

# **Oracle Utilities Meter Data Management**

Installation Guide

Release 2.0.1.5

**E18180-04**

October 2011

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# Preface

This guide describes how to install Oracle Utilities Meter Data Management.

This preface contains these topics:

- **Audience**
- **Related Documents**
- **Conventions**

## Audience

Oracle Utilities Meter Data Management Installation Guide is intended for system administrators installing Oracle Utilities Meter Data Management.

To use this document you should have:

- Experience installing and configuring application servers and other software
- Administrative privileges on the host where you are installing the software

## Related Documents

For more information, see these Oracle documents:

- *Oracle Utilities Meter Data Management Quick Install Guide*
- *Oracle Utilities Meter Data Management Database Administrator's Guide*

## Conventions

The following text conventions are used in this document:

Convention	Meaning
<b>boldface</b>	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.

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Convention	Meaning
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

# Chapter 1

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## Overview

This chapter provides an overview of the installation of Oracle Utilities Meter Data Management.

# Installation Overview

Installing Oracle Utilities Meter Data Management involves the following steps:

1. Review the different tiers of the application architecture as described in **Chapter 2: Application Architecture Overview**.
2. Understand the hardware requirements for installing the application and the supported platforms for the application and database servers as described in **Chapter 3: Supported Platforms and Hardware Requirements**.

Note: The installation and administration of the database server tier is described in detail in the document *Oracle Utilities Meter Data Management Database Administrator's Guide*.

3. Plan your installation as described in **Chapter 5: Planning the Installation**.
4. Install the database as described in the document *Oracle Utilities Meter Data Management Database Administrator's Guide*.
5. Install all required third-party software as described in **Chapter 7: Installing Application Server Prerequisite Software**. The required software is listed for each supported combination of operating system and application server.
6. Install the framework for the application as described in **Chapter 9: Installing the Application Server Component of Oracle Utilities Application Framework**.
7. Install the meter data framework for the application as described in **Chapter 10: Installing the Application Server Component of Oracle Utilities Meter Data Framework**.
8. Install Oracle Utilities Meter Data Management as described in **Chapter 11: Installing the Application Server Component of Oracle Utilities Meter Data Management**.
9. Follow the installation guidelines described in **Chapter 12: Additional Tasks**.

# Chapter 2

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## Application Architecture Overview

This section provides an overview of the Oracle Utilities Meter Data Management application architecture.

# Application Architecture

The Oracle Utilities Meter Data Management application is deployed on multiple tiers.

Please see the *Oracle Utilities Meter Data Management Server Administration Guide* for a more detailed description of the application architecture and individual tiers.

## Tier 1: Desktop/Client, or Presentation Tier

This tier is implemented in a browser-based client. Users use a desktop client Web browser to log in to and use the Oracle Utilities Meter Data Management application. Note also that a desktop machine running Microsoft Windows and the Oracle client is required to perform some of the Oracle Utilities Meter Data Management product installation steps.

## Tier 2: Web Application Server, Business Application Server, Batch Server Tier

This tier is implemented in a Web application server, business application server, or the batch server. The business application component can be installed as part of the Web application server, or as a separate component. Except where explicitly noted, most of the Oracle Utilities Meter Data Management installation documentation assumes that the Web application and business application servers reside together. The batch infrastructure will also run within this tier. You can have multiple batch server instances that serve the application.

## Tier 3: Database, or Persistence Tier

This tier is implemented in a database server. The database server stores data maintained by the Oracle Utilities Meter Data Management application. More specifically, the database tier contains the data server files and database executables that physically store the tables, indexes, and other database objects for your system.

# Chapter 3

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## Supported Platforms and Hardware Requirements

This section gives an overview of the tiers on which the product is implemented, and shows each of the operating system/server combinations that the product is certified for. It includes:

- **Software and Hardware Considerations**
- **Minimum Requirements by Tier**
- **Supported Platforms**
- **Support for Software Patches and Upgrades**

## Software and Hardware Considerations

There are many factors that can influence software and hardware decisions. For example, your system may have to satisfy specific performance, availability, or scalability requirements, or to support running in a language other than English. These business requirements, together with the chosen system architecture, should be used in initial software and hardware planning.

Some of the questions that you should answer before beginning the installation include:

- On which hardware platform and operating system will Oracle Utilities Meter Data Management be deployed?
- On which Web server product will Oracle Utilities Meter Data Management deploy?
- On which database product will Oracle Utilities Meter Data Management deploy?
- Do you plan to deploy multiple Oracle Utilities Meter Data Management instances on the same physical server?
- How do you plan to deploy Oracle Utilities Meter Data Management?
  - Web/application/database on the same physical server
  - Web/application on one server and database on separate server
  - Each component on its own server

For detailed descriptions of various deployment architecture choices that may aid in planning, please see the document *Oracle Utilities Application Framework Architecture Guidelines*, available on My Oracle Support (Article ID 807068.1).

The final hardware and software decisions must comply with the specific requirements of Oracle Utilities Meter Data Management, as described in the rest of this chapter.

## Minimum Requirements by Tier

- Tier 1, Desktop
- Tier 2, Web/Business Application Server/ Batch Server
- Tier 3, Database Server

### Tier 1, Desktop: Software and Hardware Requirements

Configuration	Processor	Memory (RAM)	Monitor Display
Minimum	Pentium IV - 2.0 GHz	1024 MB	1024X768** 16-bit Color
Recommended*	Pentium IV - 3.0+ GHz, Or any Core 2 Duo Or any Athlon X2	2048 MB	1280X1024* 32-bit Color

\* The Recommended configuration improves client performance.

\*\* To reduce the amount of scrolling required for pages that are longer than 768 or 1024 pixels, consider placing a monitor into vertical position (with narrow side on the bottom).

### Web Browser Requirements

The following Operating System / Web Browser software is supported:

- Windows XP SP3 or higher with Internet Explorer 7.x or 8.x
- Windows 7 (32-bit or 64-bit) with Internet Explorer 8.x

### Tier 2, Web/Business Application Server, Batch Server: Software and Hardware Requirements

Please consult the **Supported Platforms** on page 3-5 to determine which Web application servers can be used with the operating system that will be hosting this tier.

The recommendations that follow are based on a standard installation with both the Web application and business application servers on the same machine and the system running with the default values. The default values may not support a production environment. You should adjust these values according to your production needs. Refer to the Oracle Utilities Meter Data Management *Server Administration Guide* on how to change the default values. The minimum resource requirements exclude third-party software installation requirements. Refer to the third-party vendors for specific requirements. The following sizing excludes the Oracle database server installation.

### Memory Requirements

For each application server environment a minimum of 4 GB of real memory is required, plus 6 GB of swap space.

## Disk Space Requirements

The approximate disk space requirements in a standard installation are as follows:

Location	Size	Usage
\$SPLEBASE	5 GB minimum	This location is where the application and Framework get installed. Startup, shutdown and other online log files are stored here. The size and space that is used should be monitored because various debugging options can significantly affect the size of log files.
\$SPLAPP	2 GB minimum	This location is used for storing batch log files and output from batch jobs. The size of this space should be influenced by which batches are run and how often, and the amount of debugging information that is collected.
Location of the application Web work files on the Web servers	1.5 GB minimum	This location is used by the various Web server vendors to expand the application. It should be considered when installing these products. Refer to the individual Web server documentation to determine the location of the temporary files.
Installation temporary area	4 GB	The application gets installed from this location. You need enough space to uncompress the files and install the application.
Oracle data area	4 GB minimum	This location is where the Oracle database data files are stored. The size of this space should be based on the requirements of the production environment. For an initial or demo database install 4 GB should be sufficient.

## Tier 3, Database Server: Software and Hardware Requirements

See the section **Supported Platforms** on page 3-5 for supported database servers.

## Supported Platforms

The installation has been tested and certified to operate on many operating system, application server, and database server combinations. For the software requirements for each of these combinations, see **Chapter 7: Installing Application Server Prerequisite Software** for more information.

## Operating Systems and Application Servers

The following table details the operating system and application server combinations on which Oracle Utilities Meter Data Management version 2.0.1 has been tested and certified.

Operating System and Web Browser (Client)	Operating System (Server)	Chipset	Application Server	Database
Windows XP SP3 (IE 7.x, 8.x)	AIX 6.1 TL4 (64-bit)	POWER 64-bit	WebLogic 10.3.3 WebLogic 10.3.4  WebSphere 7.0.0.11	Oracle 11.2.0.1
	HP-UX 11.31 Base Quality Pack September 2009 (64-bit)	Itanium	WebLogic 10.3.3 WebLogic 10.3.4	Oracle 11.2.0.1
	Oracle Linux 5.5 (64-bit)	x86_64	WebLogic 10.3.3 WebLogic 10.3.4	Oracle 11.2.0.1
Windows 7 (IE 8.x)	Red Hat Enterprise Linux 5.5 (64-bit)			
	Sun Solaris 10 Update 8 (64-bit)	SPARC	WebLogic 10.3.3 WebLogic 10.3.4	Oracle 11.2.0.1
	Windows Server 2008 R2 (64-bit)	x86_64	WebLogic 10.3.3 WebLogic 10.3.4	Oracle 11.2.0.1

## Oracle Database Servers

Oracle Utilities Meter Data Management version 2.0.1 is supported with Oracle Database Server 11.2.0.1 on all of the operating systems listed above.

The following Oracle Database Server Editions are supported:

- Oracle Database Enterprise Edition
- Oracle Database Standard Edition

**Note:** Oracle Database Enterprise Edition and the Partitioning and Advanced Compression options are not mandatory but recommended. Standard Edition should only be considered suitable for very small, pilot projects or development environments where scalability, performance, and database size-on-disk are not important considerations. Oracle Database Enterprise Edition, including the Advanced Compression and Partitioning options, is strongly recommended in all other situations.

The Oracle 11.2.0.1 client is required for these versions of the database server.

## Oracle WebLogic Server Information

The following Oracle WebLogic Server Editions are supported:

- Oracle WebLogic Server Standard Edition
- Oracle WebLogic Server Enterprise Edition

## Support for Software Patches and Upgrades

Due to the ongoing nature of software improvement, vendors will issue patches and service packs for the operating systems, application servers and database servers on top of specific versions that Oracle Utilities Meter Data Management has been tested with.

If it is necessary to apply an upgrade, please do so in a test environment that is running on the same platform as your production environment prior to updating the Oracle Utilities Meter Data Management production environment.

The exceptions from this rule are Hibernate software version 3.3.2 ga and the Oracle Client version 11.2.0.1. These versions should not be upgraded.

Always contact Oracle Utilities Meter Data Management support prior to applying vendor updates that do not guarantee backward compatibility.

# Chapter 4

## Installation Types

This section provides an overview of the two types of application installation. It includes the following section:

- **Initial Installation Compared with Upgrade Installation**
- **Database Installation: Initial Installation Compared with Demo Installation**

## Initial Installation Compared with Upgrade Installation

Customers installing this version of Oracle Utilities Meter Data Management application may or may not have used previous versions of the application.

- If you have not installed and used previous versions of Oracle Utilities Meter Data Management, the installation process will create files as well as a database on your system. Depending on what data you choose to install in the database, the database install process is referred to as either initial install or demo install.
- If you have installed and used a previous version of Oracle Utilities Meter Data Management, the installation process will still create and / or overwrite files on your system. For the database however, the process will upgrade the existing database to the current version of Oracle Utilities Meter Data Management. This process is referred to as an upgrade install. Note that there are restrictions on which previous Oracle Utilities Meter Data Management versions can be upgraded to the current version.

