64 bit)
	Oracle Enterprise Linux	5.0 (32 bit and 64 bit)
	Sun Solaris	10 (SPARC 64 bit)
Data Source	Agile PLM Releases	9.2.2
		9.2.2.1
		9.2.2.2
		9.2.2.4
		9.2.2.5

Software Component	Name	Version
Browsers	Internet Explorer	6.0 or 7.0 on Windows
	Firefox	1.5.x or higher. 2.0 for Apple Mac O.S 10.x and Sun Solaris
Oracle Business Intelligence – BI server and Presentation services	Enterprise Edition	10.1.3.4.1
		9.2.2.6
		9.3

Note Refer to the *OBIEE Installation Guide* for install options specific to various Web servers.

Installation Notes

1. Ensure that at least 4GB of free disk space is available on the computer server before you begin the installation of Agile PLM Business Intelligence 3.1.2.
2. Do not install any software which occupies a lot of disk space, on the systems that have Agile PLM BI.
3. Do not use the Agile server as the Primary Domain Controller (PDC) or Dynamic Host Configuration Protocol (DHCP) server.
4. Do not enable Disk Compression on Agile computer systems.

Note We recommend that the computer systems on which you install the PLM BI, Agile PLM Data Mart and Oracle Database, have at least two physical drives or two disk partitions. This enables you to install the Operating system and the Agile/Oracle installation components on separate drives/partitions, thus ensuring better performance.

Hardware Requirements

When you choose a hardware configuration, it is important to consider details such as the total number of users, the number of concurrent users, the size of your database, the number of Engineering Change Orders processed per day, and the number of transactions in the database.

The following are the minimum hardware requirements for the Database Server that hosts the Data Mart Database schema and the BI Database Schema:

Environment	CPU	RAM	Minimum Disk Space
Development (DEV)	2	4 GB	4 x PLM DB (Source) db size
Testing or Staging (STAGE)	2	4 GB	4 x PLM DB (Source) db size
Production (PROD)	4	8 GB	4 x PLM DB (Source) db size

Installation

This chapter includes the following:

▪ Pre-installation Checklist	13
▪ Starting the Agile PLM Business Intelligence Installer	14
▪ Installing the Agile PLM Business Intelligence Application	15
▪ Executing ETL	18
▪ Post-Installation Tasks	20
▪ Uninstalling Agile PLM Business Intelligence	22

This section lists the prerequisites for installation, the installation procedure, the post-installation guidelines and uninstallation of Agile PLM Business Intelligence software. In addition, this section describes the execution of ETL after you complete the Agile PLM Business Intelligence 3.1.2 installation.

The complete installation of Agile PLM Business Intelligence 3.1.2 application involves:

1. Verifying the pre-requisites using the pre-installation checklist
2. [Starting the Agile PLM BI Installer](#) on page 14
3. [Installing Agile PLM Business Intelligence application](#) on page 15
4. Executing the ETL
5. Performing post-installation tasks

Note For information on configuring multiple work environments, refer Appendix D: Configuring Multiple Work Environments

Pre-installation Checklist

Verify the prerequisites for the installation of PLM Business Intelligence 3.1.2 application using the following pre-installation checklist:

#	Check point	Done
1	Install and configure PLM Data Mart 3.0.2, along with appropriate patches.	
2	Ensure the Database connectivity details for the Data Mart schema, ODI Master and Work repositories are available.	
3	Ensure the Database Server and Listener services are running.	
4	Install and Configure OBIEE. For information on installation and configuration of OBIEE, refer to the Oracle Business Intelligence Infrastructure Installation and Configuration Guide	
5	Ensure the Oracle BI Server and Presentation Services are running.	

#	Check point	Done
6	Install American English Unicode (en_US.UTF-8) Full Locale package in Solaris system to ensure successful installation and allow the complete functionality of PLM Business Intelligence application.	

Note If you have previously installed Agile PLM Business Intelligence 3.0, see [Upgrade Considerations](#) on page 23 for detailed information about upgrading your installation.

It is important to gather the following information before you begin the installation:

- Deployment Configuration specification

Note For more information refer the Agile PLM *Capacity Planning Guide*.

- Start date of the Fiscal year for your business
- Name of the email server specific to your email configuration
- Location of the ODI and Data Mart Schema details
- Location of the RDBMS and database details
- Names of the tablespaces to be used during the installation

Note For more information on tablespace configuration, refer the Agile PLM *Capacity Planning Guide*.

- Name and location of the OBIEE Repository Home
- Name and location of the OBIEE Web Catalog
- Location of the Data Mart 3.0.2 ETL installation

Important Install and test this release on a designated test server before installing it on your production environment. Resolve the issues or questions that you might observe during the system testing before you install this software on your production environment.

Starting the Agile PLM Business Intelligence Installer

On Windows, the installer is packaged as **BISetup_Win.exe** file. For UNIX-based operating systems, the installer is packaged as **BISetup_Lin.bin** (for Linux) or **BISetup_Sol.bin** (for Solaris) file. The installer launches an installation wizard powered by 'InstallAnywhere' to install Agile PLM Business Intelligence.

Note Click **Help** in the wizard windows for information about each step. You can keep the Help window open during the installation. The content in the **Help** window is refreshed dynamically as you progress with the installation. For information on fields in the installation wizard, see Appendix A: Fields in the Installation Wizard

To start the Agile PLM Business Intelligence 3.1.2 installer on Windows:

Double-click **Windows\BISetup.exe** in the list of files available as part of the Installer kit.

To start the Agile PLM Business Intelligence 3.1.2 installer on UNIX:

1. Navigate to the folder where the file exists, in your UNIX terminal.
2. Provide full (Read, Write, Execute) permissions to the **BISetup_Lin.bin** or **BISetup_Sol.bin** file.
3. Enter **./BISetup_Lin.bin** or **./BISetup_Sol.bin** on your UNIX prompt.

Important Install Agile PLM Business Intelligence 3.1.2 in Linux as a non-root user.

Installing the Agile PLM Business Intelligence Application

The process to install Agile PLM Business Intelligence application is the same for Windows (Microsoft Windows), and versions of UNIX (Sun Solaris and Red Hat Linux) Operating systems.

The Agile PLM BI installation process includes the following steps:

1. Installing the MDS DB Schema and ETL Components
2. Installing the PLM BI components

Note You must start the installer twice to complete the Agile PLM BI installation process. In some implementation scenarios, there is a need to manually install the MDS DB schema. This section also describes the steps involved in the manual installation of the MDS DB Schema. For more information, refer [Manually Installing the MDS Schema](#).

Installing the MDS DB Schema and ETL Components

The installer provides options to install MDS DB schema and ETL components separately. You can also choose to install these components together.

To install the MDS DB Schema and ETL Components:

1. Start the installer.
For information, refer [Starting Agile PLM BI Installer](#) on page 14.
2. In the Welcome window, click **Next**.
3. In the **Choose Install Set** window, select the **Business Intelligence MDS** option.

