



# **Agile PLM Business Intelligence**

Agile PLM BI Setup Guide

v3.1

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## CONTENTS

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Copyright and Trademarks.....	ii
<b>About this Guide .....</b>	<b>1</b>
Objective.....	1
<b>Product Overview.....</b>	<b>3</b>
Introduction.....	3
<b>BI Architecture .....</b>	<b>3</b>
Components.....	4
Oracle Data Integrator.....	4
Agile PLM Data Mart Schema .....	4
ODI Repositories .....	4
Agile PLM BI MDS.....	4
PLM BI Configurator .....	4
PLM BI Model.....	4
PLM BI Web Catalog.....	5
<b>System Requirements .....</b>	<b>7</b>
Software Requirements.....	7
Hardware Requirements .....	8
Supported Platforms.....	8
<b>Installation.....</b>	<b>11</b>
Pre-installation Checklist.....	11
Installation Process .....	12
Installation on Windows.....	12
Installer Usage Options .....	12
Installation of MDS Module.....	13
Installation of PLM BI Application Module .....	21
Installation on Red Hat Linux, Oracle Enterprise Linux and Sun Solaris .....	24
Manual MDS schema installation and DB Privileges .....	25
Post-Installation Guidelines.....	28
Log Files .....	31
Executing ETL .....	32
Execute ETL from Command Prompt.....	32
Uninstall Product .....	33
Upgrade Considerations.....	33
Before you upgrade.....	34

Upgrading MDS Configurator .....	34
Upgrading Repositories .....	37
Upgrading Web Catalog and Permissions in the Presentation Layer.....	37
<b>Troubleshooting .....</b>	<b>39</b>
Frequently Asked Questions .....	43

# 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.

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**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>.

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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.

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**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.

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## 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](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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# About this Guide

This guide enables you to successfully install the Agile PLM BI 3.1 application. In addition, if you are an existing BI 3.0 customer, this guide provides instructions to upgrade your installation to 3.1. It is presumed that you are familiar with or have working knowledge of Oracle Data Integrator, Oracle Business Intelligence Enterprise Edition, Agile PLM, PLM DM 3.0.1 and Oracle Database.

## Objective

The main objectives of this guide are to:

- Identify installation components
- Understand installation process flow
- Understand the ETL process
- Provide minimum hardware and software requirements
- Provide information on different deployment configurations
- Troubleshoot the installation
- Upgrade from version 3.0 to 3.1

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Note	This document does not explain the installation basics of OBIEE, ODI, and Databases. Refer <a href="http://www.oracle.com/technology/documentation/index.html">http://www.oracle.com/technology/documentation/index.html</a> for documentation related to OBIEE, ODI and Databases.
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# Product Overview

This chapter includes the following:

- Introduction ..... 3
- BI Architecture ..... 3

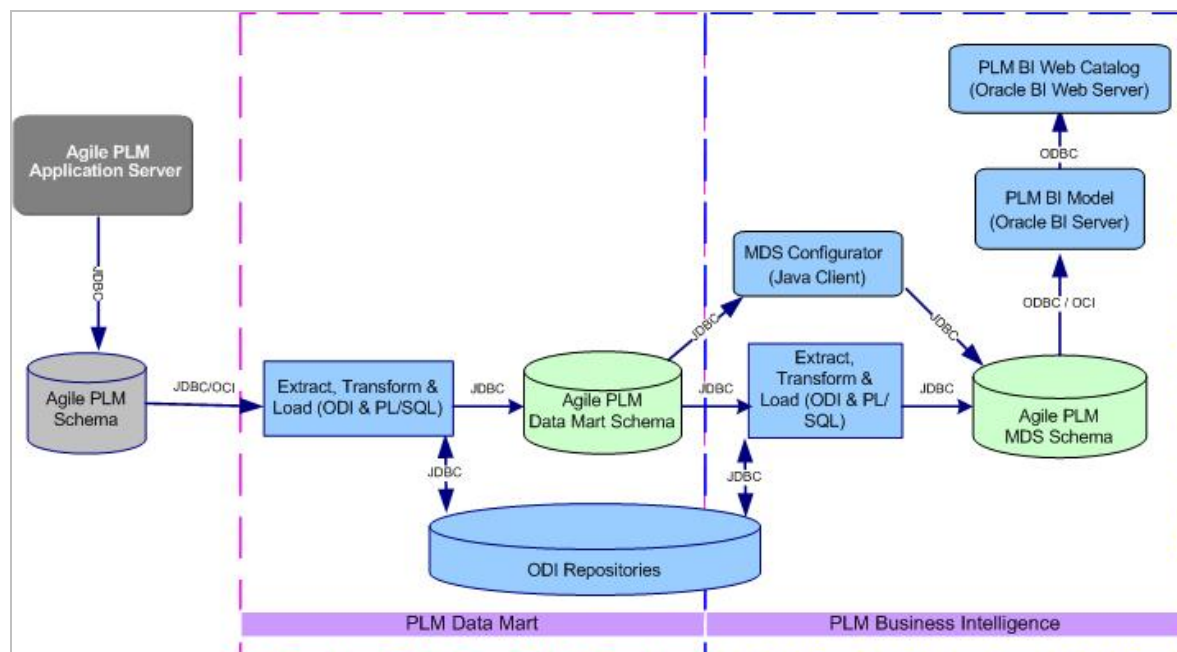
## Introduction

PLM BI Applications are comprehensive, pre-built BI solutions that deliver pervasive intelligence and provide key insights into your Product Lifecycle Management (PLM) data. The PLM BI Applications provide an integrated view of product which enable greater alignment across Product organizations. Agile PLM Business Intelligence application is built on Oracle Business Intelligence Enterprise Edition (OBIEE) analytics platform and Oracle Data Integrator (ODI) ELT platform.

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

## BI Architecture

The following illustration of PLM BI architecture depicts the positioning of various modules:



## Components

The various components in PLM BI Component 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
- PLM BI Web Catalog

## Oracle Data Integrator

Oracle Data Integrator is an application which uses Extract-Transform-Load process to transform data from one schema to another. ODI uses 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 Agile PLM OLTP (Online Transaction Processing) database.