## Database Installation: Initial Installation Compared with Demo Installation

Initial install and demo install both start with an empty database.

In the case of initial install, demo data is not populated into the database by the installation process. This installation type is typically used for production environments.

In contrast, the demo install process populates the database with demo data. This installation type is typically used for demo and testing environments.

# Chapter 5

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## Planning the Installation

This chapter provides information for planning an Oracle Utilities Meter Data Management installation, including:

- **Installation and Configuration Overview**
- **Before You Install**
- **Installation Checklist**
- **Prerequisite Third-Party Software Overview**
- **Application Framework Installation and Configuration Worksheets**
- **Meter Data Framework Installation and Configuration Worksheets**

	Application Administration	UNIX/Windows Administration	DBA
Download Software	Download Oracle Utilities Application Framework and Meter Data Framework		
	Download Oracle Utilities Meter Data Management		
	Download Third Party products		
	Download Prerequisites		
Install Prerequisites	Install Non-Web based Prerequisites	Install Operating System	Install Database Software
	Install Web Application Server Software	Create Database and Product Users/Groups	
		Configure Operating System	
	Create Web Container		Run Database Installer for product
	Configure User Profile		Configure Networking (e.g. TNSNames)
	Install Oracle Utilities Application Framework		Generate Database Security Setup
	Install Oracle Utilities Meter Data Framework		Update Database Statistics
	Install Oracle Utilities Meter Data Management		
	Deploy Application in Web Application Server		
	Post Deployment Tasks	Set Autostart (optional)	
Install Product			

## Before You Install

Refer to My Oracle Support for up-to-date additional information on Oracle Utilities Meter Data Management installation.

## Installation Checklist

The following checklist will help guide you through the installation process of the application tier. The details for each step are presented in subsequent chapters.

1. Create Group/User ID.
2. Install prerequisite software (see **Prerequisite Third-Party Software Overview** on page 5-3 for more information).
  - Oracle client 11.2.0.1 (for connecting to Oracle database)
  - Java 6
  - Hibernate 3.3.2
3. Install one of the following Web servers.
  - Oracle WebLogic 10.3.3
  - Oracle WebLogic 10.3.4
  - IBM WebSphere 7.0.0.11
4. Install optional software.
  - Oracle BI Publisher 10g (10.1.3.4.0)
5. Verify that all software installed.
6. Set up environment variables.
7. Install Oracle Utilities Application Framework.
8. Install Oracle Utilities Application Framework prerequisite single fixes.
9. Install Oracle Utilities Meter Data Framework.
10. Install Oracle Utilities Meter Data Management.
11. Deploy Oracle Utilities Meter Data Management application.
12. Post installation tasks.

## Prerequisite Third-Party Software Overview

For complete details about installing and configuring the prerequisite third-party software for your specific platform, see **Chapter 7: Installing Application Server Prerequisite Software**.

# Application Framework Installation and Configuration Worksheets

During the installation and configuration of the application you will need to provide a variety of system values. These worksheets will assist you in providing that information. They should be completed before installing the application framework, as described in the **Chapter 9: Installing the Application Server Component of Oracle Utilities Application Framework**. No Customer Install Value fields should be left blank.

Note: Some web application server information will not be available until the software installation steps have been completed as described in the **Chapter 7: Installing Application Server Prerequisite Software**.

## Installation Menu Functionality Overview

The main configuration menu is structured so that related variables and/or options are grouped together and are associated by a menu item number. To access a particular group of variables and options, enter the menu item number associated with that group. Each option within that group is displayed in turn on the screen, along with a prompt so that you can type the desired value for the option, if it is not the same as the default or current value.

When performing the initial installation you need to go through all menu options. The menu options may have a default value, a list of valid values and a validation check.

On each option prompt you can keep the current value by simply leaving the input line empty. In order to erase a variable value you need to enter one dot (“.”). The leading spaces will be trimmed out on each values entered.

**Note:** When working with the menu you will see the following:

- **Valid Values: [ALFANUM].** This indicates you will need to enter an alphanumeric value in the prompt.
- **Valid Values: [NUM].** This indicates you will need to enter a numeric value in the prompt.

When all options are set, type <P> at the main menu prompt option. This will save the option values selected throughout the configuration.

During this processing the global variables are validated and the configuration file <SPLEBASE>/etc/ENVIRON.INI is created or updated. This file contains all the variables inputted and calculated. These are needed by the next part of the installation process.

To exit the configuration utility without saving any of the values entered, type <X> and 'Enter'

## Installation Menu Functionality Details

The Environment Installation Utility requires that Oracle Client Home is set in the path for the user performing the installation.

Prior to running the installation utility you will need to review the supported platforms document to ensure you have all of the Third Party software installed.

In this menu if the variables are set prior to execution, that value will be defaulted by the installation utility when performing the installation.

When the installation has been completed successfully, the values will be written to an ENVIRON.INI file. When splenviron.sh / cmd is executed, it will read from the ENVIRON.INI file to set the environment variables.

In the worksheets there are three different types of values given:

- Default Values are the values that will be defaulted when running the installation utility.

- Security Values denote values that should be changed when in production.
- Example Values are values that can be used for a default installation.

**Note:** The production environment should not be run with default values. See the Oracle Utilities Meter Data Management *Server Administration Guide* for additional information about configuring these values.

When you enter passwords you will not see the password characters on the screen because they are entered in silent mode. Passwords are encrypted when the values are entered.

Install the Oracle Client software specified in the section **Supported Platforms** prior to running any of the installation utilities.

The following prompt will appear when executing the installation utility:

```
Enter Oracle Client Home Directory (<ENTER> quit):
```

**Note:** If the environmental variable ORACLE\_CLIENT\_HOME is set, the install script will validate the variable. If it passes the validation you will not be prompted for it. This is needed in order to run Perl installation utilities.

## Encryption Methods

When the application server choice is WebLogic, the Oracle Utilities Application Framework installation uses the Oracle WebLogic API to encrypt the User ID and password that perform admin functions for the WebLogic application servers. Please refer to the Oracle WebLogic documentation for further information about the encryption.

The Oracle Utilities Application Framework installation also uses industry standard cryptography to encrypt passwords that are prompted within the installation.

When the application server choice is WebSphere Basic or WebSphere Network Deployment, the Oracle Utilities Application Framework installation will use industry standard cryptography to encrypt passwords that are prompted within the installation.

In each case these password are entered in the command line but the inputted values are not reflected on the screen when performing the installation.

## Third Party Software Configuration

```
*****
* Environment Installation Options *
*****
1. Third Party Software Configuration
   Oracle Client Home Directory:
   Web Java Home Directory:
   Child JVM Home Directory:
   COBOL Home Directory:
   Hibernate JAR Directory:
   ONS JAR Directory:
   Database Home Directory:
   Web Application Server Home Directory:
   ADF Home Directory:
   OIM OAM Enabled Environment:
```

Menu Option	Name Used In Documentation	Usage	Customer Install Value
Oracle Client Home Directory	ORACLE_CLIENT_HOME	The home directory of the Oracle Client. The application will use the Perl included under this Oracle Client.  Example Location: /oracle/client/product/11.2.0.1	
Web Java Home Directory	JAVA_HOME	Java home that will be used by the Web application server.  Example Location: /ouaf/java/jdk1.6.0_20	
* Child JVM Home Directory	CHILD_JVM_JAVA_HOME	Java home that will be used by the child java process that handles COBOL related requests.  Example Location: /ouaf/java/jdk1.6.0_20	
* COBOL Home Directory	COBDIR	COBOL installation location directory.  Example Location: /opt/SPLcobAS51WP4	
Hibernate JAR Directory	HIBERNATE_JAR_DIR	Location on the disk where the hibernate3.jar is installed.	
*ONS JAR Directory	ONS_JAR_DIR	Location on the disk where the ons-11.2.0.2.jar file is installed.  **Required for Oracle RAC installation. See the Server Administration Guide for more information.	
Database Home Directory	DATABASE_HOME	Location on the disk where database client is installed for your particular installation.  Example Location for Oracle Database: /oracle/client/product/11.2.0.1  Note: This value will be the same as the previously entered for Oracle.	

Menu Option	Name Used In Documentation	Usage	Customer Install Value
Web Application Server Home Directory	WEB_SERVER_HOME	<p>Location on the disk where the application server is installed.</p> <p>Example Location: WebLogic: /ouaf/middleware/wlserver_10.3</p> <p>In order to validate the home directory, check if the following jar files exist in the appropriate path: \$WEB_SERVER_HOME/server/lib/weblogic.jar %WEB_SERVER_HOME%\server\lib\weblogic.jar</p> <p>WebSphere: /ouaf/IBM/WebSphere7/AppServer</p> <p>WebSphere ND: /ouaf/IBM/WebSphere70ND/</p>	
* ADF Home Directory	ADF_HOME	<p>Location on the disk where ADF is installed.</p> <p>Example Location: /ouaf/jdev11_1_1_2</p>	Press <b>Enter</b> to skip this value.
OIM OAM Enabled Environment	OPEN_SPML_ENABLED_ENV	<p>Denotes if an environment will be integrating with Oracle Identity Manager for user propagation.</p> <p>Valid values: true false</p> <p>Defaulted value: false</p>	

\* Denotes optional Menu Options that may be required for the product installation and variables.

\*\* In order to activate the RAC FCF, the application needs the external ons.jar file, version 11.2.0.2. This ons.jar is located under the Oracle Database Software 11.2.0.2, at the following path:

\$ORACLE\_HOME/opmn/lib/ons.jar

The ons.jar should be copied to the Application Server. During the OUAF installation the relevant option should be populated with the folder location of the ons.jar.