4. In the **PLM BI MDS Installation Components** window, select the components that you want to install. The next steps vary based on your selection. Click **Help** on the wizard window for details on values to be entered in each step of the installation wizard. For information on every field in the Installation wizard windows, refer Appendix A: Fields in the Installation Wizard.
5. Verify the installation details of the selected component in the **Pre-installation Summary** window.
6. Click **Install**.
7. In the **Installation Completed** window, click **Done**.

Manually Installing the MDS schema

If you selected the option 'Generate SQL scripts' in the **Select schema creation** window during the installation of the MDS module, the installer generates a set of SQL files and stores them in **Schema** folder in the **Business intelligence MDS Install Directory**. This option involves running these scripts in SQL*Plus to manually create Business Intelligence MDS schema objects.

You can create the MDS schema using the manually generated installation scripts in the following scenarios:

- Scenario 1: Generate the scripts to create MDS schema in the same system
- Scenario 2: Generate the scripts to create MDS schema in a different system

Scenario 1

This scenario illustrates the procedure to generate the scripts using the installer in System A and create the MDS schema in the same system using the generated scripts.

Note Agile PLM Data Mart needs to be installed before you generate the scripts.

To generate the scripts and create MDS schema in the same system:

1. Set the Oracle SID name.
In Windows:
set ORACLE_SID = <sid_name>
In Solaris/Linux:
export ORACLE_SID = <sid_name>
 2. In SQL*Plus, connect to the target database using the **System User** and **Password**.
 3. Run the UsersCreation.sql script to create the MDS user and assign privileges.
The UsersCreation.sql script executes the **Create MDS User and Privileges** script if you are creating new database user. For existing users, only the **Privileges** script is executed.
-
- Note** For more information on privileges, see [Appendix B: DB privileges](#)
-
4. Disconnect the System user.
 5. Connect to MDS schema using MDS User and password, which was created by the script UsersCreation.sql
 6. Run the mds.sql script to install the MDS schema objects and logger object.

Note To avoid installation errors, follow the steps in the given sequence.

Scenario 2

This scenario illustrates the procedure to generate scripts using the installer in System A, and create the MDS Schema in another system using the generated scripts.

If you generate the scripts in System A and execute them in System B, then you need to replace the scripts in the same location in System B, because mds.sql invokes the SQL files using an absolute path. Alternatively, you can modify the directory path in the mds.sql file to any valid directory.

Example:

Generate the scripts in System A in the directory F:\MDS31. Copy the scripts to System B into the location F:\MDS31. If F: drive does not exist in System B, copy the scripts to any valid directory on System B and modify the directory path in the mds.sql file.

Note To manually install the MDS Schema, follow the steps as described in Scenario 1.

<p>Important Ensure that the TNS name is PLMA. It is recommended that you modify the TNSNAMES.ORA file to reflect PLMA as the TNS name, so you can obtain correct display of all the out of box reports.</p>

Installing BI Components

After you complete the installation of MDS Schema and ETL components, you need to install the BI components.

To install the BI Components:

1. Start the installer.
For information, refer to [Starting Agile PLM BI Installer](#) on page 14.
2. In the **Welcome** window, click **Next**.
3. In the **Choose Install Set** window, select the **Business Intelligence Application** option.
4. In the **Business Intelligence Application Temp Directory** window, enter the path to a folder or use the **Choose** button to select a folder as the Business Intelligence Application Temp Directory. The next steps vary based on your selection. Click **Help** on the wizard window for details on each window of the installation wizard. For information on every field in the Installation wizard windows, refer Appendix A: Fields in the Installation Wizard.
5. Verify the installation details of the selected component that appear in the **Pre-installation Summary** window.
6. Click **Install**.
7. In the **Installation Completed** window, click **Done**.

Installation Folder Structure

After you complete the installation of Agile PLM BI, the MDS installation base directory, for example, **C:\PLMBI31** contains the following sub-folders:

Name of the Folder	Description
\ant	Used to execute ANT scripts
\bin	Configuration tools and Miscellaneous entities
\common	Common Components such as PL/SQL logging libraries
\config	All PLM Business Intelligence configurations including the ANT install configuration file
\images	Contains images used in the Configurator tool.
\install	Installation components such as SQL scripts, ETL objects, and Java classes
\jdk	Contains JRE 1.5, used to install ETL components and to launch MDS Configurator.
\lib	Dependent libraries that the PLM BI 3.1 installer and Configurator uses
\logs	Centralized location for logs specific to BI
\Schema This folder is created only for Generate SQL option that you select during the installation of MDS DB Schema and ETL components.	SQL scripts to <ul style="list-style-type: none">▫ Create, update or delete schema▫ Create pre and post-populate scripts
\olap	BI Repository and Web catalog
\uninstall	Executable files to uninstall the software. This folder also includes executable file to remove any installed Hot Fix or Service Pack for Analytics.

1.

Executing ETL

After the BI Installation is complete, you need to execute the Data integration task using the ODI Operator to load data into MDS from the Agile PLM source database. You can also execute ETL from the command prompt. Before you execute the ETL, it is recommended that you follow the guidelines mentioned in the [Optimizing ETL Performance](#) on page 21 section.

Note If you want to see the status of all the tasks that are under execution, increase the Operator Display Limit to 1000 (the default value is 100). Click **File Menu > User parameter >Set operator Display limit** to change the operator display limit.

To execute ETL from ODI:

1. Launch the ODI Operator and login using authentication details for the ODI session created during the Data Mart installation. The username and password will populate automatically when you open ODI Operator subsequently.
2. Click **OK**.
3. Click the **Scenarios** tab. The Left Frame displays all components.
4. Right-click on **MDS_ETL_LOAD Version 001** component and select **Execute**. The **Execution** window appears.

Note To execute ETL for MDS and DM from ODI, execute the component 'ANALYTICS_ETL Version 001'.

5. Select MDS as **Context**.
6. Click **OK**. The **Sessions Started** window appears.
7. Click **OK**. The ETL process begins.

Note If you install Data Mart and MDS together, then you need an ODI login to execute ETL. Refer the Agile PLM Data Mart Set up Guide for the procedure to create an ODI Login.

Executing ETL from Command Prompt

To execute ETL from command prompt, follow these steps:

1. In Windows command prompt, change directory to **bin** folder in your PLM BI Home Directory, for example, C:\PLMBI31\bin

2. Enter the following command line

```
startbi MDS_ETL_LOAD 001 MDS
```

where

startbi is the batch file that executes ETL tasks

MDS_ETL_LOAD is the ETL task

001 is the version number of ETL task

MDS is the ETL context

The ETL process starts.