## ODI Repositories

ODI Repositories maintain all information related to 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.

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## **PLM BI Web Catalog**

PLM BI Web Catalog component presents organized information in the form of Reports on PLM BI Interactive Dashboards.



# System Requirements

**This chapter includes the following:**

- Software Requirements ..... 7
- Hardware Requirements..... 7
- Supported Platforms ..... 8

## 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 for Windows Operating System
	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	10.1.3.4.0
Database server	Oracle Enterprise Edition	10g R2, 11g
Data Integration Component	Oracle Data Integrator	10.1.3.5
Software Development Package	Java Development Kit	1.5

**Note** Refer OBIEE Installation Guide for Install Options specific to different various Web servers.

Agile PLM Business Intelligence application is certified and supported on the following Operating System platforms:

- 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 )

## Hardware Requirements

When you choose 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 data base.

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

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

<b>Important</b>	Ensure at least 4GB of free disk space is available on the computer server before you begin the installation of Agile PLM BI 3.1
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Do not install any software which occupies a lot of disk space, on the systems that have Agile PLM BI.

Do not include any other data base schema on the computer systems that have Agile PLM BI database and schema.

Do not use Agile Host server as the Primary Domain Controller (PDC) or Dynamic Host Configuration Protocol (DHCP) server.

Do not enable Disk Compression on Agile computer systems.

<b>Note</b>	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.
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## Supported Platforms

The supported versions of the various software components are as follows:

Software Component	Version
Agile PLM Releases	9.2.2
	9.2.2.1
	9.2.2.2
	9.2.2.3
	9.2.2.4

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Software Component	Version
	9.2.2.5 9.2.2.6
Database and Operating System	Oracle 10g, Oracle 11g on Windows 2003 Solaris 10 Red Hat Linux 5
Oracle Data Integrator (ODI) 10.1.3.5	Windows 2003 (32 bit and 64 bit ) Solaris 10 (SPARC) Red Hat Linux 5 (32 bit and 64 bit ) Oracle Enterprise Linux 5
Oracle Business Intelligence Enterprise Edition (OBIEE) 10.1.3.4	Windows 2003 Red Hat Linux 5 Solaris 10  Refer OBIEE platform document for supported environments.





# Installation

The Agile PLM BI 3.1 Installer prompts for the following necessary installation details:

- OBIEE Configuration parameters
- PLM Data Mart DB Schema Information
- PLM Data Layer (MDS) Schema Information

## Pre-installation Checklist

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**Note** If you are an existing PLM BI 3.0 user, see [Upgrade considerations](#) on page 33 section for the pre-installation checklist that applies to you.

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If you are a new user, we recommend you to verify the prerequisites for the installation of PLM BI 3.1 application using the following pre-installation verification checklist:

#	Check point	Done
1	Ensure that the OC4J server is 'On'. For details refer <a href="#">Frequently Asked Questions</a> on page 42	
2	Ensure that the database listener is 'On'	
3	Install and Configure OBIEE	
4	Install and Configure PLM Data Mart 3.0.1 along with appropriate patches	
5	Ensure that the PLM BI 3.1 Database installation uses the existing Master and Work Repository schema	
6	Ensure that the PLM BI 3.1 Database installation has an existing or a new schema to publish data	

For more information on:

- Installation and configuration of OBIEE refer to *Oracle Business Intelligence Infrastructure Installation and Configuration Guide*
- Installation and configuration of PLM DataMart 3.0.1, refer *Agile PLM DataMart 3.0.1 Setup Guide*

It is useful to collate the following information before you begin the installation:

- Deployment Configuration specification
- 
- Note** For more information refer *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 Datamart Schema details
- Location of the RDBMS and database details
- Names of the table spaces to be used during the installation

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Note	For more information on table space configuration, refer <i>Capacity Planning guide</i>
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- Name and location of the OBIEE Repository Home
- Name and location of the OBIEE Web Catalog
- Location of the Datamart 3.0.1 ETL installation

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Note	Install the MDS ETL in the same machine as Datamart 3.0.1 ETL. Install the MDS Schema in the same instance where Datamart Schema is located. You can install the MDS and DM as single schema or separate schema.
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## Installation Process

This section describes the installation process for the following Operating systems:

- Microsoft Windows
- Red Hat and Oracle Enterprise Linux
- Sun Solaris

## Installation on Windows

The installation of Agile PLM BI 3.1 on Windows Operating System involves the following phases:

- Installation of MDS module including MDS DB Schema and ETL Components
- Installation of PLM BI Application module

You need to execute the Windows\BISetup.exe file twice to complete both the phases of the product installation. The BISetup.exe launches an Installation wizard powered by 'InstallAnywhere' to install Agile PLM BI 3.1. The Wizard has buttons such as Next, Previous, and Cancel for Navigation.

## Installer Usage Options

The installer usage options selected during the installation of MDS needs to be the same as those selected during the installation of PLM Data Mart.

### Example:

During the installation of PLM Data Mart, if you had created the DB first followed by the execution of ETL, then you need to choose the same sequence of options during the installation of MDS. You cannot select the option that installs the DB and executes ETL in a single step for the MDS installation.

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## Installation of MDS Module

### To install MDS module:

1. Double-click Windows\BISetup.exe in the list of files available as part of the Installer kit.
2. Click Next in the Welcome window of the Installation wizard.
3. Select the Business Intelligence MDS option to install ETL and MDS in PLM BI MDS module.
4. Follow instructions as in the figure, *Installation Process flow for MDS module*. See *Fields in MDS Installation* for description of every step in the figure.

The numbers 1, 2 and 3 in the figure, represent the path of the flow diagram. 1A represents Step A of Flow 1.