## Environment Installation Options

### 50. Environment Installation Options

Environment Mount Point:

Log Files Mount Point:

Environment Name:

Database Type:

Web Application Server Type:

Install Application Viewer Module:

Menu Option	Name Used In Documentation	Usage	Customer Install Value
Environment Mount Point	<SPLDIR>	<p>The mount point into which the application is installed. For example: /ouaf for UNIX and C:\ouaf for Windows.</p> <p>This mount point MUST exist and the MDM administrator user ID MUST be able to write to this directory. (This is the user ID that is created specifically to administer the (MDM) environments; the default is cissys). The installation sets permissions on all subdirectories installed under this directory.</p> <p>See &lt;SPLENVIRON&gt; below for more information on how this mount point is used.</p>	
Log File Mount Point	<SPLDIROUT>	<p>A mount point that will contain any application output or application logs. Example value is /ouaf/sploutput for UNIX installation or C:\ouaf\sploutput for Windows.</p> <p>This mount point MUST exist and the MDM administrator user ID MUST be able to write to this directory. (This is the user ID that is created specifically to administer the (MDM) environments; the default is cissys).</p> <p>For each environment initialized, the application logs will be written to the directory &lt;SPLDIROUT&gt;/&lt;SPLENVIRON&gt;</p> <p>Note: Later in the installation the splenvron.sh ( splenvron.cmd ) script will set the \$SPLOUTPUT (%SPLOUTPUT%) environment variable to point to:&lt;SPLDIROUT&gt;/&lt;SPLENVIRON&gt;</p>	

Menu Option	Name Used In Documentation	Usage	Customer Install Value
Environment Name	<SPLENVIRON>	<p>A descriptive name to be used as both a directory name under the mount point &lt;SPLDIR&gt; and an environment descriptor. This value typically identifies the purpose of the environment. For example, DEV01 or CONV.</p> <p>On installation a directory &lt;SPLDIR&gt;/&lt;SPLENVIRON&gt; is created, under which the Oracle Utilities Application Framework and Oracle Utilities Meter Data Management software resides.</p> <p>When multiple environments are set up on the machine you will typically have directories such as: /ouaf/DEV01/.... /ouaf/CONV/....</p> <p>Each of these contains a complete version of the Oracle Utilities Application Framework and Oracle Utilities Meter Data Management.</p> <p>Note: Later in the installation process, the splenvirion.sh (splenvirion.cmd) script will set \$SPLEBASE ( %SPLEBASE%) environment variable to point to &lt;SPLDIR&gt;/&lt;SPLENVIRON&gt;</p>	
Database Type	<CMPDB>	<p>Type of a database to connect an environment to.</p> <p>Valid values: oracle: Oracle</p> <p>Defaulted value: oracle</p> <p>Note: Not all database types are supported on all platforms; refer to the Supported Platforms section for details.</p>	oracle
Web Application Server Type	<SPLWAS>	<p>A Web Application Server for the environment to be used. The following value must be selected:</p> <p>Valid values: WLS: WebLogic WAS: WebSphere WASND: WebSphere ND</p> <p>Note: Not all Web Application servers are supported on all platforms; refer to Supported Platforms section for details.</p>	

Menu Option	Name Used In Documentation	Usage	Customer Install Value
Installation Application Viewer Module	<WEB_ISAPVIEWER>	<p>Denotes if the Application Viewer Web Module will be installed in the environment. When this value is set to false the application viewer will not be accessible in the environment.</p> <p>Valid values:</p> <ul style="list-style-type: none"><li>true: Application Viewer module will be installed.</li><li>false: Application Viewer module will not be installed.</li></ul> <p>Defaulted value: true</p> <p>Note: When the value of false is selected, the Application Viewer will only be installed at a later date by a complete reinstall of the application.</p>	

# Environment Description

1. Environment Description  
Environment Description:

Menu Option	Name used in this Documentation	Usage	Customer Install Value
Environment Description	DESC	This is a free form text field to describe the purpose of the environment.	

## WebLogic Business Application Server Configuration

The WebLogic parameters below and in the worksheet are for a WebLogic installation.

### 2. Business Application Server Configuration

Business Server Host:	<machine_name>
WebLogic Server Name:	myserver
Business Server Application Name:	SPLService
MPL Admin Port Number:	
MPL Automatic startup:	false

Menu Option	Name used in this Documentation	Usage	Customer Install Value
Business Server Host	BSN_WLHOST	The host name on which business application server resides.  Default value: <current server name>	
WebLogic Server Name	BSN_WLS_SVRNAME	The name of the WebLogic server where the business application resides.  Default value: myserver  Note: If there is not a previously created WebLogic server, take the default value of "myserver".	
Business Server Application Name	BSN_APP	The name of the business application server.  Default value: SPLService	
MPL Admin Port number	MPLADMINPORT	The port number for the Multi Purpose Listener (MPL) Admin Server.  Example value: 6502	
MPL Automatic Startup	MPLSTART	Automatically starts the MPL Listener whenever environment starts. Default value: false	

## WebSphere Basic Business Application Server Configuration

The WebSphere parameters below and in the worksheet are for a WebSphere installation.

### 2. Business Application Server Configuration

Business Server Host: <machine\_name>  
 Bootstrap Port:  
 WebSphere Server Name:  
 WebSphere Node Name:  
 Business Server Application Name: SPLService  
 MPL Admin Port Number:  
 MPL Automatic startup:

Menu Option	Name used in this Documentation	Usage	Customer Install Value
Business Server Host	BSN_WLHOST	The host name on which business application server resides.  Default value: <current server name>	
Bootstrap Port	BSN_WASBOOTSTRAPPORT	The boot strap port number allows the Web module to communicate with the EJB module.	
WebSphere Server Name	BSN_SVRNAME	The WebSphere Application Server to host the OUAF application.  Each OUAF must be installed in a unique WebSphere Application Server.  Default value: server2	
WebSphere Node Name	BSN_NODENAME	The name of the WebSphere Node Name where the WebSphere Application Server is running.	
Business Server Application Name	BSN_APP	The name of the business application server.  Default value: SPLService	
MPL Admin Port number	MPLADMINPORT	The port number for the Multi Purpose Listener (MPL) Admin Server.  Example value: 6502	
MPL Automatic Startup	MPLSTART	Automatically starts the MPL Listener whenever environment starts.  Default value: false	

## WebLogic Web Application Server Configuration

The WebLogic parameters below and in the worksheet are for a WebLogic installation.

### 3. Web Application Server Configuration

```

Web Server Host:                               <machine_name>
Web Server Port Number:
Web Context Root:
WebLogic JNDI User ID:
WebLogic JNDI Password:
WebLogic Admin System User ID:
WebLogic Admin System Password:
WebLogic Server Name:                         myserver
Web Server Application Name:                  SPLWeb
Application Admin User ID:
Application Admin Password:
Expanded Directories:                         true
Application Viewer Module:                    true
  
```

Menu Option	Name used in this Documentation	Usage	Customer Install Value
Web Server Host	WEB_WLHOST	The host name on which the Web application Server resides.  Default value: <current server name>	
Web Server Port Number	WEB_WLPORT	A unique port number within the system that will be assigned to the HTTP port. This is the port number that is used as a part of the client URL request to connect to the host.  Example value: 6500	
Web Context Root	WEB_CONTEXT_ROOT	A context root name that allows customers to run multiple instances of Web application on the same server.  Default value: ouaf	
WebLogic JNDI User ID	WEB_WLSYSUSER	The user ID the application uses to connect to the EJB component through JNDI. This is the EJB container user ID.  Note: If there is no previously created WebLogic user, specify the value as "system".  This is a security value.	

Menu Option	Name used in this Documentation	Usage	Customer Install Value
WebLogic JNDI Password	WEB_WLSYSPASS	<p>The password the application uses to connect to the EJB component through JNDI</p> <p>Note: If WebLogic JNDI User ID was set to system, specify the value of ouafadmin for password. This value will be saved in encrypted format.</p> <p>This is a security value.</p>	
WebLogic Admin System User ID	WLS_WEB_WLSYSUSER	<p>The user ID to log in to the Oracle WebLogic console and to administer Oracle WebLogic. The Oracle WebLogic startup and stop script also utilizes this user ID</p> <p>Note: The installation utility will prompt to enter "Y" to encrypt. Enter Y/y When there is a not a WebLogic user previously created, and specify a value of "system".</p>	
WebLogic Admin System Password	WLS_WEB_WLSYSPASS	<p>The password to login to Oracle WebLogic console and to administer Oracle WebLogic. The Oracle WebLogic startup and stop script also utilize this password.</p> <p>Note: The installation utility will prompt to enter "Y" to encrypt. Enter Y/y when there is a not a WebLogic user previously created, and specify value of ouafadmin.</p> <p>This is a security value.</p>	
WebLogic Server Name	WEB_WLS_SERVERNAME	<p>The name of the WebLogic server where the Web application resides.</p> <p>Default value: myserver</p> <p>Note: If there is not a previously created WebLogic server, take default value of "myserver".</p>	
Web Server Application Name	WEB_APP	<p>The name of the Web application server.</p> <p>Default value: SPLWeb</p>	

Menu Option	Name used in this Documentation	Usage	Customer Install Value
Application Admin User ID	WEB_SPLUSER	<p>This is the default user ID to login to the application through the browser.</p> <p>Example value: SYSUSER</p> <p>Note: The required value for an initial install is “SYSUSER”. This value is also used in communication within the XAI application.</p> <p>This is a security value.</p>	
Application Admin Userid Password	WEB_SPLPASS	<p>This is the password of the application admin user.</p> <p>Example value: sysuser00</p> <p>Note: The required value for an initial install is “sysuser00”. This value will be saved in encrypted format</p> <p>This is a Security Value.</p>	
Expanded Directories	WEB_ISEXPANDED	<p>When the value is “true” the Web application will be deployed in exploded directory format (no WAR files).</p> <p>When the value is “false”, the web application will be deployed in ear file format.</p> <p>Valid values:  true: Environment expanded (no WAR files)  false: Environment with WAR/EAR files</p> <p>Default value: false</p>	

Menu Option	Name used in this Documentation	Usage	Customer Install Value
Application Viewer Module	WEB_ISAPPVIEWER	<p>When the value is “true” the application viewer will be deployed to the Web server. When the value is “false”, the application viewer will not be deployed to the Web Server.</p> <p>Note: With either value the application viewer module will still be managed by the upgrade process.</p> <p>Note: When this value is set to false from the initial install menu you will not be able to change this value to true to re-enable the application viewer.</p> <p>Valid values: true: The application viewer module will be deployed to the Web Server false: The application viewer module will not be deployed to the Web Server</p> <p>Default value: true</p>	

## WebSphere Basic Web Application Server Configuration

The WebSphere parameters below and in the worksheet are for a WebSphere installation.

### 3. Web Application Server Configuration

Web Server Host: <machine\_name>  
 Web Server Port Number:  
 Web Context Root:  
 WebSphere Server Name:  
 WebSphere Node Name:  
 Web Server Application Name:  
 WebSphere JNDI System User ID:  
 WebSphere JNDI System Password:  
 Application Admin User ID:  
 Application Admin Password:  
 Expanded Directories:  
 Application Viewer Module:

Menu Option	Name used in this Documentation	Usage	Customer Install Value
Web Server Host	WEB_WLHOST	<p>The host name on which the Web application Server resides.</p> <p>Default value: &lt;machine_name&gt;</p>	
Web Server Port Number	WEB_WLPORT	<p>The WC_defaulthost number for your WebSpher Basic server. This is the port number that is used as a part of the client URL request to connect to the host.</p> <p>Example value: 9081</p>	
Web Context Root	WEB_CONTEXT_ROOT	<p>A context root name that allows customers to run multiple instances of Web application on the same installation of WebSphere server.</p> <p>Default value: ouaf</p>	
WebSphere Server Name	WEB_SVRNAME	<p>The WebSphere Basic Application Server to host the MDM application.</p> <p>Each MDM must be installed in a unique WebSphere Basic application server.</p> <p>Default value: server2</p>	
WebSphere Node Name	WEB_NODENAME	<p>The name of the WebSphere Basic Node Name where the WebSphere Basic application server is running.</p>	
Web Server Application Name	WEB_APP	<p>The name of the Web application server.</p> <p>Default value: SPLWeb</p>	

Menu Option	Name used in this Documentation	Usage	Customer Install Value
WebSphere JNDI User ID:	WEB_WASUSER	<p>User ID the application utilizes to connect to the EJB component through JNDI. This is the EJB container user ID.</p> <p>Note: This value must be a valid User in the WebSphere console.</p> <p>This is a security value.</p>	
WebSphere JNDI System Password:	WEB_WASPASS	<p>The password the application utilizes to connect to the EJB component through JNDI.</p> <p>Note: This value will be saved in encrypted format.</p> <p>This is a security value.</p>	
Application Admin User ID	WEB_SPLUSER	<p>This is the default user ID to login to the application through the browser.</p> <p>Example value: SYSUSER</p> <p>Note: This value is also used in communication within the XAI application.</p> <p>Note: This value must be a valid User in the WebSphere console.</p> <p>This is a security value.</p>	
Application Admin Userid Password	WEB_SPLPASS	<p>This is the password of the application admin user.</p> <p>Example value: sysuser00</p> <p>Note: This value will be saved in encrypted format</p> <p>This is a security value.</p>	
Expanded Directories	WEB_ISEXPANDED	<p>When the value is “true” the Web application will be deployed in exploded directory format (no WAR files).</p> <p>When the value is “false”, the web application will be deployed in ear file format.</p> <p>Valid values: true: Environment expanded (no WAR files) false: Environment with WAR/EAR files</p> <p>Default value: false</p>	