To view the status of ETL process:

1. Launch ODI Operator and select **Login**.
2. Enter the user name and password. The user name and password populate automatically on subsequent launches. Click **OK**.
3. In the **Sessions List** tab, select **All Executions** in the left frame which shows all running tasks.

Alternately,

In the **Hierarchical Sessions** tab, select **Status** or **All Executions** in the left frame to check overall progress.

Note For complete information on installation and usage of ODI, refer to the ODI documentation available for free download at <http://www.oracle.com/technology/documentation/index.html>

When your ETL execution is complete, a success or failure notification is sent to the E-mail ID you specified during the PLM BI MDS installation.

Post-Installation Tasks

This section describes the post-installation tasks and recommendations related to the following:

- [Starting Windows Services](#) on page 20
- Configuring Connection Pool Settings in OBIEE
- [Optimizing ETL Performance](#) on page 21

Starting the Windows Services

Ensure that you start the following services in the listed order:

1. OC4J or IIS
2. Oracle BI Java Host
3. Oracle BI Server
4. Oracle BI Presentation Server

Configuring Connection Pool Settings in OBIEE

You must ensure that you have configured appropriate Connection Pool settings in OBIEE Administrator:

To configure connection pool settings:

1. Login to the OBIEE Administration tool.
2. Verify in the Physical layer that `TNSNAME` is `PLMA` and schema username/password is `PLMBIMDS/PLMBIMDS`.
3. In the Physical Layer, edit the **Data Source Name** in the **Connection Pool Window** to `PLMA`, if the `TNSNAME` is not `PLMA` and the Username/Password is `PLMBIMDS/PLMBIMDS`.
4. Enter the Username and Password that you entered during installation of the MDS schema. The default value is `PLMBIMDS/PLMBIMDS`.

Optimizing ETL Performance

Before you execute ETL, it is recommended that you configure the following parameters to optimize ETL performance:

- DB Session and process parameters
- Heap Size in ODI
- ODITimeOut Parameter in ODI

DB Session and process parameters

Verify that the database has enough database sessions (>500) to execute ETL in ODI.

To verify the DB session and process parameters:

1. Login using `sys as sysdba` in command prompt using SQLPlus
2. Execute `SHOW PARAMETER SESSIONS`
3. Execute `SHOW PARAMETER PROCESSES`
4. Execute `'Alter system set processes=1000 scope=spfile`
Alternatively,
Execute `'Alter system set processes=1000 scope=both`
5. Restart the instance. For more information, see the Oracle Database documentation.

Heap Size in ODI

Modify the Heap size in ODI to enhance the ETL performance.

To increase the Heap size:

1. Navigate to the <ODI Home>/ bin folder
2. Set `ODI_INIT_HEAP=32m` (default) and Set `ODI_MAX_HEAP=256m` in the **ODIPARAMS.BAT** file

Note Set the values according to the memory space available in the local machine. For example, if you have 2 GB of available memory, you can set the `ODI_INIT_HEAP` to 512m and `ODI_MAX_HEAP` to 1024m. For more information refer to the ODI Documentation on Oracle Technology Network.

ODI Timeout Parameter in ODI

Ensure that you set the ODITimeOut Parameter to 180 seconds. Use **File > User Parameters** in the ODI Designer Tool Menu Bar to modify this value. The default value is 30 seconds.

Uninstalling Agile PLM Business Intelligence

The uninstaller application is available in the **Uninstall** folder within the installation base directory for Windows installer.

Example

C:\PLMBI31\Uninstall

It is recommended that you create a backup copy of the folder before you begin the un-installation of the application.

Double-click the file named **Uninstall PLM Business Intelligence.exe** to uninstall the PLM Business Intelligence 3.1.2 application.

<p>Important You must manually remove the schemas after uninstalling the PLM Business Intelligence 3.1.2 application.</p>
--

<p>Note If the install folder is not deleted automatically after you uninstall the application, you need to manually delete the PLMBI31 folder.</p>
--

Upgrade Considerations

This chapter includes the following:

▪ Before You Upgrade	23
▪ Upgrading Configured Attributes	23
▪ Upgrading Repositories	26
▪ Upgrading Web Catalog and Permissions in the Presentation Layer	27

The upgrade from Business Intelligence 3.0 to Business Intelligence 3.1.2 involves upgrading the following components:

- Configured attributes
- Repositories
- Web Catalog and Permissions in the Presentation Layer

This chapter describes the pre-upgrade requirements and the upgrade process. In addition, it lists the attributes which do not migrate when you upgrade the MDS Configurator.

Before You Upgrade

- Create a copy of all your current configurations and customizations. The examples include, PLM BI RPD, Catalog, and MDS schema.
- Ensure that you install the following components:
 - MDS 3.0
 - MDS 3.1.1
 - JRE/JDK 1.5

Upgrading Configured Attributes

The BI_DATA_DICTIONARY table maintains the customization information related to MDS Configurator. You need to create a back-up copy of the BI_DATA_DICTIONARY.

When you install Business Intelligence 3.1.2 on an existing Business Intelligence 3.0 schema or user, the install scripts complete the upgrade and retain the attributes you customized using MDS Configurator 3.0, in MDS 3.1.1.

Note Some attributes do not migrate during the upgrade. For more information, refer the section [Excluded Attributes](#) on page 25.

To upgrade the configured attributes from MDS 3.0 to MDS 3.1.1:

1. Extract the .zip file

2. Set variables in the **config.properties** file
3. Run the scripts.

Extract zip file

Extract the **Upgrade.zip** file into a new folder.

Set configuration properties

1. Open the **config.properties** file in <Upgrade Extracted Folder>\config directory.
2. Edit the following properties according to your requirement:

Note This is a segment of a sample config.properties file. The entries in your config.properties file may differ.

```
# Please specify existing MDS 3.0 installed host name
BI30_HOST_NAME=AGILELAB8
# Existing MDS 3.0 schema /user name
BI30_USER_NAME=PLMBIMDS30

# Existing MDS 3.0 schema /user password
BI30_PASSWORD=PLMBIMDS

# Please specify existing MDS 3.0 SID name
BI30_DB_SID=PLMDM

# Please specify existing MDS 3.0 database port no
BI30_DB_PORT=1521
#
# Please specify the MDS 3.1.1 database details
# Please specify existing MDS 3.1.1 installed host name
BI_HOST_NAME= AGILELAB2
# Existing MDS 3.1.1 schema /user name
BI_USER_NAME=PLMBIMDS
```

```
# Existing MDS 3.1.1 schema /user password
BI_PASSWORD=PLMBIMDS

# Please specify existing MDS 3.1.1 SID name
BI_DB_SID=PLMA

# Please specify existing MDS 3.1.1 database port no
BI_DB_PORT=1521
```

Execute scripts

For Windows:

1. From the command prompt, navigate to the folder which has the extracted files.
2. Change directory to the bin folder.
3. Set the JAVA_HOME variable.
4. Run the **install.bat** file.