Path 1 installs PLM BI MDS Schema Components

Path 2 installs PLM BI MDS ETL Components

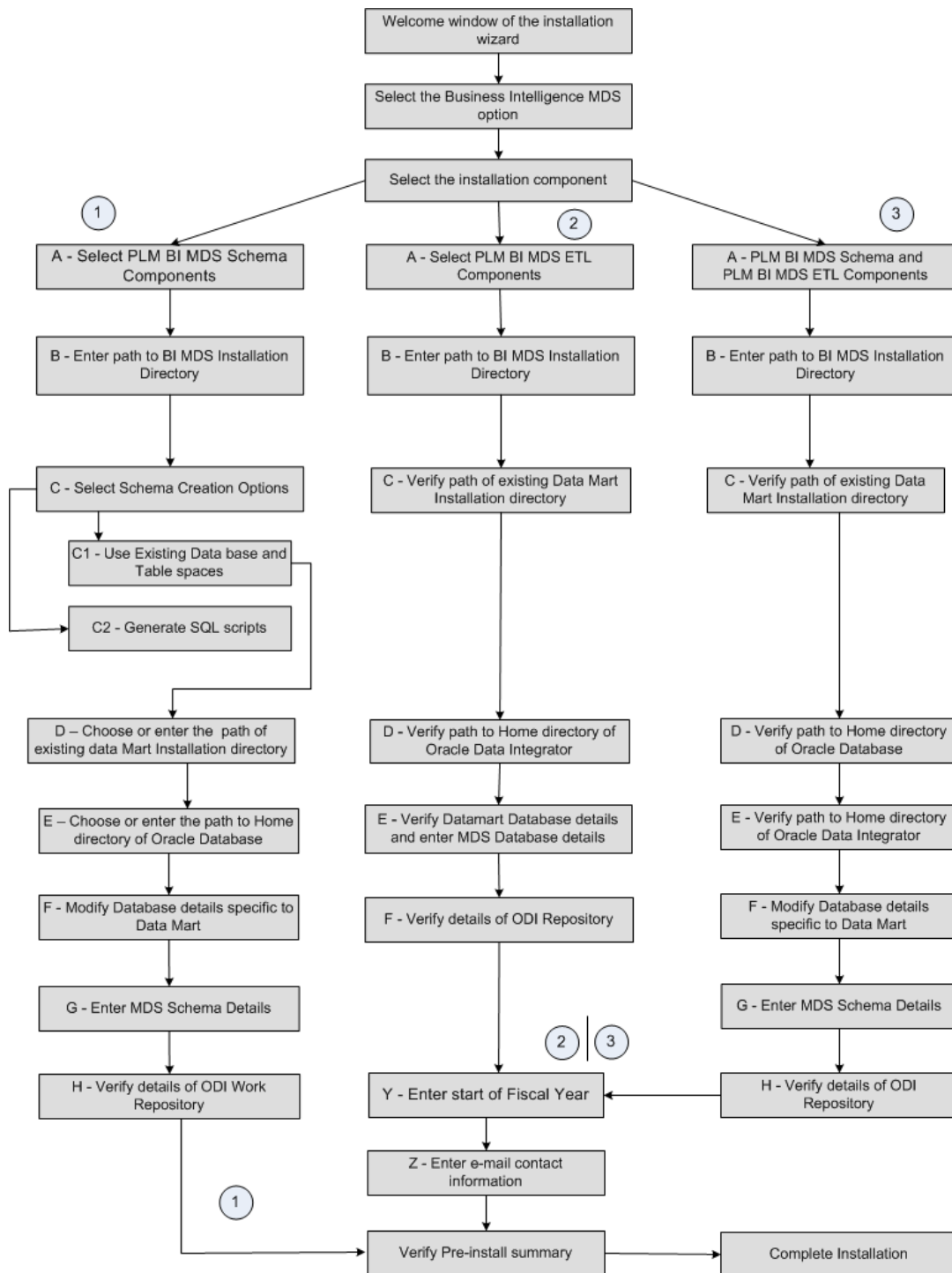
Path 3 installs PLM BI MDS Schema and PLM BI MDS ETL Components

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Note	You can choose one of the Installation paths, as appropriate, to complete the Installation of MDS module.
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## Installation Process Flow for MDS module



## Fields in MDS installation

This section describes the various fields in the wizard screens in the order of the installation steps for all the Installation paths.

Installation path 1:

Step	Field/Label	Type	Description
1A	Install Schema	Option Button	Select PLM BI MDS Installation
1B	Business Intelligence MDS Install Directory	Text	Enter the path to the BI MDS install directory. The default path is C:\PLMBI31  Alternately,  Click <b>Choose</b> to navigate to the folder in which you want to install the MDS.  Click <b>Restore Default</b> to reset the path.
1C1	Use existing Database and Table spaces	Option button	Select Use existing database and table spaces to create MDS schema using the existing database and table spaces.
1C2	Generate SQL Scripts	Option button	Select 'Generate SQL Scripts' to manually create BI schema, DDL, and procedures.  You need to execute the following scripts: <ul style="list-style-type: none"> <li>▫ UsersCreation.sql</li> <li>▫ mds.sql</li> </ul>
1D	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.
1E	Oracle Database Home Directory	Text	The path to the Home Directory of the Oracle Database appears as default value in this field.  <b>Note</b> You need not modify this path unless you want to use a different Oracle Database Installation.
1F	Datamart Database Details	Text Fields	All these auto-populated fields take their values from the Data Mart installation specifications. Modify these fields if you had made modifications to the settings in

			the database. Modify the password if you had changed the system password in the database
	Host Name		Name of the Database Host
	Database Port Number		Number which identifies the port used to connect to the database
	Database Name (SID)		String which identifies the database
	System User Password		This is the SYSTEM User Password for the SID. This login enables you to grant user permissions.
	Sys User Password		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		User Name of the Data Mart schema
	Data Mart Schema User Password		Password that corresponds to the Data Mart User Name.
1G	BI MDS Schema Details	Text fields	Authentication details specific to BI MDS schema. These are auto-populated fields.
	BI MDS Schema User Name		<p>User name which authenticates access to the BI MDS schema. You can enter the User Name of any existing or new schema.</p> <p><b>Note</b> If you had chosen 'Single Schema Installation' during the Datamart installation, you can use the same user name to complete the single schema installation for MDS.</p>
	BI MDS Schema User Password		Password which corresponds to the BI MDS Schema User Name. Default values are based on the Data Mart specifications.
	BI MDS Table Space Details		Table space details specific to BI MDS.
	BI MDS Data Table Space Name		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		Enter the name of the BI MDS Indexes Table Space. Default values are based on the Data Mart specifications.
1H	Oracle Data Integrator Schema Details	Text fields	<p>Verify the details specific to the Work Repository database for ODI schema.</p> <p><b>Note</b> All these fields are auto-populated from the Configuration file used in</p>