Menu Option	Name used in this Documentation	Usage	Customer Install Value
Application Viewer Module	WEB_ISAPPVIEWER	<p>When the value is “true” the application viewer will be deployed to the Web server. When the value is “false”, the application viewer will not be deployed to the Web Server.</p> <p>Note: With either value the application viewer module will still be managed by the upgrade process.</p> <p>Note: When this value is set to false from the initial install menu you will not be able to change this value to true to re-enable the application viewer.</p> <p>Valid values: true: The application viewer module will be deployed to the Web Server) false: The application viewer module will not be deployed to the Web Server)</p> <p>Default value: true</p>	

## Database Configuration

### 4. Database Configuration

Web Application Database User ID:  
 Web Application Database Password:  
 MPL Database User ID:  
 MPL Database Password:  
 XAI Database User ID:  
 XAI Database Password:  
 Batch Database User ID:  
 Batch Database Password:  
 Database Name  
 Database Server:  
 Database Port:  
 ONS Server Configuration:  
 Database Override Connection String:  
 Oracle Client Character Set NLS\_LANG: AMERICAN\_AMERICA.AL32UTF8

Menu Option	Name Used in this Documentation	Usage	Customer Install Value
Web Application Database User ID	DBUSER	<p>The database user ID that has been configured on the database for the Web application server connection.</p> <p>This is a security value.</p>	
Web Application Database Password	DBPASS	<p>The database password that has been configured on the database for the Web application connection.</p> <p>Note: This value will be saved in encrypted format.</p> <p>This is a security value.</p>	
MPL Database User ID	MPL_DBUSER	<p>The database user ID that has been configured on the database for the MPL server connection.</p> <p>This is a security value.</p>	
MPL Database Password	MPL_DBPASS	<p>The database password that has been configured on the database for the MPL server connection.</p> <p>Note: This value will be saved in encrypted format.</p> <p>This is a security value.</p>	
XAI Database User ID	XAI_DBUSER	<p>The database user ID that has been configured on the database for the XAI server connection.</p> <p>This is a security value.</p>	

Menu Option	Name Used in this Documentation	Usage	Customer Install Value
XAI Database Password	XAI_DBPASS	<p>The database password that has been configured on the database for the XAI server connection.</p> <p>Note: This value will be saved in encrypted format.</p> <p>This is a security value.</p>	
Batch Database User ID	BATCH_DBUSER	<p>The database user ID that has been configured on the database for the batch connection.</p> <p>This is a security value.</p>	
Batch Database Password	BATCH_DBPASS	<p>The database password that has been configured on the database for the batch connection.</p> <p>Note: This value will be saved in encrypted format.</p> <p>This is a security value.</p>	
Database Name	DBNAME	The name of the database instance that the application will be connecting to.	
Database Server	DBSERVER	Host name of the server where database resides.	
Database Port	DBPORT	Database port number on the database server used for connecting to the database	
ONS Server Configuration	ONSCONFIG	<p>ONS Server Configuration is required for Oracle RAC FCF.</p> <p>See the Server Administration Guide for more information.</p> <p>This is an optional value.</p>	
Database Override Connection String	DB_OVERRIDE_CONNECTION	<p>This connection string can be used to override the database information entered above for RAC installation.</p> <p>Set this string to override the standard database connection string, as entered above.</p> <p>See the Server Administration Guide for more information.</p> <p>This is an optional value.</p>	

Menu Option	Name Used in this Documentation	Usage	Customer Install Value
Oracle Client Character Set NLS_LANG	NLS_LANG	<p>The Oracle Database Character Set.</p> <p>Select the Language and Territory that are in use in your country.</p> <p>Default value: AMERICAN_AMERICA.AL32UTF8</p>	

## General Configuration Options

**Note:** See the Oracle Utilities Meter Data Management *Batch Server Administration Guide* for additional details on this configuration.

### 5. General Configuration Options

```
Batch RMI Port:
Batch Mode: CLUSTERED
Coherence Cluster Name:
Coherence Cluster Address:
Coherence Cluster Port:
Coherence Cluster Mode: dev
```

Menu Option	Name used in this Documentation	Usage	Customer Install Value
Batch RMI Port	BATCH_RMI_PORT	Unique port used by the Batch RMI	
Batch Mode	BATCH_MODE	Valid values: CLUSTERED or DISTRIBUTED  Default value: CLUSTERED Note: CLUSTERED is currently the only supported mode for production environments.	
Coherence Cluster Name	COHERENCE_CLUSTER_NAME	Unique name for the batch CLUSTER  Note: Value is required when batch mode is CLUSTERED.	
Coherence Cluster Address	COHERENCE_CLUSTER_ADDRESS	Unique multicast address.  Note: Value is required when batch mode is CLUSTERED.	
Coherence Cluster Port	COHERENCE_CLUSTER_PORT	Unique port for the batch CLUSTER  Note: Value is required when batch mode is CLUSTERED.	
Coherence Cluster Mode	COHERENCE_CLUSTER_MODE	Valid values: dev (Development) prod (Production)  Default value: dev	

## Advanced Menu Options

The advanced menu options are not available during installation. These options can be accessed after installation using the following commands:

### Unix:

```
$SPLEBASE/bin/configureEnv.sh -a
```

### Windows

```
%SPLEBASE%\bin\configureEnv.cmd -a
```

## Advanced Environment Miscellaneous Configuration

### 50. Advanced Environment Miscellaneous Configuration

```
Online JVM Batch Server Enabled:           false
Online JVM Batch Number of Threads:        5
Online JVM Batch Scheduler Daemon Enabled:  false
JMX Enablement System User ID:
JMX Enablement System Password:
RMI Port number for JMX Business:
RMI Port number for JMX Web:
GIS Service Running on the same Web Server: true
GIS Service URL:
GIS WebLogic System User ID:
GIS WebLogic System Password:
Online Display Software Home:
```

Menu Option	Name used in this Documentation	Usage	Customer Value Install
WebSphere Deployment Manager Host Name	WASND_DMGR_HOST	WebSphere Deployment Manager Host name, this value is used for WebSphere ND, when connecting to the WebSphere Deployment Manager.  Note: This value will only appear for WebSphere ND.	
Online JVM Batch Server Enabled	BATCHENABLED	When starting a web application server JVM, this property can be set to “true” to allow the on-line application server to also act as a batch worker in the grid.  Default value: false  Note: This functionality should only be used in low volume environments.	

Menu Option	Name used in this Documentation	Usage	Customer Value Install
Online JVM Batch Number of Threads	BATCHTHREADS	<p>The maximum number of batch processing threads to be executed within a worker JVM when no explicit Distributed Thread Pool is specified. The “DEFAULT” distributed thread pool is used by the batch-scheduling daemon when it initiates processing on batch jobs (typically added via the online system) where no thread pool is specified).</p> <p>Default value: 5</p> <p>Note: This will be only used and activated when BATCHEENABLED is set to true.</p>	
Online JVM Batch Scheduler Daemon Enabled	BATCHDAEMON	<p>In a distributed batch environment, this property can be set to “true” to allow a worker JVM to host the batch scheduling daemon. The daemon accepts online batch submissions requests and automatically submits the work for them.</p> <p>Valid values: true, false</p> <p>Default value: false</p> <p>Note: This will be only used and activated when BATCHEENABLED is set to true.</p>	
JMX Enablement System User ID	BSN_JMX_SYSUSER	<p>Example value: user</p> <p>This value is optional.</p>	
JMX Enablement System Password	BSN_JMX_SYSPASS	<p>Example value: admin</p> <p>Note: This value will be saved in encrypted format.</p> <p>This value is optional.</p>	
RMI Port number for JMX Business	BSN_JMX_RMI_POR T_PERFORMACE	<p>JMX Port for Business Application Server monitoring.</p> <p>This needs to be set to an available port number on the machine.</p> <p>This value is optional.</p>	

Menu Option	Name used in this Documentation	Usage	Customer Value Install
RMI Port number for JMX Web	WEB_JMX_RMI_PORT_PERFORMANCE	<p>JMX Port for Web application server monitoring</p> <p>This needs to be an available port number for the environment running on the machine.</p> <p>This value is optional.</p>	
GIS Service Running on the same Web Server	GIS	<p>Geographical information (GEOCODING) - GIS Service running on the same Web application server</p> <p>Valid values: true, false</p> <p>This value is optional.</p>	
GIS Service URL	GIS_URL	<p>This is the URL of the external Web server.</p> <p>Note: This value will be only be used when GIS is set to true.</p> <p>This value is optional.</p>	
GIS WebLogic System User ID	GIS_WLSYSUSER	<p>GIS WebLogic System User ID</p> <p>Note: This value will be only be used when GIS is set to true.</p> <p>This value is optional.</p>	
GIS WebLogic System Password	GIS_WLSYSPASS	<p>GIS WebLogic System Password.</p> <p>Note: This value will be only be used when GIS is set to true.</p> <p>This value is optional.</p>	
Online Display Software Home	ONLINE_DISPLAY_HOME	<p>The location of the Online Display Software installation directory.</p> <p>This value is optional.</p>	

## Advanced Environment Memory Configuration

```

51. Advanced Environment Memory Configuration
    JVM Child Memory Allocation:                    512
    JVM Child Additional Options:
    Web Application Java Initial Heap Size:          1024
    Web Application Java Max Heap Size:              1024
    Web Application Java Max Perm Size:              500
    Web Application Additional Options:
    Ant Min Heap Size:                              200
    Ant Max Heap Size:                              800
    Ant Additional Options:
    Thread Pool Worker Java Min Heap Size:          512
    Thread Pool Worker Java Max Heap Size:          1024
    Thread Pool Worker Java Max Perm Size:          768
    Thread Pool Worker Additional Options:
    Additional Runtime Classpath:
    Release Cobol Thread Memory Options:
-Dspl.runtime.cobol.remote.releaseThreadMemoryAfterEachCall=...

```

Menu Option	Name used in this Documentation	Usage	Customer Install Value
JVM Child Memory Allocation	JVMMEMORYARG	Heap size for the JVM Child.  Default value: 512	
JVM Child Additional Options	JVM_ADDITIONAL_OPT	Additional JVM options that are passed to the Child JVM.  Note: For WebLogic installation only.	
Web Application Java Initial Heap Size	WEB_MEMORY_OPT_MIN	Initial heap size for the application server.  Default value: 1024  Note: For WebLogic installation only.	
Web Application Java Max Heap Size	WEB_MEMORY_OPT_MAX	Maximum heap size for the application server.  Default value: 1024  Note: For WebLogic installation only.	
Web Application Java Max Perm Size	WEB_MEMORY_OPT_MAXPERMSIZE	Maximum Perm Size for the application server.  Default value: 500MB (Linux, Solaris) 300MB (Windows, HP-UX)  Note: For WebLogic installation only.	