Example:

```
E:\BI\upgrade\bin>set JAVA_HOME=C:\java\jdk1.5.0_14
E:\BI\upgrade\bin>install.bat
```

For Linux/Solaris:

1. In the terminal window, navigate to the directory which has the extracted files.
2. Change to the bin directory.
3. Set the JAVA_HOME variable.
4. Execute **install.sh** file.

Example:

```
[oracle@agilelab5 bin]$export JAVA_HOME=/home/Java/jdk1.5.0_14
[oracle@agilelab5 bin]$sh install.sh
```

Excluded Attributes

Attributes mapped from a few attribute groups to the 'Affected Items' on Complaints, NCR, CAPA, and Audit, do not migrate to 3.1.2. These attributes need to be mapped to new fact tables corresponding to each attribute group.

The following table lists the Attribute groups that require mapping and the corresponding New Fact

tables:

Attribute Groups that require mapping	New Fact Table
Problem Reports.Cover Page, P2 and P3 attributes	PQM_PR_F
Problem Reports.Flex Attributes	PQM_PR_F
NCR.Cover Page, P2 and P3 attributes	PQM_NCR_F
NCR.Flex Attributes	PQM_NCR_F
CAPA.Cover Page, P2 and P3 attributes	PQM_CAPA_F
CAPA.Flex Attributes	PQM_CAPA_F
Audits.Cover Page, P2 and P3 attributes	PQM_AUDIT_F
Audits.Flex Attributes	PQM_AUDIT_F
Documents.Cover Page, P2 and P3 attributes	ITEM_F
Document.Flex Attributes	ITEM_F
Parts.Cover Page, P2 and P3 attributes	ITEM_F
Parts.Flex Attributes	ITEM_F

Upgrading Customization

The PLM BI 3.1.2 upgrade scripts do not upgrade the customization. Examples of such customization are:

- Custom tasks in ODI
- Custom tables in MDS
- Modifications to Repository file
- New Reports & Dashboards
- Modifications to Out of box Reports & Dashboards

Note For further information on upgrading customization, contact Oracle Support.

Upgrading Repositories

For Repository upgrade, refer to the "Merging Oracle BI Repositories" section in the *OBIEE Server Administration Guide*.

Upgrading Web Catalog and Permissions in the Presentation Layer

For Web Catalog and Presentation Layer upgrade, refer the "Managing Presentation Catalog Using Oracle BI Catalog Manager" section in the *OBIEE Presentation Services Administration Guide*.

Troubleshooting

This chapter lists common installation errors and troubleshooting guidelines for your reference. If you experience errors other than those listed here, contact **support** <http://www.oracle.com/agile/support.html> (<http://www.oracle.com/agile/support.html>) for assistance.

Unsupported Operating systems error

I use Windows XP operating system. I get a warning that states 'Unsupported Operating System' when I run the BISetup_Win.exe file. There are options to quit or continue the installation. If I continue the installation what is the impact?

Cause:

You are running the installer on a computer that is not a Server. This warning indicates that Oracle does not support any issues that might come up after the installation of the software on a desktop at work or a Personal Computer(PC) used for software demonstrations.

Action:

There are no known adverse impacts if you continue with the installation. This warning does not appear if you install PLM BI on a Server.

You can choose to quit the installation if you do not want to install the application on your work desktop or Home PC.

Connection Identifier error on ETL run

When I run ETL, the ODI_INT_CREATE_DBLINK task displays a connection identifier error message.

Cause:

The TNSNAMES.ORA file does not have the correct information that enables connection to the source database.

Action:

Add a TNSNAME entry in the target database that points to the source database before you run the ETL.

If the database SID name of the source and target database are different (Example: Source SID = AGILE9 and Target SID = PLMDM), then modify the TNS Service name as AGILE9 in the tnsname.ora file.

If the database SID name of the source and target database are the same (Example: Source SID = AGILE9 and Target SID = AGILE9), to eliminate DBLINK errors:

1. Modify the TNS entry as follows:

AGILE9_LAB1 =

(DESCRIPTION =

```
(ADDRESS_LIST =  
  (ADDRESS = (PROTOCOL = TCP)(HOST = LAB1)(PORT = 1521))  
)  
(CONNECT_DATA =  
  (SERVICE_NAME = AGILE9)  
)  
)
```

2. Start > Oracle > Oracle Data Integrator > Topology Manager
In the Topology Manager select Physical Architectures
>Technologies>Oracle>SRC_CONN_PHYSICAL.
3. Replace the added TNSNAME (Example: AGILE9_LAB1) in the DB link column.

Credential retrieval failure error on ETL run

My Database server and ODI/ETL systems are in two different domains. When I run ETL, the ODI_INT_CREATE_DBLINK scenario returns the following message:

ORA-12638: Credential retrieval failed.

Cause:

The source DB and target DB are in different domains.

Action:

To eliminate the DBLINK errors:

1. Navigate to the %oracle_home%\network\admin directory.
2. Modify the SID and HOSTNAME in the TNSNAME entry to reflect the domain name.
3. Start > Oracle > Oracle Data Integrator > Topology Manager.
4. In the Topology Manager, select
Physical Architectures >Technologies>Oracle>SRC_CONN_PHYSICAL.
5. Replace the added TNSNAME (Example: AGILE9.ALAB01) in the DB link column.

To verify DBLINK:

Execute the scenario ODI_INT_CREATE_DBLINK from ODI operator in ODI.

If the scenario fails, the following message appears again:

Link AGILE9.ALAB01 error: ORA-12638: Credential retrieval failed

To resolve this issue:

1. Navigate to the %oracle_home%\network\admin directory

2. Modify the value of SQLNET.AUTHENTICATION_SERVICES in sqlnet.ora file as follows:
Original Entry - SQLNET.AUTHENTICATION_SERVICES= (NTS)
Modified Entry - SQLNET.AUTHENTICATION_SERVICES= (NONE)
3. Restart the database instance.
4. Re-run the scenario ODI_INT_CREATE_DBLINK from ODI operator in ODI.

Unable to update RPD and Web Catalog

The PLM BI Installation is unsuccessful. I am unable to update RPD and Web Catalog.

Action:

Ensure that the OC4J server is running before you begin the installation.

Page cannot be displayed

I completed the installation successfully but when I launch the PLM BI application URL, I get a 'Page cannot be displayed' screen.

Action:

Ensure that you start the following services in the listed order:

1. OC4J or IIS
2. Oracle BI Java Host
3. Oracle BI Server
4. Oracle BI Presentation Server

Unable to view reports

When I login to the BI Application, I am unable to view any report. The window displays ODBC Driver errors.

Action:

If either TNSNAMES or MDS schema names or both are not default, reconfigure the TNSNAMES.ORA file, CONNECTION POOL details and MDS Schema Name in OBIEE Administrator, as appropriate.