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			the Data mart installation.
	Work Repository Database User Name		Verify the User Name of the Work Repository Database. The default values are based on the Data Mart specifications.
	Work Repository Database Password		Verify the Password of the Work Repository Database. The default values are based on the Data Mart specifications.
Verify Pre-install Summary			
Complete Installation			

## Installation Path 2:

Step	Field/Label	Type	Description
2A	Install ETL Components	Option Button	Select this option to install the ETL components.
2B	Business Intelligence MDS Install Directory	Text	Enter the path to the BI MDS install directory. The default path is C:\PLMBI31 Alternately, Click <b>Choose</b> to navigate to the folder in which you want to install the MDS. Click <b>Restore Default</b> to reset the path.
2C	Existing Data Mart Home Directory	Text	The path to the existing Data Mart Install directory appears in this field. The default value is C:\PLMDataMart. Verify this path and modify it as required.
2D	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.
2E	Data Mart Database details		All these auto-populated fields take their values from the Data Mart installation specifications. Modify these fields if you had made modifications to the settings in the database. Modify the password if you had changed the system password in the database.
	Host Name	Text fields	Name of the Database Host.

	Database Port Number		Number which identifies the port used to connect to the database
	Database Name (SID)		String which identifies the database.
	Data Mart Schema User Name		User Name of the Data Mart schema.
	Data Mart Schema User Password		Password that corresponds to the Data Mart User Name.
	BI MDS Schema User Name		<p>User name which authenticates access to the BI MDS schema. You need to enter the name of an existing BI MDS 3.1 schema or user name.</p> <p><b>Note</b> This is applicable to installation of ETL components only.</p> <p>The maximum length of the Username is 10 characters. Username should start with a letter in English alphabet (a to z, or A to Z ). Other valid characters in Username are numbers between 0 and 9 and underscore ( _ ).</p>
	BI MDS Schema User Password		<p>Password which corresponds to the BI MDS Schema User Name.</p> <p>The maximum length of the Password is 10 characters. Password should start with a letter in English alphabet ( a to z, or A to Z ). Other valid characters in Passwords are numbers between 0 and 9, @, and underscore ( _ ).</p>
2F	Oracle Data Integrator Schema Details:		<p>Verify the details specific to the Work Repository database for ODI schema.</p> <p>All these fields are auto-populated from the Configuration file used in the Data mart installation.</p>
	Master Repository Database User Name	Text	Verify the User Name of the Master Repository Database. The default value is based on the Data Mart specification.
	Master Repository Database Password	Text	Verify the Password of the Master Repository Database. The default value is based on the Data Mart specification.
	Work Repository Database User Name	Text	Verify the User Name of the Work Repository Database. The default value is based on the Data Mart specification.
	Work Repository Database Password	Text	Verify the Password of the Work Repository Database. The default value is based on the Data Mart specification.

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	ODI Work Repository Name	Text	Verify the Name of the ODI Work Repository. The default value is based on the Data Mart specification.
Y	Start of the Fiscal Year	Date in the format MM-DD-YYYY	Enter the date on which the Fiscal year begins in your Organization.
Z	Email ID	Text	<p>Enter the Email ID in which you want to receive the ETL notifications after every ETL execution.</p> <p>Use comma (,) to delimit more than one Email address in this field.</p> <p>The default value is based on the Data Mart specification.</p>
	Mail Server Name	Text	<p>Enter the Email server which routes your emails to and from the given Email addresses.</p> <p>The default value is based on the Data Mart specification.</p>
Verify Pre-install summary			
Complete installation			

## Installation path 3:

Step	Field/Label	Type	Description
3A	Install schema and ETL components in the same environment.	Option button	Select this option to install both the MDS schema and ETL components.
3B	Business Intelligence MDS Install Directory	Text	<p>Enter the path to the BI MDS install directory. The default path is C:\PLMBI31</p> <p>Alternately,</p> <p>Click <b>Choose</b> to navigate to the folder in which you want to install the MDS.</p> <p>Click <b>Restore Default</b> to reset the path.</p>
3C	Existing Data Mart Home Directory	Text	<p>The path to the existing Data Mart Install directory appears as default value in this field. The default value is C:\PLMDataMart</p> <p>This field is modifiable.</p>
3D	Oracle Database Home Directory	Text	<p>The path to the Home Directory of the Oracle Database appears as default value in this field.</p> <p><b>Note</b> You need not modify this path</p>

			unless you want to use a different Oracle Database Installation.
3E Note	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.
3F	Database details	Text fields	All these auto-populated fields take their values from the Data Mart installation specifications. Modify these fields if you had made modifications to the settings in the database. Modify the password if you had changed the system password in the database.
	Host Name		Name of the Database Host.
	Database Port Number		Number which identifies the port used to connect to the database.
	Database name (SID)		String which identifies the database.
	System User Password		This is the SYSTEM User Password for the SID. This login enables you to grant user permissions.
	Sys User Password		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		User Name of the Data Mart schema.
	Data Mart Schema User Password		Password that corresponds to the Data Mart User Name.
3G	BI MDS Schema Details	Text fields	Authentication details specific to BI MDS schema. These are auto-populated fields.
	BI MDS Schema User Name		User name which authenticates access to the BI MDS schema. You can enter the User Name of any existing or new schema.  <b>Note</b> If you had chosen 'Single Schema Installation' during the Datamart installation, you can use the same user name to complete the single schema installation for MDS.
	BI MDS Schema User Password		Password which corresponds to the BI MDS Schema User Name.
	BI MDS Table Spaces Details		Table space details specific to BI MDS.