Menu Option	Name used in this Documentation	Usage	Customer Install Value
Web Application Additional Options	WEB_ADDITIONAL_OPT	Additional options that will be passed in to the web application server JVM.  Optional Entry.  Note: For WebLogic installation only.	
Ant Min Heap Size	ANT_OPT_MIN	Minimum Heap Size passed to ANT JVM.  Default value: 200	
Ant Max Heap Size	ANT_OPT_MAX	Maximum Heap Size passed to ANT JVM.  Default value: 800	
Ant Additional Options	ANT_ADDITIONAL_OPT	Additional options that are passed into the ANT JVM.	
Thread Pool Worker Java Min Heap Size	BATCH_MEMORY_OPT_MIN	Minimum heap size passed to the Thread Pool Worker.  Default value: 512	
Thread Pool Worker Java Max Heap Size	BATCH_MEMORY_OPT_MAX	Maximum heap size passed to the Thread Pool Worker.  Default value: 1024	
Thread Pool Worker Additional Options	BATCH_MEMORY_ADDITIONAL_OPT	Additional Memory Options passed into the Thread Pool Worker. This is an optional free form field.	
Additional Runtime Classpath	ADDITIONAL_RUNTIME_CLASSPATH	Additional Classpath Options passed in when starting the WebLogic JVM  Note: For WebLogic installation only.  This is an optional value.	
Release Cobol Thread Memory Options	REL_CBL_THREAD_MEM	Allow for child JVMs to be optionally configured to release thread-bound memory when each thread is returned to its thread pool. This will increase the number of memory allocations and memory free calls performed by the Microfocus runtime. It will also lower the amount of C-heap memory consumed by child JVMs.  Valid values: true, false  Default value: false	

## Advanced Web Application Configuration

### 52. Advanced Web Application Configuration

```

WebLogic SSL Port Number:
WebLogic Console Port Number:
WebLogic Additional Stop Arguments:
Strip HTML Comments: false
Authentication Login Page Type: FORM
Web Form Login Page: /loginPage.jsp
Web Form Login Error Page: /formLoginError.jsp
Web Security Role: cisusers
Web Principal Name: cisusers
This is a development environment: false
Preload All Pages on Startup: false
Maximum Age of a Cache Entry for Text: 28800
Maximum Age of a Cache Entry for Images: 28800
JSP Recompile Interval (s): 43200

```

Menu Option	Name used in this Documentation	Usage	Customer Install Value
WebLogic SSL Port Number:	WEB_WLSSPORT	<p>The port number assigned to WebLogic Secure Sockets connection. This is the port number that is used for Secure Sockets connecting to the WebLogic server.</p> <p>The Secure Sockets implementation is disabled in the default configuration.</p> <p>For Production additional actions are required. Do NOT run Production with Demo certificates Refer to the WLS installation guide - Configuring Identity and Trust When this value is populated http will be disabled.</p> <p>Example value: 6501</p> <p>Note: For WebLogic installation only.</p> <p>This value is optional.</p>	
WebLogic Console Port Number	WLS_ADMIN_PORT	<p>The port number assigned to WebLogic Console connection. This is the port number that is used for Secure Sockets connecting to the WebLogic Console server.</p> <p>Note: For WebLogic installation only.</p> <p>This value is optional.</p>	

Menu Option	Name used in this Documentation	Usage	Customer Install Value
WebLogic Additional Stop Arguments	ADDITIONAL_STOP_WEBLOGIC	<p>WebLogic Additional Stop Arguments</p> <p>This value is required when running the WebLogic Console Port Number and the Application using SSL.</p> <p>Example values:  -Dweblogic.security.TrustKeyStore=DemoTrust  -Dweblogic.security.TrustKeystoreType=CustomTrust</p> <p>Note: For Production additional actions are required. Do NOT run Production with Demo certificates</p> <p>Refer to the WLS installation guide - Configuring Identity and Trust</p> <p>Note: For WebLogic installation only.</p> <p>Optional Value</p>	
StripHTMLComments: false	STRIP_HTML_COMMENTS	<p>Stripping HTML (and JavaScript) comments will increase the security of the system.</p> <p>Default value: false</p> <p>Valid values: true, false</p>	
Authentication Login Page Type	WEB_WLAUTHMETHOD	<p>Specifies which authentication mode should be used. To switch off OUA Login Page enter: BASIC</p> <p>Valid values: FORM, BASIC</p> <p>Default value: FORM</p>	
Web Form Login Page	WEB_FORM_LOGIN_PAGE	<p>Specify the jsp file used to login into the application.</p> <p>Default value: /loginPage.jsp</p>	
Web Form Login Error Page	WEB_FORM_LOGIN_ERROR_PAGE	<p>Specify the jsp file used when there is an error when logging into the application.</p> <p>Default value: /formLoginError.jsp</p>	
Web Security Role	WEB_PRINCIPAL_NAME	<p>Specify the name of the security role.</p> <p>Default value: cisusers</p>	

Menu Option	Name used in this Documentation	Usage	Customer Install Value
Web Principal Name	WEB_PRINCIPAL_NAME	Specify the name of a principal that is defined in the security realm.  Default value: cisusers	
This is a development environment	WEB_ISDEVELOPMENT	If the value is “true”, the Web application may be used for application development, which will trigger certain generation processes. If the value is “false” the environment will be used as a runtime environment.  When you choose “true” (development environment) the startup preload pages will be disabled, and the application security will be less strict. This value also controls the amount of logging information written to the application log files.  Valid values: true, false  Default value: false	
Preload All Pages on Startup	WEB_PRELOADALL	This controls if the pages should be preloaded during the startup of the application or not.  Valid values: true, false  Default value: false	
Maximum Age of a Cache Entry for Text	WEB_MAXAGE	Default value: 28800	
Maximum Age of a Cache Entry for Images	WEB_MAXAGEI	Default value: 28800	
JSP Recompile Interval (s)	WEB_wlpageCheckSeconds	Default value: 43200	

## Advanced Web Application Configuration

### 53. OIM Configuration Settings

SPML SOAP Trace Setting: false  
 SPML IDM Schema Name: F1-IDMUser  
 SPML OIM Name Space: http://xmlns.oracle.com/OIM/provisioning  
 SPML OIM Enclosing Element: SOAPElement

Menu Option	Name used in this Documentation	Usage	Customer Install Value
SPML SOAP Trace Setting	OIM_SPML_SOAP_DEBUG_SETTING	Name of Oracle Identity Manager library for debug  Default value: false  Valid values: true, false	
SPML IDM Schema Name	OIM_SPML_UBER_SCHEMA_NAME	Name of Oracle Identity Manager library for schema  Default value: F1-IDMUser	
SPML OIM Name Space	OIM_SPML_NAME_SPACE	Default Namespace for Oracle Identity Manager integration  Default value: http://xmlns.oracle.com/OIM/provisioning	
SPML OIM Enclosing Element	OIM_SPML_SOAP_ELEMENT	Default top level SOAP Element name for Oracle Identity Manager integration  Default value: SOAPElement	

## Meter Data Framework Installation and Configuration Worksheets

During the installation and configuration of the application you will need to provide a variety of system values. These worksheets will assist you in providing that information. They should be completed before installing the application framework, as described in **Chapter 10: Installing the Application Server Component of Oracle Utilities Meter Data Framework**. No Customer Install Value fields should be left blank.

**Note:** The OSB configuration and SOA configuration menus are optional for Oracle Utilities Meter Data Management and can be skipped. These configurations are required in case another product such as Oracle Utilities Smart Grid Gateway will also be installed on top of Oracle Utilities Meter Data Framework.

## WebLogic OSB Configuration

### 8. OSB Configuration

```

OSB Home:
OSB Host Server: <machine name>
OSB Port Number:
JDBC URL for database:
Database User Name:
Database Password:
JNDI name for datasource: wlsbjmsrpDataSource
Mount point for OSB files: /spl/sploutput/osb
OSB Weblogic User Name:
OSB Weblogic User Password:

```

Menu Option	Name Used In Documentation	Usage	Customer Install Value
OSB Home	OSB_HOME	Location of the directory where OSB is installed.  For Example: Unix: /middleware/Oracle_OSB1 Windows: C:\middleware\Oracle_OSB1	
OSB Host Server	OSB_HOST	Host name of the server where the OSB WebLogic server instance will run.  Default Value: <current server name>	
OSB Port Number:	OSB_PORT_NUMBER	Admin port number of the OSB WebLogic server instance.  This is the port number that is used as a part of the OSB URL request to connect to the host.	
JDBC URL for database	DBURL_OSB	The JDBC URL of the database where the OSB schemas are located.  For Example: jdbc:oracle:thin:@localhost:1521:OSBDB  This value is required for the example WebLogic server instance.	
Database User Name	DBUSER_OSB	OSB database user ID.  This value is required for the example WebLogic server instance.	
Database Password	DBPASS_OSB_WLS	OSB database password.  This value is required for the example WebLogic server instance.	

Menu Option	Name Used In Documentation	Usage	Customer Install Value
JNDI name for datasource	JNDI_OSB	<p>JNDI name for accessing the OSB database</p> <p>Note: Retain the default value.</p> <p>Default Value: wlsbjmsrpDataSource.</p>	
Mount point for OSB files	OSB_LOG_DIR	<p>Location of the network share or mount point where the OSB files will be dropped. This path should be accessible from the machine where OSB WebLogic instance is running.</p> <p>For example: /ouaf/osb/&lt;ENVIRONMENT NAME&gt;/</p> <p>Default Value: /spl/sploutput/osb</p>	
OSB WebLogic User Name	OSB_USER	<p>WebLogic JMS user ID for the WebLogic instance where the OSB cartridge will be deployed.</p> <p>Note: For the example OSB WebLogic instance this should be specified as <b>weblogic</b>.</p>	
OSB WebLogic User Password	OSB_PASS_WLS	<p>WebLogic JMS user password for the WebLogic instance where the OSB cartridge will be deployed.</p> <p>Note: For the example OSB WebLogic instance this should be specified as <b>weblogic123</b>.</p>	

## WebSphere OSB Configuration

### 8. OSB Configuration

OSB Home:

OSB Host Server:

<machine name>

OSB Port Number:

Mount point for OSB files:

/spl/sploutput/osb

Menu Option	Name Used in this Documentation	Usage	Customer Install Value
OSB Home	OSB_HOME	Location of the directory where OSB is installed.  For Example: <b>Unix:</b> /middleware/Oracle_OSB1 <b>Windows:</b> C:\middleware\Oracle_OSB1	
OSB Host Server	OSB_HOST	Host name of the server where the OSB WebLogic server instance will run.  Default Value: <current server name>	
OSB Port Number:	OSB_PORT_NUMBER	Admin port number of the OSB WebLogic server instance. Note: This also specifies the port number on which the example WebLogic server will listen.	
Mount point for OSB files	OSB_LOG_DIR	Location of the network share or mount point where the OSB files will be dropped. This path should be accessible from the machine where OSB WebLogic instance is running. For example: /ouaf/osb/ <ENVIRONMENT NAME>/  Default Value: /spl/sploutput/osb	

## WebLogic SOA Configuration

### 9. SOA Configuration

SOA Home:

SOA Host Server:

<machine name>

SOA Port Number:

JDBC URL for database:

Database User Name (SOAINFRA):

Database Password (SOAINFRA):

Database User Name (MDS):

Database Password (MDS):

Database User Name (ORASDPM):

Database Password (ORASDPM):

Menu Option	Name Used In Documentation	Usage	Customer Install Value
SOA Home	SOA_HOME	Location of the directory where SOA is installed.  For Example: <b>Unix:</b> /middleware/Oracle_SOA1 <b>Windows:</b> C:\middleware\Oracle_SOA1	
SOA Host Server	SOA_HOST	Host server where the SOA WebLogic server instance will run.  Default Value: <current server name>	
SOA Port Number:	SOA_PORT_NUMBER	Port number of the SOA WebLogic server instance. If SOA is deployed on a managed server, specify the managed server port number.  Note: This also specifies the port number on which the example SOA WebLogic server will listen.	
JDBC URL for database	DBURL_SOA	The JDBC URL of the database where the SOA schemas are located.  For Example: jdbc:oracle:thin:@localhost:1521:SOADB  This value is required for the example SOA WebLogic server instance.	
Database User Name (SOAINFRA)	DBUSER_SOAINFRA	User ID for the SOAINFRA schema.  This value is required for the example SOA WebLogic server instance.	
Database Password (SOAINFRA)	DBPASS_SOAINFRA	Password for the SOAINFRA schema.  This value is required for the example SOA WebLogic server instance.	