Installation Unsuccessful

During the installation of PLM BI, I get an error message: Installation unsuccessful. Check the Logs\Bilninstall.log file. The log file is not created under \logs\Bilninstall.log.

Action:

Repeat the installation using the latest download of Bilninstall.exe

Unable to install MDS and DB in the same system

I have installed the BI 3.1 database. I am unable to install the 3.1 MDS in the same system and in the same directory where the BI 3.1 database is installed.

Action:

If you are installing both the database and ETL on the same system, you can select both options together in the installer. If you install them separately in the same system, you will need to use two separate install folders.

Frequently Asked Questions

How do I ensure that the graphs in the BI Interactive Dashboards have the latest data?

The Report Data refreshes with the successful completion of MDS. Contact your BI Administrator for the latest MDS ETL scheduling and completion information.

How much memory space do I need on my system to execute ETL?

Ensure that you have at least 2 GB of available disk space in both DB server and ETL (ODI) systems to execute ETL. For recommendations, refer to the Hardware Requirements section in this document.

Can I install MDS DB Schema, ETL, and OBIEE application in one system?

You can install ETL components including ODI in the system which has the Data base installation. However, we recommend that you install OBIEE and PLM BI Application components in separate systems for better performance results.

ODI uses JRE 1.4.2. Why do I also need JDK 1.5 on my system?

OBIEE and Web service capabilities mandate the installation of JDK 1.5. Ensure that you set JAVA_HOME to JDK 1.5 after you install the ETL components.

In ODI Operator, I see ANALYTICS_ETL, DATAMART_Load, and MDS_ETL_LOAD in the Scenario tab. Which one should I execute to run the ETL?

- To run both Data Mart and MDS ETL execute the ANALYTICS_ETL scenario
- To run Data Mart ETL only, execute DATAMART_LOAD scenario
- To run MDS ETL only, execute MDS_ETL_LOAD scenario

How do I manually set my MDS ETL to run in either full or incremental mode?

To set your ETL run in 'Full' mode, set the value of Full_load column in the ETL_PARAMETER table to 'Y'.

To set your ETL run in 'Incremental' mode, set the value of Full_load column in the ETL_PARAMETER table to 'N'.

Contact your database administrator for this activity.

Note If you make any modification to the PLM Configuration (for example, adding an attribute), we recommend Data Mart and MDS ETL run in 'Full' mode.

If I modify the SID and User Name of the MDS database can I continue to use the existing installation of PLM BI?

You need to reinstall the application for the changes to take effect.

If I modify the ODM Password after the installation of PLM BI, how do I modify the same in the existing PLM BI Installation to take effect in the MDS Configurator?

To modify the ODM password after the installation of PLM BI:

1. Navigate to the bin directory of the install folder in the Windows command prompt or UNIX prompt.
Example : `D:/PLMBI/bin`
2. Enter `BIEncoder <new password to encrypt>`
3. Copy the encrypted password that appears.
4. Navigate to `<biinstall_home>/config/BIDataLayerconfig.properties` file.
Example : `D:/PLMBI/config/BIDataLayerconfig.properties`
5. Paste the encrypted password in the **ODM_PASSWORD** field. This field is in the #ODM Schema Details section of the `BIDataLayerconfig.properties` file.
6. **Save** and close the `BIDataLayerconfig.properties` file.
7. **Exit** the command prompt.

In addition, you need to change the password of the ODM connection in the Physical Repository of ODI Topology Manager. For information, refer *Oracle Data Integrator User Guide*.

How do I modify the Mail Server name in the PLM BI Installation?**To modify the name of the Mail Server:**

1. Navigate to the `<biinstall_home>/config/BIDataLayerConfig.properties` file.
Example : `D:/PLMBI/config/BIDataLayerconfig.properties`
2. Modify the name of the mail server in the `MAILSERVER` property as `MAILSERVER = <New Mail Server Name>`
3. Navigate to `<biinstall_home>/bin` directory in the Windows command prompt or UNIX prompt.
4. Run the `LoadParameter4BI.bat` file to reflect the modifications.

What are the different scenarios of ETL run?

- ANALYTICS_ETL will run both DATAMART_LOAD and MDS_ETL.
- MDS_ETL will run MDS only
- DATAMART_LOAD will run Data Mart only

Note MDS_ETL depends on Datamart_ETL. If DM ran in 'Full' mode, the MDS should also run in 'Full' mode. If DM ran in the 'Incremental' mode, the MDS can be run in 'Full' or 'Incremental' mode. If DM ETL run fails, the MDS ETL does not run.

How do I check if OC4J server is up and running?

In `<OBIEE_Home>\oc4j_b\j2ee\home\log\rmi.log` file, check for log entries similar to the following:

```
08/08/21 13:22:39.325 10.1.3.1.0 Started
```

```
08/08/21 13:34:40.392 10.1.3.1.0 Stopped (JVM termination)
```

This entry displays the Start time and End time of the OC4J server. If the OC4J is running, the log

file will display only the Start time.

What are the possible causes for ETL run time failures?

The possible causes for ETL run time failures are as follows:

- Agile PLM Server Upgrades such as HotFix Patches, and unsupported minor/major releases
- Agile PLM Configuration Changes
- MDS Configuration Changes
- Unsupported Database Server Version Upgrade
- Database Password Changes which do not reflect in Data Mart, MDS and ODI environments.
- Unsupported version of ODI Server Upgrade or Repository Changes

What are the possible root causes for Reports/Dashboard issues?

The possible causes for BI Reports/Dashboard Issues are:

- Patches or Minor release upgrades to BI 3.1
- Unsupported versions of OBIEE Server Upgrades
- Reports or Dashboard Configuration Changes
- Database or OBIEE Password Changes which do not reflect in Data Mart, MDS, and ODI environments.
- LDAP Group Changes

How do we localize PLM Business Intelligence application?

Agile PLM Business Intelligence application is built on Oracle Business Intelligence Enterprise Edition that is designed to work in multiple languages. Please refer to Appendix B "Localizing Oracle Business Intelligence Deployments" in the *Oracle® Business Intelligence Infrastructure Installation and Configuration Guide*.

The externalize strings utility in the BI Administrator displays the strings (names and descriptions) used specifically in the PLM Quality Presentation catalogs. Please note that an additional effort is required to translate them to the desired language before you can view the localized version of the application. Contact Oracle Support for additional information.

What are the maintenance requirements?

We recommend you to create periodic backup copies of the MDS schema and ODI repositories (Master and Work Repository).

What are the possible causes of failure in installation?

The possible causes of installation failure are:

- Failure in the Import of ODI packages during installation
- Drop in database connections
- Out-of-space errors in database tablespaces

- Unsupported database, ODI, and OBIEE versions

When I install OBIEE on Windows, the command prompt window for OC4J is always on. What should I do so I don't see this window?