	BI MDS Data Table Space		Enter the name of the BI MDS Data Table Space. The default value is based on the Data Mart specifications. Verify the value and modify as required.
	BI MDS Indexes Table Space		Enter the name of the BI MDS Indexes Table Space. The default value is based on the Data Mart specifications. Verify the value and modify as required.
3H	Oracle Data Integrator Schema Details:	Text fields	Verify the details specific to the Work Repository database for ODI schema.  <b>Note</b> All these fields are auto-populated from the Configuration file used in the Data mart installation.
	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.
Enter Start of Fiscal Year. Refer Step Y			
Enter Email Contact Information. Refer Step Z.			
Verify Pre-install Summary.			
Complete Installation.			

## Installation of PLM BI Application Module

### To install PLM BI module:

1. Double-click Windows\BISetup.exe in the list of files available as part of the Installer kit.
2. Click Next in the Welcome window of the Installation wizard.
3. Select the Business Intelligence Application button to install model and web catalog in the PLM BI module of PLM BI 3.1

4. Follow instructions as in the figure, *Installation Process flow for PLM BI Application module*. See *Fields in PLM BI Application module Installation* for description of every step in the figure.

The indicators A, B and C represent the three branches from the Step 3 of the Installation process. Step 3Ai represents the step: Verify path to Home directory of OBI Repository.

Path 3A installs Repository and Web Catalog

Path 3B installs Repository

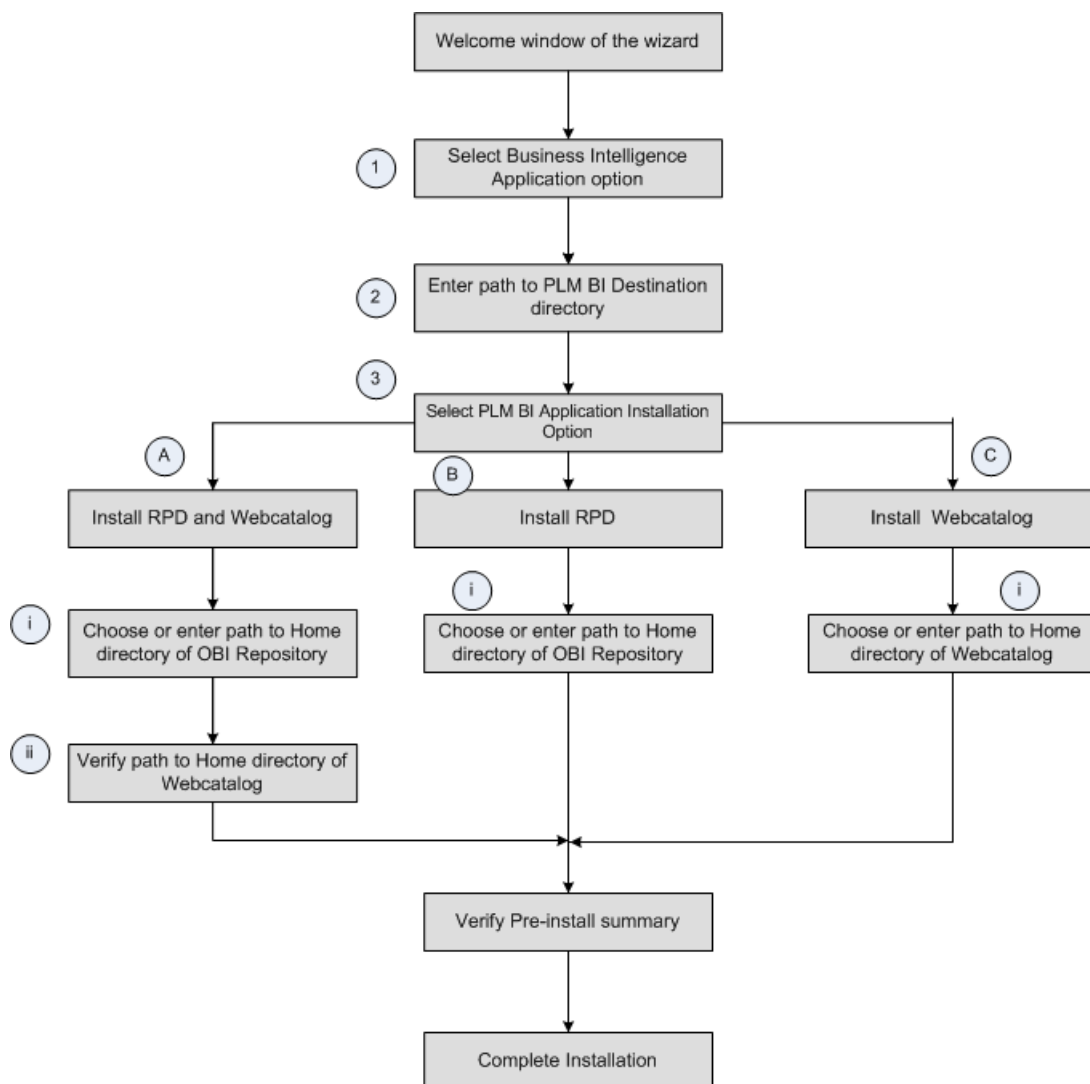
Path 3C installs Web Catalog

---

**Note** You can choose one of the Installation paths, as appropriate, to complete the Installation of PLM BI Application module.

---

## Installation Process flow for PLM BI Application Module



## Fields in PLM BI Application module installation

This section describes the various fields in the wizard screens in the order of the installation steps.