Menu Option	Name Used In Documentation	Usage	Customer Install Value
Database User Name (MDS)	DBUSER_MDS	User ID for the MDS schema.  This value is required for the example SOA WebLogic server instance.	
DBPASS_MDS	DBPASS_MDS	Password for the MDS schema.  This value is required for the example SOA WebLogic server instance.	
Database User Name (ORASDPM)	DBUSER_ORASDPM	User ID for the ORASDPM schema.  This value is required for the example SOA WebLogic server instance.	
Database Password (ORASDPM)	DBPASS_ORASDPM	Password for the ORASDPM schema.  This value is required for the example SOA WebLogic server instance.	

# WebSphere SOA Configuration

9. SOA Configuration

SOA Home:

SOA Host Server:

SOA Port Number:

<machine name>

Menu Option	Name Used in this Documentation	Usage	Customer Install Value
SOA Home	SOA_HOME	<div>Location of the directory where SOA is installed.</div> <div>For Example:</div> <div>Unix:</div> <div>/middleware/Oracle_SOA1</div> <div>Windows:</div> <div>C:\middleware\Oracle_SOA1</div>	
SOA Host Server	SOA_HOST	<div>Host server where SOA WebLogic server instance will run.</div> <div>Default Value: &lt;current server name&gt;</div>	
SOA Port Number:	SOA_PORT_NUMBER	<div>Port number of the SOA WebLogic server instance. If SOA is deployed on a managed server, specify the managed server port number.</div> <div>Note: This also specifies the port number on which the example SOA WebLogic server will listen.</div>	

# Chapter 6

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## Installing the Database

Please review Chapter 1 of this guide and then follow the steps for installing the database as described in the *Oracle Utilities Meter Data Management Database Administrator's Guide*.



# Chapter 7

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## Installing Application Server Prerequisite Software

This chapter describes the software that needs to be installed for each of the supported operating system and application server combinations. The sections for this chapter are:

- **AIX 6.1 Application Server**
- **HP-UX 11.31 Itanium Application Server**
- **Oracle Linux 5.5 or Red Hat Linux 5.5 Application Server**
- **Solaris 10 Application Server**
- **Windows 2008 Application Server**

## AIX 6.1 Application Server

This section describes the software requirements for operating the application using the AIX application server.

### Supported Application Servers

Operating System	Chipsets	Application Server
AIX 6.1 (64-bit) TL4	POWER 64-bit	Oracle WebLogic 11gR1 (10.3.3 or 10.3.4) 64-bit version WebSphere Basic (7.0.0.13) 64-bit version

### Web/Application Server Tier

#### AIX 6.1 TL4 Operating System Running on Power5 and Power6 Architecture

##### UNIX Administrator User ID

The following user groups and accounts have to be created to install and administer the application:

Description	Default Value	Customer Defined Value
Oracle Utilities Meter Data Management Administrator User ID	cissys	
Oracle Utilities Meter Data Management User Group	cisusr	

Note: It is recommended that you change the default values for security reasons. See

Throughout this document the administrator user id is often referred to as the "cissys" user id. You should substitute that with the customer defined user id when not using the default value. After the initial install, the software should always be managed using that user id.

By default, the cissys userid is the only one given access to the installed files.

1. Create a group called cisusr (user group).
2. Create a user called cissys. Primary group cisusr. Set the primary shell for the cissys user to Korn Shell.

The shell scripts use the ">" to overwrite shell functionality. Your operating system may be configured to not allow this functionality by default in the users shell.

To avoid file access permission problems when executing scripts, consider placing the following command into cissys profile script:

```
set +o noclobber
```

##### Security Configuration

Various options exists to secure a system. In this application all files will be created with the minimum permissions required to ensure that group-readable, group-writable and group-executable files will have the correct user groups and to restrict the permissions available to

legitimate users. In this way, a low privileged end user cannot directly edit configuration files and thereby bypass application security controls.

The following users and group categories must be defined to implement this security. For demonstration purposes the following users and groups will be used. These users must be created according to industry standards (including password policies). All users should be created with a default umask of 022 to ensure files created during normal operation have the correct permissions.

Please replace these users and groups for your installation defaults:

User	Group	Description
cissys	cisusr	This user will be used to install the application and to apply patches. This user will own all the application files. The same care should be taken with this user ID as if it is 'root'. This user will be able to add, delete and modify files within the application.
cisadm	cisusr	Administrative and Operation functions will be available to this user. This user will be able to stop and start the application and batch processes, but will not have access to modify any file other than generated log files
cisoper	-----	Low level operator. This user will only be able to read logs files and collect information for debugging and investigative purposes. Care should be taken in production to disable debugging as debugging information could contain potential sensitive data which this user should not have privy to.

**Note:** The Oracle Client and WebLogic should be installed as the user who will stop and start the application. For example, if you plan to run the application as the install user these components must belong to cissys.

### Oracle Client 11.2.0.1 — Runtime Option

Install the Oracle Client as described in the Oracle Client installation documentation. Use the cissys account to install the Oracle Client. If another user installs the Oracle Client, make sure the cissys user ID has the proper execute permissions.

For the cissys user ID, ensure that the environment variable ORACLE\_CLIENT\_HOME is set up, and that ORACLE\_CLIENT\_HOME/perl/bin is the first Perl listed in the cissys account's PATH variable.

### IBM Java Software Development Kit version 6.0 SR8 64-bit

Installation of Java is a prerequisite for using Oracle WebLogic as a Web application server.

At the time of release, AIX Java packages could be obtained from:

<http://www.ibm.com/developerworks/java/jdk/aix/service.html>

The web server requires the 64-bit Java platform in order to function. The main prerequisite for the web server is the version of java mentioned above.

For the Administrator userid (cissys), ensure that the environment variable JAVA\_HOME is set up, and that "java" can be found in cissys' PATH variable.

### **Hibernate 3.3.2**

You must install Hibernate before installing Oracle Utilities Meter Data Management.

Download the file hibernate-3.3.2.ga.zip (the zip file associated with the 3.3.2 GA release.) from the following link:

<http://sourceforge.net/projects/hibernate/files/hibernate3/3.3.2.GA/>

It is very important that you download the exact version, as the product has only been certified with this exact release.

You will need to create a permanent directory to place one of the files from hibernate-3.3.2.ga.zip. (e.g., /opt/hibernate).

Extract the file hibernate3.jar into the newly created directory (e.g., /opt/hibernate) from the hibernate-3.3.2.ga.zip zip file.

### **IBM WebSphere Basic (7.0.0.13) 64-bit**

WebSphere must be purchased and downloaded from IBM. It must be installed and configured prior to the MDM installation. This Web application server will run as a 64-bit application.

A single WebSphere server represents a single Oracle Utilities Meter Data Management environment. You can install multiple environments on a single WebSphere Installation by creating additional WebSphere servers. Refer to the Chapter **Configuring WebSphere Application Server** for preinstallation steps.

### **Oracle WebLogic 11gR1 (10.3.3 or 10.3.4) 64-bit**

Oracle WebLogic software can be downloaded from the Oracle web site. This application server will run as a 64-bit application.

- Download and install 64-bit Java (as documented above) before installing WebLogic.
- Download and install WebLogic Server 11gR1 (10.3.3 or 10.3.4).

# HP-UX 11.31 Itanium Application Server

This section describes the software requirements for operating the application using the HP-UX 11.31 Itanium application server.

## Supported Application Servers

Operating System	Chipsets	Application Server
HP-UX 11.31 Base Quality Pack September 2009 (64-bit)	Itanium	Oracle WebLogic 11gR1 (10.3.3 or 10.3.4) 64-bit version

## Web/Application Server Tier

### HP-UX 11.31 Itanium Operating System Running on Itanium2 Architecture

#### UNIX Administrator User ID

The following user groups and accounts have to be created to install and administer the application:

Description	Default Value	Customer Defined Value
Oracle Utilities Meter Data Management Administrator User ID	cissys	
Oracle Utilities Meter Data Management User Group	cisusr	

Note: It is recommended that you change the default values for security reasons.

Throughout this document the administrator user id is often referred to as the "cissys" user id. You should substitute that with the customer defined user id when not using the default value. After the initial install, the software should always be managed using that user id.

By default, the cissys userid is the only one given access to the files installed.

1. Create a group called cisusr (user group)
2. Create a user called cissys. Primary group cisusr. Set the primary shell for the cissys user to Korn Shell.

The shell scripts use the ">" to overwrite shell functionality. Your operating system may be configured to not allow this functionality by default in the users shell.

To avoid file access permission problems when executing scripts, consider placing the following command into cissys profile script:

```
set +o noclobber
```

#### Security Configuration

Various options exists to secure a system. In this application all files will be created with the minimum permissions required to ensure that group-readable, group-writable and group-

executable files will have the correct user groups and to restrict the permissions available to legitimate users. In this way, a low privileged end user cannot directly edit configuration files and thereby bypass application security controls.

The following users and group categories must be defined to implement this security. For demonstration purposes the following users and groups will be used. These users must be created according to industry standards (including password policies). All users should be created with a default umask of 022 to ensure files created during normal operation have the correct permissions.

Please replace these users and groups for your installation defaults:

User	Group	Description
cissys	cisusr	This user will be used to install the application and to apply patches. This user will own all the application files. The same care should be taken with this user ID as if it is 'root'. This user will be able to add, delete and modify files within the application.
cisadm	cisusr	Administrative and Operation functions will be available to this user. This user will be able to stop and start the application and batch processes, but will not have access to modify any file other than generated log files
cisoper	-----	Low level operator. This user will only be able to read logs files and collect information for debugging and investigative purposes. Care should be taken in production to disable debugging as debugging information could contain potential sensitive data which this user should not have privy to.

**Note:** The Oracle Client and WebLogic should be installed as the user who will stop and start the application. For example, if you plan to run the application as the install user these components must belong to cissys.

### Oracle Client 11.2.0.1 — Runtime Option

Install the Oracle Client as described in the Oracle Client installation documentation. Use the cissys account to install the Oracle Client. If another user installs the Oracle Client, make sure the cissys user ID has the proper execute permissions.

For the cissys user ID, ensure that the environment variable ORACLE\_CLIENT\_HOME is set up, and that ORACLE\_CLIENT\_HOME/perl/bin is the first Perl listed in the cissys account's PATH variable.