When you install OBIEE on Windows, the command prompt window for OC4J is always on when you start the computer. You can set the OC4J to run as a Windows service to avoid seeing this command prompt.

To set the OC4J to run as a Windows service:

1. Download JavaService -2.0.1.0
2. Extract the file to a directory.

Example

```
C:\JavaService
```

3. Note the directory path of your oc4j.jar file in the OBIEE installation folder.

Example

```
C:\OracxleBI\oc4j_bi\j2ee\home\oc4j.jar
```

4. In a Command Prompt window, navigate to the folder which has the extracted JavaService files.

Example

```
cd C:\JavaService\
```

5. Type the following command using the two installation paths:

```
javaservice -install "Oracle BI EE OC4J" "C:\Program
Files\Java\jdk1.5\jre\bin\client\jvm.dll" -XX:MaxPermSize=128m
"-Djava.class.path=C:\OracleBI\oc4j_bi\j2ee\home\oc4j.jar" -start
oracle.oc4j.loader.boot.BootStrap -description "Oracle BI EE OC4J
Service"
```

6. In **Start > Run**, type `services.msc` to open the Service manager and set the Oracle BI EE OC4J service to run in the 'Automatic' or 'Manual' mode.

Can I install BI MDS in the same folder where Data Mart 3.0.1 is installed ?

Yes, but we recommend to have a separate folder for the BI MDS installation.

Can I install Data Mart (including Master and Work Repository) and MDS as a single schema?

Yes, you can. You need to use the same schema name for MDS which is being used for Data Mart.

For example, if you installed Data Mart as a single schema option and called it **ODM**, during MDS installation, when prompted for MDS schema name you need to input **ODM**.

Can I use BI Installer for remote installation (i.e. launch installer in machine A to install the software in machine B)?

No, the installer does not support remote installation. However, you can manually install the database schema. See Manual Installation Steps for manual DB schema installation.

Tablespaces assigned for MDS data and indexes grows after successive ETL runs. What are the steps that I can take to prevent this?

After successful every ETL run, purge unused database objects using the following command:

```
PURGE TABLESPACE <Tablespace_Name>;
```

```
PURGE TABLESPACE agileodm;
```

```
PURGE TABLESPACE agileodm_indx;
```

Appendix A: Fields in MDS installation

This section describes the various fields in the wizard windows for MDS Installation.

Window: Business Intelligence MDS Install Directory

Field / Label	Type	Description
Business Intelligence MDS Install Directory	Text	Enter the path to the BI MDS install directory. The default path is C:\PLMBI31 Click Choose button to select a different installation folder. Click Restore Default to revert to the default values.

Window: Schema Creation Options

Field / Label	Type	Description
Use existing Database and Table spaces	Option button	Select this option to create MDS schema using the existing database and table spaces.
Generate SQL Scripts	Option button	Select this option to manually create BI schema, DDL, and procedures. You need to execute the following scripts: <ul style="list-style-type: none"> ▫ UsersCreation.sql ▫ mds.sql

Window: Existing Data Mart Home Directory

Field / Label	Type	Description
Existing Data Mart Home Directory	Text	The path to the existing Data Mart Install directory appears as default value in this field. The default value is C:\PLMDataMart. This field is modifiable.

Window: Oracle Database Home Directory

Field / Label	Type	Description
Oracle Database Home Directory	Text	The path to the Home Directory of the Oracle Database appears as default value in this field. You need not modify this path unless you want to use a different Oracle Database Installation.

Window: Oracle Data Integrator Home Directory

Field / Label	Type	Description
Oracle Data Integrator Home Directory	Text	The path to the Home Directory of the Oracle Data Integrator appears as default value in this field. This field is modifiable.

Window: Data Mart Database details

Field / Label	Type	Description
Host Name	Text	Name of the Database Host
Database Port Number	Text	Number which identifies the port used to connect to the database
Database Name (SID)	Text	String which identifies the database
System User Password	Text	This is the SYSTEM User Password for the SID. This login enables you to grant user permissions.
Sys User Password	Text	This is the SYS user password for the SID. SYS is the Supreme user with rights to grant user permissions to all users.
Data Mart Schema User Name	Text	User Name of the Data Mart schema
Data Mart Schema User Password	Text	Password that corresponds to the Data Mart User Name.

Window: Business Intelligence MDS Schema Details

Field / Label	Type	Description
Business Intelligence MDS Schema Details		
BI MDS Schema User Name	Text	User name which authenticates access to the BI MDS schema. You can enter the User Name of any existing or new schema. If you had chosen 'Single Schema Installation' during the Data Mart installation, you can use the same user name to complete the single schema installation for MDS.

Field / Label	Type	Description
BI MDS Schema User Password	Text	Password which corresponds to the BI MDS Schema User Name. Default values are based on the Data Mart specifications.
Business Intelligence MDS Table Spaces Details		
BI MDS Data Table Space Name	Text	Enter the name of the BI MDS Data Table Space. Default values are based on the Data Mart specifications.
BI MDS Indexes Table Space Name	Text	Enter the name of the BI MDS Indexes Table Space. Default values are based on the Data Mart specifications.

Window: Oracle Data Integrator Repository Details

Field / Label	Type	Description
Master Repository Database User Name		Verify the User Name of the Master Repository Database. The default value is based on the Data Mart specifications.
Master Repository Database Password		Verify the Password of the Master Repository Database. The default value is based on the Data Mart specifications.
Work Repository Database User Name		Verify the User Name of the Work Repository Database. The default value is based on the Data Mart specifications.
Work Repository Database Password		Verify the Password of the Work Repository Database. The default value is based on the Data Mart specifications.
ODI Work Repository Name		Verify the Name of the ODI Work Repository. The default value is based on the Data Mart specifications.

Note All these fields are auto-populated from the Configuration file used in the Data mart installation.

Window: Start of the Fiscal Year

Field / Label	Type	Description
Start of the Fiscal Year	Date in the format MM-DD-YYYY	Enter the date on which the Fiscal year begins in your Organization.

Window: Load Parameter

Field / Label	Type	Description
Email ID(s)	Text	Enter the Email ID in which you want to receive the ETL notifications. Use comma (,) to delimit more than one Email address in this field.
Mail Server Name	Text	Enter the Email server which routes your emails to and from the given Email addresses.

Note The default value is based on the Data Mart specification.

Fields in BI Application Module Installation

This section describes the various fields in the wizard windows for BI Application Module Installation.

Window: Business Intelligence Application Temp Directory

Field / Label	Type	Description
Business Intelligence Application Temp Directory	Text	Enter or modify the path to the folder in which you want to install the Business Intelligence application. Default value is C:\PLMBI31. Click Choose button to select a different installation folder. Click Restore Default to revert to the default values.