Step	Field Label	Type	Description
1	Business Intelligence Application	Button	Select this button to install model and web catalog in the BI module of PLM BI 3.1.
2	Business Intelligence Application Temp Directory	Text	<p>Enter or modify the path to the folder in which you want to install the Business Intelligence application. Default value is C:\PLMBI31.</p> <p>Click <b>Choose</b> button to select a different installation folder. Click <b>Restore Default</b> to revert to the default values.</p>
3A	Install Repository and WebCatalog	Option Button	Select this option to install Repository and WebCatalog components.
3Ai	OBI Repository Home Directory	Text	<p>Enter the path to the Home Directory of the OBI Repository.</p> <p>Alternately,</p> <p>Click <b>Choose</b> to navigate to the folder which is the Home Directory of the OBI Repository.</p> <p>C:\OBIEE\OracleBI</p> <p>Click <b>Restore Default</b> to reset the path.</p>
3Aii	OBI Web Catalog Home Directory	Text	<p>Enter the path to the Home Directory of the OBI Web Catalog.</p> <p>Alternately,</p> <p>Click <b>Choose</b> to navigate to the folder which is the Home Directory of the OBI Webcatalog.</p> <p>C:\OBIEE\OracleBIDataweb</p> <p>Click <b>Restore Default</b> to reset the path.</p>
3B	Install Repository	Option button	Select this option to install Repository component.
3Bi	OBI Repository Home Directory	Text	<p>Enter the path to the Home Directory of the OBI Repository.</p> <p>Alternately,</p> <p>Click <b>Choose</b> to navigate to the folder</p>

Step	Field Label	Type	Description
			which is the Home Directory of the OBI Repository. C:\OBIEE\OracleBI Click <b>Restore Default</b> to reset the path.
3C	Install Web Catalog	Option button	Select this option to install Web Catalog component.
3Ci	OBI Web Catalog Home Directory	Text	Enter the path to the Home Directory of the OBI Web Catalog. Alternately, Click <b>Choose</b> to navigate to the folder which is the Home Directory of the OBI Web Catalog. Example: C:\OBIEE\OracleBIData\web Click <b>Restore Default</b> to reset the path.
Verify Pre-install Summary.			
Complete Installation.			

## Installation on Red Hat Linux, Oracle Enterprise Linux and Sun Solaris

The Prerequisites to install Agile PLM BI on Linux and Solaris are same as those on Windows.

The Linux-specific installer is packaged as BISetup.bin file.

### To execute the installer:

1. Navigate to the path where the file exists, in your Linux terminal.
2. Provide full (Read, Write, Execute) permissions to the BISetup.bin file.
3. Enter ./BISetup.bin on your Linux prompt.

The installation wizard appears. The steps for the installation of Agile PLM BI 3.1 in Linux are same as those in Windows. Refer the section Installation on Windows for details.

---

---

**Note** We recommend that you install Agile PLM BI 3.1 in Linux as a non-root user.

---

The procedure on the installation of Agile PLM BI 3.1 on Red Hat Linux also applies to Sun Solaris.

---

**Note** Install American English Unicode (en\_US.UTF-8) Full Locale package in Solaris system to ensure successful installation and avail the complete functionality of PLM BI application.

---

## Manual MDS schema installation and DB Privileges

If you selected the option Generate SQL Scripts in S -1C: Select schema creation options, the Installer generates a set of SQL files and stores them in schema folder in Business intelligence MDS Install Directory. This option involves executing these scripts in sqlplus to manually create Business Intelligence MDS Schema Objects.

The following are the different possibilities of creating MDS schema using manually generated Install Scripts:

### Scenario 1

Generate the scripts using installer in system A where MDS Schema is created and execute the scripts manually.

---

**Note** The PLM Data Mart needs to be already installed before executing these steps.

---

### To manually install DB Schema:

Step 1: set oracle sid

In Windows:

```
set ORACLE_SID = <sid_name>
```

In Solaris/Linux :

```
export ORACLE_SID = <sid_name>
```

Step 2:

In sqlplus, connect to the target Database using the System User and Password.

Step 3:

Execute UsersCreation.sql

The UsersCreation.sql executes Create MDS User and Privileges script if you are creating new

database user. For existing users, only privileges script is executed.

**Step 4:**

Disconnect the system user.

**Step 5:**

Connect MDS schema using MDS user and password, which was created by Step 3

**Step 6:**

Execute MDS.sql. The mds.sql enables you to install MDS schema objects, and logger object.

---

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

---

**Scenario 2**

Generate the scripts using 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 2, then you need to replace the scripts in the same location in System B, because mds.sql invokes .sql files using absolute path. Alternatively, you can modify the directory path in mds.sql to any valid directory.

**Example :**

Generate the scripts in System A. For example, in directory F:\MDS31. Copy the scripts to System B. For example, 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 mds.sql file.

---

**Note** Follow the steps as described in Scenario 1 to manually install the MDS Schema.

---

## DB Privileges

The following are the DB privileges required for single schema installation:

Schema	Privilege	Purpose
MDS	CONNECT,RESOURCE	Connect, Create, Insert, Update, Delete, Drop or Alter table, Create or Drop or Alter Index in your schema
	CREATE VIEW	Create a view in your schema
	CREATE MATERIALIZED VIEW	Create a materialized view in your schema



	CREATE DATABASE LINK	Create a database link in your schema
	DROP PUBLIC DATABASE LINK	Drop a public database link in your schema
	ALL ON SYS.DBMS_PIPE	Privileges are used for PL/SQL Logger.
	CREATE PUBLIC SYNONYM	Privileges are used for PL/SQL Logger.
	DROP PUBLIC SYNONYM	Privileges are used for PL/SQL Logger.
	EXECUTE ON SYS.DBMS_SYSTEM	Privileges are used for PL/SQL Logger.

The following are the privileges required for Multiple schema installation:

Schema	Privilege	Purpose
MDS	CONNECT,RESOURCE	Connect, Create, Insert, Update, Delete, Drop or Alter table, Create or Drop or Alter Index in your schema.
	SELECT ANY TABLE	Select a table in another schema
	INSERT ANY TABLE	Insert a table in another schema
	DELETE ANY TABLE	Delete a table in another schema
	UPDATE ANY TABLE	Update a table in another schema
	CREATE ANY TABLE	Create a table in another schema
	DROP ANY TABLE	Drop a table in another schema
	CREATE VIEW	Create View in your schema
	DROP ANY VIEW	Drop View in another schema
	CREATE SYNONYM	Create synonym in your schema
	CREATE ANY SYNONYM	Create synonym in another schema
	DROP ANY SYNONYM	Drop synonym in another schema
	CREATE ANY INDEX	Create index in another schema
	DROP ANY INDEX	Drop index in another schema