### HP Java Development Kit version 1.6.0.06

The Web server requires the 64-bit Java platform in order to function. The main prerequisite for the Web server is the version of java mentioned above.

For the userid cissys, ensure that the environment variable JAVA\_HOME is setup, and that "java" can be found in cissys' PATH variable.

### Hibernate 3.3.2

You must install Hibernate before installing Oracle Utilities Meter Data Management.

Download the file hibernate-3.3.2.ga.zip (the zip file associated with the 3.3.2 GA release.) from the following link:

<http://sourceforge.net/projects/hibernate/files/hibernate3/3.3.2.GA/>

It is very important that you download the exact version, as the product has only been certified with this exact release.

You will need to create a permanent directory to place one of the files from hibernate-3.3.2.ga.zip. (e.g., /opt/hibernate).

Extract the file hibernate3.jar into the newly created directory (e.g., /opt/hibernate) from the hibernate-3.3.2.ga.zip zip file.

### **Oracle WebLogic 11gR1 (10.3.3 or 10.3.4) 64-bit**

Oracle WebLogic software can be downloaded from the Oracle web site. This application server will run as a 64-bit application.

- Download and install 64-bit Java (as documented above) before installing WebLogic.
- Download and install WebLogic Server 11gR1 (10.3.3 or 10.3.4).

# Oracle Linux 5.5 or Red Hat Linux 5.5 Application Server

This section describes the software requirements for operating the application using the Oracle Linux or Red Hat Linux application server.

## Supported Application Servers

Operating System	Chipsets	Application Server
Oracle Linux 5.5 (64-bit) Red Hat Enterprise Linux 5.5 (64-bit)	x86_64	Oracle WebLogic 11gR1 (10.3.3 or 10.3.4) 64-bit version

## Web/Application Server Tier

### Oracle Linux 5.5 or Red Hat Enterprise Linux 5.5 Operating System Running on x86\_64 64-bit Architecture

#### UNIX Administrator User ID

The following user groups and accounts have to be created to install and administer the application:

Description	Default Value	Customer Defined Value
Oracle Utilities Meter Data Management Administrator User ID	cissys	
Oracle Utilities Meter Data Management User Group	cisusr	

Note: It is recommended that you change the default values for security reasons.

Throughout this document the administrator user id is often referred to as the "cissys" user id. You should substitute that with the customer defined user id when not using the default value. After the initial install, the software should always be managed using that user id.

By default, the cissys userid is the only one given access to the files installed.

1. Create a group called cisusr (user group)
2. Create a user called cissys. Primary group cisusr. Set the primary shell for the cissys user to Korn Shell.

The shell scripts use the ">" to overwrite shell functionality. Your operating system may be configured to not allow this functionality by default in the users shell.

To avoid file access permission problems when executing scripts, consider placing the following command into cissys profile script:

```
set +o noclobber
```

#### Security Configuration

Various options exist to secure a system. In this application all files will be created with the minimum permissions required to ensure that group-readable, group-writable and group-

executable files will have the correct user groups and to restrict the permissions available to legitimate users. In this way, a low privileged end user cannot directly edit configuration files and thereby bypass application security controls.

The following users and group categories must be defined to implement this security. For demonstration purposes the following users and groups will be used. These users must be created according to industry standards (including password policies). All users should be created with a default umask of 022 to ensure files created during normal operation have the correct permissions.

Please replace these users and groups for your installation defaults:

User	Group	Description
cissys	cisusr	This user will be used to install the application and to apply patches. This user will own all the application files. The same care should be taken with this user ID as if it is 'root'. This user will be able to add, delete and modify files within the application.
cisadm	cisusr	Administrative and Operation functions will be available to this user. This user will be able to stop and start the application and batch processes, but will not have access to modify any file other than generated log files
cisoper	-----	Low level operator. This user will only be able to read logs files and collect information for debugging and investigative purposes. Care should be taken in production to disable debugging as debugging information could contain potential sensitive data which this user should not have privy to.

**Note:** The Oracle Client and WebLogic should be installed as the user who will stop and start the application. For example, if you plan to run the application as the install user these components must belong to cissys.

### Oracle Client 11.2.0.1 — Runtime Option

Install the Oracle Client as described in the Oracle Client installation documentation. Use the cissys account to install the Oracle Client. If another user installs the Oracle Client, make sure the cissys user ID has the proper execute permissions.

For the cissys user ID, ensure that the environment variable ORACLE\_CLIENT\_HOME is set up, and that ORACLE\_CLIENT\_HOME/perl/bin is the first Perl listed in the cissys account's PATH variable.

### Oracle Java Development Kit Version 6.0 Update 20 or Later, 64-bit

At time of release, Oracle Java packages could be obtained from:

<http://www.oracle.com/technetwork/java/archive-139210.html>

The Oracle WebLogic Server requires the 64-bit version. The main prerequisite for the Web server is the version of java mentioned above.

For the userid cissys, ensure that the environment variable JAVA\_HOME is setup, and that java\_home/bin and java\_home/lib can be found in cissys' PATH variable.

### Hibernate 3.3.2

You must install Hibernate before installing Oracle Utilities Meter Data Management.

Download the file hibernate-3.3.2.ga.zip (the zip file associated with the 3.3.2 GA release.) from the following link:

<http://sourceforge.net/projects/hibernate/files/hibernate3/3.3.2.GA/>

It is very important that you download the exact version, as the product has only been certified with this exact release.

You will need to create a permanent directory to place one of the files from hibernate-3.3.2.ga.zip. (e.g., /opt/hibernate).

Extract the file hibernate3.jar into the newly created directory (e.g., /opt/hibernate) from the hibernate-3.3.2.ga.zip zip file.

### **Oracle WebLogic 11gR1 (10.3.3 or 10.3.4) 64-bit**

Oracle WebLogic software can be downloaded from the Oracle web site. This application server will run as a 64-bit application.

- Download and install 64-bit Java (as documented above) before installing WebLogic.
- Download and install WebLogic Server 11gR1 (10.3.3 or 10.3.4).

# Solaris 10 Application Server

This section describes the software requirements for operating the application using the Sun Solaris 10 application server.

## Supported Application Servers

Operating System	Chipsets	Application Server
Solaris 10 Update 8 (64-bit)	SPARC	Oracle WebLogic 11gR1 (10.3.3 or 10.3.4) 64-bit version

## Web/Application Server Tier

### Solaris 10 Operating System Running on SPARC-based 64-bit Architecture

#### UNIX Administrator User ID

The following user groups and accounts have to be created to install and administer the application:

Description	Default Value	Customer Defined Value
Oracle Utilities Meter Data Management Administrator User ID	cissys	
Oracle Utilities Meter Data Management User Group	cisusr	

Note: It is recommended that you change the default values for security reasons.

Throughout this document the administrator user id is often referred to as the "cissys" user id. You should substitute that with the customer defined user id when not using the default value. After the initial install, the software should always be managed using that user id.

By default, the cissys userid is the only one given access to the files installed.

1. Create a group called cisusr (user group)
2. Create a user called cissys. Primary group cisusr. Set the primary shell for the cissys user to Korn Shell.

The shell scripts use the ">" to overwrite shell functionality. Your operating system may be configured to not allow this functionality by default in the users shell.

To avoid file access permission problems when executing scripts, consider placing the following command into cissys profile script:

```
set +o noclobber
```

#### Security Configuration

Various options exists to secure a system. In this application all files will be created with the minimum permissions required to ensure that group-readable, group-writable and group-executable files will have the correct user groups and to restrict the permissions available to

legitimate users. In this way, a low privileged end user cannot directly edit configuration files and thereby bypass application security controls.

The following users and group categories must be defined to implement this security. For demonstration purposes the following users and groups will be used. These users must be created according to industry standards (including password policies). All users should be created with a default umask of 022 to ensure files created during normal operation have the correct permissions.

Please replace these users and groups for your installation defaults:

User	Group	Description
cissys	cisusr	This user will be used to install the application and to apply patches. This user will own all the application files. The same care should be taken with this user ID as if it is 'root'. This user will be able to add, delete and modify files within the application.
cisadm	cisusr	Administrative and Operation functions will be available to this user. This user will be able to stop and start the application and batch processes, but will not have access to modify any file other than generated log files
cisoper	-----	Low level operator. This user will only be able to read logs files and collect information for debugging and investigative purposes. Care should be taken in production to disable debugging as debugging information could contain potential sensitive data which this user should not have privy to.

**Note:** The Oracle Client and WebLogic should be installed as the user who will stop and start the application. For example, if you plan to run the application as the install user these components must belong to cissys.

### Oracle Client 11.2.0.1 — Runtime Option

Install the Oracle Client as described in the Oracle Client installation documentation. Use the cissys account to install the Oracle Client. If another user installs the Oracle Client, make sure the cissys user ID has the proper execute permissions.

For the cissys user ID, ensure that the environment variable ORACLE\_CLIENT\_HOME is set up, and that ORACLE\_CLIENT\_HOME/perl/bin is the first Perl listed in the cissys account's PATH variable.

### Oracle Java Development Kit Version 6.0 Update 20 or Later, 64-bit

This software is only required for Oracle WebLogic installations.

At the time of release, the Oracle Java packages used in the test cycle were downloaded from:

<http://www.oracle.com/technetwork/java/archive-139210.html>

The Oracle WebLogic Server requires the 64-bit version. The main prerequisite for the Web server is the version of java mentioned above.

For the userid cissys, ensure that the environment variable JAVA\_HOME is setup, and that java\_home/bin and java\_home/lib can be found in cissys' PATH variable.

### Hibernate 3.3.2

You must install Hibernate before installing Oracle Utilities Meter Data Management.

Download the file hibernate-3.3.2.ga.zip (the zip file associated with the 3.3.2 GA release.) from the following link:

<http://sourceforge.net/projects/hibernate/files/hibernate3/3.3.2.GA/>

It is very important that you download the exact version, as the product has only been certified with this exact release.

You will need to create a permanent directory to place one of the files from hibernate-3.3.2.ga.zip. (e.g., /opt/hibernate).

Extract the file hibernate3.jar into the newly created directory (e.g., /opt/hibernate) from the hibernate-3.3.2.ga.zip zip file.

### **Oracle WebLogic 11gR1 (10.3.3 or 10.3.4) 64-bit**

Oracle WebLogic software can be downloaded from the Oracle web site. This application server will run as a 64-bit application.

- Download and install 64-bit Java (as documented above) before installing WebLogic.
- Download and install WebLogic Server 11gR1 (10.3.3 or 10.3.4).

## Windows 2008 Application Server

This section describes the software requirements for operating the application using the Windows application server.

### Supported Application Servers

Operating System	Chipsets	Application Server
Windows Server 2008 R2 (64-bit)	x86_64	Oracle WebLogic 11gR1 (10.3.3 or 10.3.4) 64-bit version

### Web/Application Server Tier

#### Oracle Client 11.2.0.1 — Runtime Option

Install the Oracle Client as described in the Oracle Client installation documentation. Use the cissys account to install the Oracle Client. If another user installs the Oracle Client, make sure the cissys user ID has the proper execute permissions.

For the cissys user ID, ensure that the environment variable ORACLE\_CLIENT\_HOME is set up, and that ORACLE\_CLIENT\_HOME/perl/bin is the first Perl listed in the cissys account's PATH variable.

#### Oracle Java Development Kit version 6.0 Update 20 or Later, 64-bit

This software is required for the Oracle WebLogic Installation.