Window: OBI Repository and Web catalog Install Directory

Field / Label	Type	Description
OBI Repository Home Directory	Text	Enter the path to the Home Directory of the OBI Repository. Alternatively, Click Choose to navigate to the folder which is the Home Directory of the OBI Repository. C:\OBIEE\OracleBI Click Restore Default to reset the path.
OBI Web Catalog Home Directory	Text	Enter the path to the Home Directory of the OBI Web Catalog. Alternatively, Click Choose to navigate to the folder which is the Home Directory of the OBI Webcatalog. C:\OBIEE\OracleBIData\web

Field / Label	Type	Description
		Click Restore Default to reset the path.

Window: OBI Repository Install Directory

Field / Label	Type	Description
OBI Repository Home Directory	Text	Enter the path to the Home Directory of the OBI Repository. Alternately, Click Choose to navigate to the folder which is the Home Directory of the OBI Repository. C:\OBIEE\OracleBI Click Restore Default to reset the path.

Window: OBI Web Catalog Install Directory

Field / Label	Type	Description
OBI Web Catalog Home Directory	Text	Enter the path to the Home Directory of the OBI Web Catalog. Alternately, Click Choose to navigate to the folder which is the Home Directory of the OBI Web Catalog. Example: C:\OBIEE\OracleBIData\web Click Restore Default to reset the path.

Appendix B: DB Privileges

The DB privileges vary for single schema and multiple schema installations.

Single Database Schema Privileges

The following are the privileges required when you use a single schema to host the MDS, DataMart, ODI Master, and ODI Work Repository objects:

Privilege	Purpose
CONNECT,RESOURCE	Connect, Create, Insert, Update, Delete, Drop or Alter table, Create or Drop or Alter Index in your schema
CREATE DATABASE LINK	Create DBLink to Agile PLM source system for every Full ETL run
DROP PUBLIC DATABASE LINK	Drop the DBLink to Agile PLM after connection

CREATE PUBLIC SYNONYM	Create a synonym to source table in target schema
ANALYZE ANY	ODI Tool analyzes the i\$ table during incremental ETL run
DROP PUBLIC SYNONYM	Drop synonym
ALL ON SYS.DBMS_PIPE	PL/SQL logger module to log the debug, warning and error messages
EXECUTE ON, SYS.DBMS_SYSTEM	PL/SQL logger module to log the debug, warning, and error messages
CREATE VIEW	Create a view in your schema
CREATE MATERIALIZED VIEW	Create a materialized view in your schema

Privileges for Multiple Schemas

The Installer grants the required privileges when it creates the schemas as SYS user.

ODI Work, Data Mart, and MDS Schema require ANALYZE ANY WITH ADMIN OPTION privilege for performance optimizations.

Data Mart and MDS Schema users require the following privileges if not installed in ODI Work schema:

Privilege	Purpose
CREATE DATABASE LINK	Create DBLink to Agile PLM source database for every ETL run
DROP PUBLIC DATABASE LINK	Drop DBLink for every Full ETL run
CREATE ANY TABLE	Create i\$,e\$,c\$ tables in ODI Work Repository schema.
CREATE ANY SYNONYM	Create a synonym for Source table in ODI Work Repository schema
CREATE ANY INDEX	Create a index in ODI Work Repository Schema for i\$ tables
INSERT ANY TABLE	Insert a table like i\$,e\$,c\$ in Work Repository schema
CREATE PUBLIC SYNONYM	Create a synonym to source table in target schema
DROP ANY SYNONYM	Drop a synonym in ODI Work Repository schema
DELETE ANY TABLE	Delete records from i\$ tables in ODI Work Repository schema and this is used during Incremental ETL run
UPDATE ANY TABLE	Update records in i\$ tables in ODI Work Repository schema and this is used during Incremental ETL run
DROP ANY TABLE	Drop i\$ tables in ODI Work Repository schema and this is used during Full/Incremental ETL runs
SELECT ANY TABLE	Select a table like i\$_listname in ODI Work Repository

Privilege	Purpose
	schema.
CREATE VIEW	Create a view in your schema
CREATE MATERIALIZED VIEW	Create a materialized view in your schema
EXECUTE, DEBUG ON SYS.DBMS_PIPE	PL/SQL logger module to log debug, warning and error messages.
EXECUTE ON SYS.DBMS_SYSTEM	PL/SQL logger module to log debug, warning and error messages.

Note For information on Data Mart and ODI Schema privilege details see Agile PLM Data Mart Setup Guide.

Appendix C: Log Files

Log files are located in the Logs folder within the PLMBI Install Home Folder. These log files are useful to troubleshoot the installation issues. The following table lists the various log files and descriptions:

Name of the Log file	Description
BI_DATA_DICT_PC_SD.log	Status of MDS PC module data dictionary seed data insert
BI_DATA_DICT_PQM_SD.log	Status of MDS PQM module data dictionary seed data insert
BRIDGE_SD.log	Status of MDS Bridge Control table seed data insert
LIST_DIM_SD.log	Status of MDS List dimension control table seed data insert
MDS_TEMP_DDL.log	Status of the MDS temp table creation
MDS_VIEWS.log	Status of the MDS views creation
PC_DDL.log	Status of the MDS PC table creation
PLSQLLogger.log	Status of the PLSQL logger objects creation
SEED_DATA_GLOBAL.log	Status of the BI Measures and Dimension names seed data insert
USERDEF_OBJ.log	Status of the User Defined Dimension and Multi list table creation
BIInstall.log	Status of BI Installation. This file also enables you to track the real-time Installation update.
UsersCreation.log	Status of MDS user creation. This file also stores details

Name of the Log file	Description
	of the user grants.
MDS_COMMENT.log	Status of Comments created on tables and columns
MDS_DDL.log	Status of MDS PQM tables and index creation
MDS_PROCS.log	Status of MDS Packages, procedures and function creation
MDS_SD.log	Status of static dimension table seed data insert
WorkSchemaUpd4BI.log	Status of snp_subscriber table which internally inserts the data of J\$tables.
LoadParameter4BI.log	Status of parameter details (such as mail id).

Appendix D: Configuring Multiple Work Environments

Implementation scenarios sometimes require installation of separate work repositories and MDS users for work environments such as, Development, Test, and Production. The configuration of Test and Production environments involves:

- Creating MDS user for Test and Production
- Configuring Test and Production context
- Configuring Test and Production Physical Schema

The Development and Test environments should be configured before the Production environment.

Note The configuration order for Test and Production environments is interchangeable.

Development Environment

You need to follow the installation instructions from [Pre-installation instructions](#) on page 13 through [Post-installation Tasks](#) on page 20 to complete the configuration for the Development environment. The installer creates a Master repository and Work repository along with the MDS user.

Test Environment

The following are the pre-requisites to configure the Test environment:

- Oracle Data Mart:
Oracle Data Mart (ODM) must be configured for Test and Production environments. The respective work repositories need to refer the Development environment's Master repository.

▫ Business Intelligence:

In the Development environment, ensure that the ODM and MDS ETL installation are complete.