	CREATE MATERIALIZED VIEW	Create materialized view in your schema
	CREATE ANY TRIGGER	Create trigger in another schema
	DROP ANY TRIGGER	Drop trigger in another schema
	CREATE DATABASE LINK	Create Database link in your schema
	DROP PUBLIC DATABASE LINK	Drop a public database link in your schema
	ALL ON SYS.DBMS_PIPE	Privileges are used for PL/SQL Logger.
	CREATE PUBLIC SYNONYM	Privileges are used for PL/SQL Logger.
	DROP PUBLIC SYNONYM	Privileges are used for PL/SQL Logger.
	EXECUTE ON SYS.DBMS_SYSTEM	Privileges are used for PL/SQL Logger.
ODM	DROP ANY TRIGGER	Drop trigger in another schema
	CREATE ANY TRIGGER	Create trigger in another schema
	CREATE ANY VIEW	Create view in another schema
ODIWORK	SELECT ANY TABLE	Select a table in another schema

---

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

---

## Post-Installation Guidelines

After you complete the installation of both the modules, verify whether the MDS installation base directory, for example, C:\PLMBI31 has the following sub-folders:

Name of the Folder	Description
\bin	Configuration tools and Miscellaneous entities
\common	Common Components such as PL/SQL logging libraries
\config	All PLM Business Intelligence configurations including ANT install configuration file
\install	Installation components such as SQL scripts, ETL objects, and Java classes
\lib	Dependent libraries that the PLM BI 3.1 installer and

---

Name of the Folder	Description
	Configurator uses
\logs	Centralized location for logs specific to BI
\Schema <b>Note</b> This folder is created only for Generate SQL option. See <a href="#">Installation of MDS Module</a> on page 13 for details.	SQL scripts to <ul style="list-style-type: none"> <li>▪ Create, update or delete schema</li> <li>▪ Create pre and post-populate scripts</li> </ul>
\uninstall	Executable files to install the software. This folder also includes executable file to remove any installed Hot Fix or Service Pack for Analytics.
\ant	Used to execute ANT scripts
\jdk	Contains JRE 1.5, used to install ETL components and to launch MDS Configurator.
\images	Contains images used in the Configurator tool.
\olap	Contains BI Repository and Web catalog

- Ensure that you receive the following message regarding the MDS-ETL execution in your Email account before you access the BI Interactive Dashboards:

```

From: PLM_BI_MDS@oracle.com [mailto:PLM_BI_MDS@oracle.com] Sent: Tuesday, March 03, 2009 11 :32 AM To:
plmbiadmin@oracle.com Subject: MDS ETL [FULL @ Host:AGILELAB8 | DB Name:PLMDM | DB User:PLMBIMDS ] - SUCCESS.

PLM MDS (FULL) Load Process Completed Successfully.

Please refer to Oracle Data Integrator's Operator for log details

This is auto-generated from
[ Host: AGILELAB8 ] | [ DB Name:PLMDM ] | [ DB User:PLMBIMDS ]

```

---

**Note** You mentioned this email address during the installation of PLM BI MDS module.

---

- Ensure that the TNS name is PLMA.

---

**Note** It is recommended that you modify the TNSNAMES.ORA file to reflect PLMA as the TNS name, so you can obtain a correct display of all the out of box reports.

---

- We recommend you to focus on performance tuning before you execute the ETL.

The following are the performance tuning measures:

- Check the DB for enough Data base sessions (>500) to enable a perfect execution of the ETL in ODI.

**To check 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 Oracle Database documentation.

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

**To increase the Heap size to enhance the ETL performance:**

1. Navigate to <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 ODI Documentation on Oracle Technology Network.
------	---

- Ensure that you start the following services in the same order:

- OC4J or IIS
- Oracle BI Java Host
- Oracle BI Server
- Oracle BI Presentation Server

- Ensure appropriate Connection Pool settings in OBIEE Administrator:

**The following are the steps to ensure that the connection pool settings are appropriate:**

1. Login to 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

- 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.
-

## Log Files

Log files are located in the Logs folder within PLMBI Install Home Folder. These log files are useful to troubleshoot 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 for 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 the details 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).

## Executing ETL

After the BI Installation is complete, you need to execute Data integration task using ODI Operator to load data into MDS from Agile PLM source database.

---

Note	If you want to see the status of all the tasks that are under execution, you need to increase the Operator Display Limit to 1000 (the default value is 100). To do so, in ODI Operator, go to File Menu > User parameter > Set operator Display limit and change the value.
------	---

---

### To execute ETL from ODI, follow these steps:

1. Launch 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 Scenarios tab. You will see all the components listed in the Left Frame.
4. Right-click on MDS\_ETL\_LOAD Version 001 component and select Execute. A Variables 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. A Sessions Started window appears.
7. Click OK. The ETL process begins.

---

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

---

## Execute 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 batchfile 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 will 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>

---

## Uninstall Product

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

**Example**

C:\PLMBI31\Uninstall

We recommend you to create a copy of the folder as a backup, before you begin the un-installation of the application.

Double-click on the file named Uninstall PLM Business Intelligence.exe to uninstall the PLM BI 3.1 application.

---

**Note** If the install folder does not get deleted automatically after you uninstall the application, you need to manually delete the folder.

---

## Upgrade Considerations

The upgrade from BI 3.0 to BI 3.1 involves upgrading the following components:

- MDS Configurator
- Web Catalog and Permissions in the Presentation Layer
- Repositories

## Before you upgrade

1. Create a copy of all your current configurations and customizations. The examples include, PLM BI RPD, Catalog, and MDS schema.
2. Ensure the installation of the following components:
  - MDS 3.0
  - MDS 3.1
  - JRE/JDK 1.5

## Upgrading MDS Configurator

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 BI 3.1 on an existing BI 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.

---

Note	Some attributes do not migrate during the upgrade. For more information, refer the section <i>Excluded Attributes</i> .
------	---

---

### To retain the attributes customized using MDS Configurator 3.1 in MDS 3.1:

1. Extract the .zip file
1. Set variables in config.properties file
2. Execute the scripts

Step 1: Extract the zip file.

Extract the Upgrade.zip file into a new folder.

Step 2 : Set variables in config.properties file.

Open the config.properties file in <Upgrade Extracted Folder>\config directory.

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 database details
# Please specify existing MDS 3.1 installed host name
BI_HOST_NAME= AGILELAB2

# Existing MDS 3.1 schema /user name
BI_USER_NAME=PLMBIMDS

# Existing MDS 3.1 schema /user password
BI_PASSWORD=PLMBIMDS

# Please specify existing MDS 3.1 SID name
BI_DB_SID=PLMA

# Please specify existing MDS 3.1 database port no
BI_DB_PORT=1521
```

**Step 3 : Execute the scripts**

**For Windows**

1. From the command prompt, navigate to the folder which has the extracted files.

3. Change directory to bin folder.
4. Set JAVA\_HOME variable.
5. Execute 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 folder which has the extracted files.
6. Change directory to bin folder.
7. Set JAVA\_HOME variable.
8. 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. 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:

<b>Attribute Groups that require mapping</b>	<b>New Fact Table</b>
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

---

Attribute Groups that require mapping	New Fact Table
Parts.Flex Attributes	ITEM_F

## Upgrading Customization

The PLM BI 3.1 upgrade scripts do not upgrade the customization. Examples of such customization are:

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

---

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

---

## Upgrading Repositories

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

## Upgrading Web Catalog and Permissions in the Presentation Layer

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



# Troubleshooting

### **Issue 1**

I use Windows XP operating system. I get a warning that states Unsupported Operating System when I run the BISetup.exe. 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 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. You can also choose to continue with the installation.

### **Issue 2**

When I run ETL, 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 TNSNAME entry in the target DB which points to the source DB, before you run the ETL.

If the DB SID name of the source and target DB 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 DB SID name of the source and target DB are the same (Example: Source SID = AGILE9 and Target SID = AGILE9)

Step 1:

Modify the TNS entry as follows:

AGILE9\_LAB1 =

(DESCRIPTION =

(ADDRESS\_LIST =

(ADDRESS = (PROTOCOL = TCP)(HOST = LAB1)(PORT = 1521))

)

```
(CONNECT_DATA =  
(SERVICE_NAME = AGILE9)  
)  
)
```

Step 2:

Start > Oracle > Oracle Data Integrator > Topology Manager

In the Topology Manager select Physical Architectures  
>Technologies>Oracle>SRC\_CONN\_PHYSICAL.

Step 3:

Replace the added TNSNAME (AGILE9\_LAB1) in the DB link column.

---

**Note**      This step enables you to eliminate DBLINK errors.

---

### ***Issue 3***

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. Why?

Cause:

The source DB and target DB are in different domains.

Action:

Step 1:

Navigate to %oracle\_home%\network\admin directory.

Step 2:

Modify the SID and HOSTNAME in the TNSNAME entry to reflect the domain name.

Step 3:

Start > Oracle > Oracle Data Integrator > Topology Manager.

Step 4:

In the Topology Manager select

Physical Architectures >Technologies>Oracle>SRC\_CONN\_PHYSICAL.

Step 5:

Replace the added TNSNAME (AGILE9.ALAB01) in the DB link column.

---

---

**Note** This step enables you to eliminate DBLINK errors.

---

**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 %oracle\_home%\network\admin directory
9. 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)
10. Restart the database instance.
11. Re-execute the scenario ODI\_INT\_CREATE\_DBLINK from ODI operator in ODI.

**Issue 4**

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

Action:

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

**Issue 5**

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

Action:

Ensure that you have started the following Services and re-launch the PLM BI application again:

- BI Presentation Server
- BI Server
- BI Java Host

In addition, ensure that the OC4J/IIS is 'On'.

**Issue 6**

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, re-configure the TNSNAMES.ORA file, CONNECTION POOL details and MDS Schema Name in OBIEE Administrator, as appropriate.

### ***Issue 7***

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

### ***Issue 8***

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

*Action:*

If you're installing both the DB and ETL in 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 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 DataMart and MDS ETL execute the ANALYTICS\_ETL scenario
- To run Datamart 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 DB administrator for this activity.

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Note	If you make any modification to the PLM Configuration (for example, adding an attribute), we recommend Datamart and MDS ETL run in 'Full' mode.
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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
12. Enter BIEncoder <new password to encrypt>
13. Copy the encrypted password that appears.
14. Navigate to <biinstall\_home>/config/BIDataLayerconfig.properties file.  
Example : D:/PLMBI/config/BIDataLayerconfig.properties
15. Paste the encrypted password in the ODM\_PASSWORD field. This field is in the #ODM Schema Details section of the BIDataLayerconfig.properties file.
16. Save and close the BIDataLayerconfig.properties file.
17. 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
18. Modify the name of the mail server in the MAILSERVER property as MAILSERVER = <New Mail Server Name>
19. Navigate to <biinstall\_home>/bin directory in the Windows command prompt or UNIX prompt.
20. 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 DataMart only

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

In <OBIEE\_Home>\oc4j\_bij2ee\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 Datamart, 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 Datamart, 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 *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 queries on the same.

#### 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 DB Connections
- Out-of-space errors in DB Table spaces
- Unsupported DB, 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 always.

#### **To set the OC4J to run as a Windows service:**

1. Download JavaService -2.0.1.0
  21. Extract the file to a directory.  
Example  
C:\JavaService
  22. Note the directory path of your jvm.dll file in the Java Installation folder.  
Example  
C:\Program Files\Java\jdk1.5\jre\bin\client\jvm.dll
  23. Note the directory path of your oc4j.jar file in the OBIEE installation folder.  
Example  
C:\OracxleBI\oc4j\_bi\j2ee\home\oc4j.jar
  24. In the command prompt, navigate to the folder which has the extracted JavaService files.  
Example
-

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

25. 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"
```

26. 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 DataMart 3.0.1 is installed ?

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

Can I install DataMart (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 DataMart.

For example, if you installed DataMart 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 to do 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 DB 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>;
```

**Example:**

```
PURGE TABLESPACE agileodm;
```

```
PURGE TABLESPACE agileodm_indx;
```