The following are the steps to configure the Test environment:

1. Set the environment variables.
2. Extract the BI3.1.2.0.0.zip file.
3. Set the variables in BIDataLayerConfig.properties file for BI MDS.
4. Set the variables in Temp.properties file for BI MDS.
5. Install BI MDS Components.

Setting Variables

Set the ANT_HOME and JAVA_HOME variables in your system environment.

Extracting zip File

Extract the BI3.1.2.0.0.zip file into a directory on your hard drive.

Setting variables in BIDataLayerConfig.properties file for BI MDS

In the <BI Extracted Folder>\config directory, edit the **BIDataLayerConfig.properties** file to change the properties according to your requirements.

Note Path separator in all of the path specifications in the **BIDataLayerConfig.properties** file is a double backward slash (\).

The following is a sample BIDataLayerConfig.properties file with comments (A comment line begins with a hash '#' symbol) containing examples for every specification:

```
BI_DATA_LAYER_HOME=<INSTALL DIR>
#Example: BI_DATA_LAYER_HOME=E:\MDS3.1.1.0.0
#ODI Repository Configuration
#Identify the repository which you want to create.
#PRODUCTION=Create BI on existing PRODUCTION Work Repository.
#QA=Create BI on existing QA Work Repository.
REPOSITORY_OPTION=PRODUCTION
#Specify if you want to create a new BI user or use the existing BI user.
#0 - BI User is existing user
#1 - BI User is new user
```

BI_USER_EXIST=1

#Oracle Home Directory

ORACLE_HOME_DIR=<ORACLE_HOME>

#Example: ORACLE_HOME_DIR_BI=E:\oracle\product\10.2.0\db_1

#ODI Home Directory

ODI_HOME_DIR=<ODI_HOME>

#Example: ODI_HOME_BI=E:\ODI\oracledi

#DATAMART Database Details

#DATABASE NAME OR SID NAME

DB_SID_NAME=<DATABASE_NAME>

#Example: DB_SID_NAME=PLMDM

#HOST NAME OR MACHINE NAME

DB_HOST_NAME=<HOST_NAME>

#Example: DB_HOST_NAME=agilelab1

#PORT NO

DB_PORT=<PORT_NO>

#Example: DB_PORT=1521

#DATA MART Schema/User Name

ODM_UN=<DM_USER_NAME>

#Example: ODM_UN=ODM

#BI Schema/User Name

#You need to enter a new user name if you entered BI_USER_EXIST=1

BI_USER_NAME=<BI_USER_NAME>

#Example: BI_USER_NAME=MDS

#

#BI Tablespace details

#The Tablespace names must exist

#DATA TABLESPACE NAME

BI_TS_NAME=<DATA_TS_NAME>

```
#Example: BI_TS_NAME=agileodm
#INDEX TABLESPACE NAME
BI_IDX_TS_NAME=<IDX_TS_NAME>
#Example: BI_IDX_TS_NAME=agileodm_idx
#
# Oracle Data Integrator Repository Details (Database)
#
#MASTER REPOSITORY USER NAME
MASTER_REP_UN=<MASTERREP_USER_NAME>
# Example: MASTER_REP_UN=ODIMASTER
#Enter the user name of the WORK REPOSITORY
WORK_REP_UN=<WORKREP_USER_NAME>
# Example: WORK_REP_UN=ODIWORK
#Enter the name of the WORK Repository
WORK_REP_NAME=<WORKREP_NAME>
# Example: WORK_REP_NAME=WORKREP
#BI SCHEMA/USER JDBC URL
TGT_DB_URL=jdbc:oracle:thin:@<HOST>:<PORT>:<SID>
# Example: TGT_DB_URL=jdbc:oracle:thin:@agilelab1:1521:PLMDM
#MASTER REPOSITORY SCHEMA/USER JDBC URL
MASTER_DB_URL=jdbc:oracle:thin:@<HOST>:<PORT>:<SID>
# Example: MASTER_DB_URL=jdbc:oracle:thin:@AGILELAB1:1521:PLMDM
#
#Email and Mail server details
#
#EMAIL ADDRESSES [COMMA SEPARATED]
NOTIFICATION_EMAILID=<TO_EMAIL_ADDRESS>
# Example: NOTIFICATION\_EMAILID=john.s@oracle.com
#Enter the name of the mail server
```

MAILSERVER=<MAIL_SERVER_NAME>

Example: MAILSERVER =mail.server.com

The format of the Fiscal Start date must be MM-DD-YYYY

FISCAL_START_DATE=<FSD>

#Example: FISCAL_START_DATE=12-31-2008

Note If BI user and BI schema objects exist, then the BI schema objects are dropped and recreated. If you are creating a new BI user, the schema objects are created on the new BI user.

Setting variables in Temp.properties file for BI MDS

In the <BI Extracted Folder>\config directory, edit the **Temp.properties** file to change the properties according to your requirements. This file mainly stores the passwords for DM, Work Repository and BI user. After the installation, the passwords stored in the **Temp.properties** file are deleted.

Passwords cleared at end of installation automatically

#BI DATABASE SYSTEM USER PASSWORD

DB_SYSTEM_PWD_T=<SYSTEM USER PASSWORD>

#Example: DB_SYSTEM_PWD_T=MANAGER

#BI DATABASE SYS USER PASSWORD

DB_SYS_PWD_T=<SYS USER PASSWORD>

#Example: DB_SYS_PWD_T=ORACLE

#DATA MART USER PASSWORD

DM_PWD_T=<DATA MART USER PASSWORD>

#Example: DM_PWD_T =ODM

#MASTER REPOSITORY PASSWORD

MASTER_REP_PWD_T=<MASTER REPOSITORY USER PASSWORD>

#Example: MASTER_REP_PWD_T=ODIMASTER

#WORK REPOSITORY PASSWORD

WORK_REP_PWD_T=<WORK REPOSITORY USER PASSWORD>

#Example: WORK_REP_PWD_T=ORKREP

#BI USER PASSWORD

BI_PWD_T=<BI USER PASSWORD>

#Example: BI_PWD_T =MDS

Installing BI MDS

Installation of BI MDS involves creation of ODI Physical architecture, ODI context and BI schema objects.

To install BI MDS on Windows:

1. In the Windows Command prompt, change to the <BI Extracted Folder>\bin directory.
2. Run the MDSetlInstall.bat file.

To install BI MDS on UNIX:

1. From the console, change to the <BI Extracted Folder>/bin directory.
2. Run the MDSetlInstall.sh file.

Note Click **Help** in the wizard windows for information about each window. The content in the **Help** window is refreshed for every step of installation. For information on every field in the Installation wizard windows, refer Appendix A: Fields in the Installation Wizard.

Production Environment

The prerequisites and procedures to configure a Production environment for PLM BI MDS is the same as that of the Test Environment.