At time of release, Oracle Java packages could be obtained from:

<http://www.oracle.com/technetwork/java/archive-139210.html>

The Oracle WebLogic Server requires the 64-bit version. The main prerequisite for the Web server is the version of java mentioned above.

For the userid cissys, ensure that the environment variable JAVA\_HOME is setup, and that java\_home/bin and java\_home/lib can be found in cissys' PATH variable.

#### Hibernate 3.3.2

Hibernate must be installed prior to the installation of Oracle Utilities Meter Data Management.

Please download the file hibernate-3.3.2.ga.zip from the following link:

<http://prdownloads.sourceforge.net/hibernate/>

or from the following link:

[http://sourceforge.net/project/showfiles.php?group\\_id=40712&package\\_id=127784](http://sourceforge.net/project/showfiles.php?group_id=40712&package_id=127784)

It is very important that you download the exact version, as the product has only been certified with this exact release.

You will need to create a permanent directory to place one of the files from hibernate-3.3.2.ga.zip. (e.g. c:\opt\hibernate3.3.2).

Extract the file hibernate3.jar from hibernate-3.3.2.ga.zip.

#### Oracle WebLogic 11gR1 (10.3.3 or 10.3.4) 64-bit

Oracle WebLogic software can be downloaded from the Oracle web site. This application server will run as a 64-bit application.

- Download and install 64-bit Java (as documented above) before installing WebLogic.
- Download and install WebLogic Server 11gR1 (10.3.3 or 10.3.4).



# Chapter 8

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## Configuring WebSphere Application Server

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**Note:** This section applies only to installations using WebSphere as an application server.

This section describes tasks that you should complete before you install the Oracle Utilities Application Framework. It also describes configuration tasks you should complete after installing Oracle Utilities Meter Data Management. It includes the following:

- **Configuring WebSphere Basic**

# Configuring WebSphere Basic

## Preinstallation Tasks

This section describes tasks that you should complete to configure a WebSphere Basic application server before you install the Oracle Utilities Application Framework.

When working within the WebSphere console make sure to apply and save your changes to the Master Configuration when appropriate.

### Setting of WebSphere Security

There are several security configuration options within WebSphere. In a production environment you must use the security implementation appropriate for your security requirements. During the QA cycle we used the User account repository of the Federated repository. The following procedures describe how to apply these security settings.

**Note:** Refer to the IBM WebSphere Application Server documentation for more details.

1. Start the WebSphere Administrative Console and log in.
2. Go to **Security, Global security**.
  - Check **Enable administrative security**.
  - Check **Enable application security**.
  - Select **Federated repositories** from the Available realm definitions
3. Click **Apply**.

### Setting WebSphere Application Groups

1. Start the WebSphere Administrative Console and log in.
2. Go to **Users and Groups - Manage Groups**.  
Create the group name of cisusers (default group).
3. Click **Create**.

### Setting WebSphere Application Users

1. Start the WebSphere Administrative Console and log in.
2. Go to **Users and Groups - Manage Users**.
  - Create the user Id of SYSUSER (example user)
  - Add the Group Membership of cisusers (created in the previous step) to the user.
3. Click **Create**.

### Setting WebSphere JNDI Users

1. Start the WebSphere Administrative Console and log in.
2. Go to **Users and Groups, Manage Users**.
  - Create the user id of JNDI (example user).
3. Click **Create**.

### Setting WebSphere JNDI Users - CORBA Naming Service Users

1. Start the WebSphere Administrative Console and log in.
2. Go to **Environment, Naming, CORBA Naming Service Users**.
  - Add the user id of JNDI (example user).

- Highlight all of the Roles (Cos Naming Read, Cos Naming Write, Cos Naming Create, Cos Naming Delete)
3. Click **Apply**.
 

**Note:** Prior to this step you will need to restart the server<sup>1</sup> since when adding CORBA Naming Service Users, the User is not recognized.
  4. Note the values for JNDI User and Password. The Oracle Utilities Application Framework will prompt you for this information during the installation.

## Creation of Additional Servers in WebSphere - Sample Script

You must also provide the name of servers during OUAF installation. You can use the following sample script to create additional servers using the wsadmin.sh tool.

**Note:** There are several other ways to accomplish this task.

1. Initialize a wsadmin.sh session:

```
<$WAS_HOME>/bin/wsadmin.sh -host localhost -port
<SoapConnectorPort> -conntype SOAP -username
<webSphereUserName> -password <webSphereUserPassword>
```

**Note:** Substitute \$WAS\_HOME, webSphereUserName, SoapConnectorPort, webSphereUserPassword, with values that are appropriate for your installation:

For example:

```
/ouaf/IBM/WebSphere70/AppServer/bin/wsadmin.sh -host
localhost -port
8889 -conntype SOAP
```

2. Create the server instance:

```
<wsadmin> $AdminTask createApplicationServer
<nodeName> {-name <serverName>}
```

## Setting General Server Properties

1. Connect to the WebSphere administrative console.
2. Select **Servers, Server Types, WebSphere application servers**, and then select **Application Servers**.
3. Select your server name.
4. Under the section General Properties.
  - Deselect **Parallel start**.
  - Deselect **Run in development mode**.
5. Click **OK**.
6. Click **Save** to commit the setting.

## Enabling SOAP Communication with WebSphere

The OUAF configuration scripts communicate with WebSphere as a SOAP client by using Jython commands to perform environment maintenance (for example, stop, start, deploy, undeploy).

To enable SOAP communication with WebSphere:

1. In a text editor, open the following file:

```
$WAS_HOME/profiles/<PROFILE_NAME>/properties/soap.client.props
```

Edit the property lines as follows:

- `com.ibm.SOAP.requestTimeout=0`
- `com.ibm.SOAP.loginUserId=< WebSphere_User_Id >`
- `com.ibm.SOAP.loginPassword=< WebSphere_Password >`

**Note:** Refer to IBM WebSphere Application Server documentation for more details.

1. If you want to encode the password in the `soap.client.props` file, then run the `PropFilePasswordEncoder` command from the `$WAS_HOME/profiles/<PROFILE_NAME>/bin` directory.

This command is specific to IBM WebSphere Application Server. It encodes passwords located in plain-text property files.

2. Save and close the file.

## Creation of Additional Servers in WebSphere - Sample Script

You must also provide the name of servers during the installation. You can use the following sample script to create additional servers using the `wsadmin.sh` tool.

**Note:** There are several other ways to accomplish this task.

1. Initialize a `wsadmin.sh` session:

```
<$WAS_HOME>/bin/wsadmin.sh -host localhost -port <SoapConnectorPort> -conntype SOAP -username <webSphereUserName> -password <webSphereUserPassword>
```

**Note:** Substitute `$WAS_HOME`, `webSphereUserName`, `SoapConnectorPort`, `webSphereUserPassword`, with values that are appropriate for your installation:

For example: `/ouaf/IBM/WebSphere70/AppServer/bin/wsadmin.sh -host localhost -port 8889 -conntype SOAP`

2. Create the server instance:

```
wsadmin> $AdminTask createApplicationServer <nodeName> {-name <serverName>}
```

## Obtaining the Bootstrap Port and WC\_defaulthost

You must also provide these port numbers during OUAF installation. Obtain the bootstrap port number and the `WC_defaulthost` by using the WebSphere administrative console.

**Note:** The WebSphere application server1 must be running to obtain the bootstrap port number and the `WC_defaulthost` port number.

To view the bootstrap port number and the `WC_defaulthost`:

1. Log on to the WebSphere administrative console.
2. Select **Servers, Server Types, WebSphere application servers, <server\_name>** and then select **Ports** under **Communications**.

The bootstrap port is displayed as `BOOTSTRAP_ADDRESS`.

The `WC_defaulthost` is displayed as `WC_defaulthost`.

3. Note the values for `WC_defaulthost` and `BOOTSTRAP_ADDRESS`. The Oracle Utilities Application Framework will prompt you for this information during the installation.

## Set Up a Virtual Host for the Server

1. Select **Environment, Virtual Host, default\_host**, and then select **Host Alias**.
2. Click **New**.

Enter the following:

- **Host Name:** \*
- **Port:** WC\_defaulthost Port Number

## Obtaining the WebSphere Node Name

You must also provide the node name during the installation. Obtain the node name by using the WebSphere administrative console.

**Note:** The WebSphere application server must be running to obtain the bootstrap port number.

To obtain the node name:

1. Connect to the WebSphere administrative console.
2. Select **Servers, Server Types, WebSphere application servers, <server\_name>**.

**Note:** Take note of the value for the Node Name.

## Installing Oracle Utilities Application Framework as a Non-Root User with IBM WebSphere Installed as Root

Installing Oracle Utilities Application Framework as a non-root user on a WebSphere application server running on AIX requires certain permissions. Prior to the installation, verify that the operating system user account installing the framework has write and execute permissions on the directories in which WebSphere will be installed.

## Postinstallation Tasks

This section describes tasks that you should complete after you have installed Oracle Utilities Meter Data Management on a WebSphere application server.

### Setting Environment Entries.

1. Connect to the WebSphere administrative console.
2. Select **Servers, Server Types, WebSphere application servers**.
3. Select the server name.
4. Go to **Server Infrastructure**, and then click **Java and Process Management**.
5. Select **Process Definition**.
6. Go to Environment Entries.
7. Click **New** and add the following Environment Entries:

Add the following entries:

**Name:** SPLENVIRON

**Value:** <\${SPLENVIRON}>

**Note:** Substitute \${SPLENVIRON} with appropriate values for your installation.

**Name:** SPLEBASE

**Value:** < \${SPLEBASE} >

**Note:** Substitute \${SPLEBASE} with appropriate values for your installation.

**Name:** LIBPATH

**Value:** <\${SPLEBASE} >/runtime

**Note:** Substitute \$SPLEBASE with appropriate values for your installation.

**Note:** You will need to restart the server\_name before you attempt to start the application on the server.

8. Click **OK**.
9. Click **Save** to commit the setting.

## Setting JVM Memory and Arguments

For Oracle Utilities Application Framework, JVM memory settings must be changed for production environments and/or when processing large volume in a nonproduction environment.

Perform the following steps to set the JVM memory size. The WebSphere application server must be running to set the memory size.

To set the JVM memory size:

1. Connect to the WebSphere administrative console.
2. Select **Servers, Server Types, WebSphere application servers**.
3. Select the server name.
4. Go to **Server Infrastructure**, and then click **Java and Process Management**.
5. Select **Process Definition**.
6. Go to **Additional Properties**, and then click **Java Virtual Machine**.
7. Enter 1024 for **Minimum Heap Size**.
8. Enter 1024 for **Maximum Heap Size**.
9. Enter -Djava.security.auth.login.config=<\$SPLEBASE>/splapp/config/java.login.config for Generic JVM arguments.

**Note:** Substitute \$SPLEBASE with appropriate values for your installation.

You will need to restart the server\_Name before you attempt to start the application on the server.

10. Click **OK**.
11. Click **Save** to commit the setting.

## Setting Server Custom Properties.

The following custom properties have been need in the past to enable WebSphere Classloader to load the correct xalan.jar file.

To set the Custom Properties:

1. Connect to the WebSphere administrative console.
2. Select **Servers, Server Types, WebSphere application servers**.
3. Select the server name.
4. Go to **Server Infrastructure**, and then click **Java and Process Management**.
5. Select **Process Definition**.
6. Go to **Additional Properties**, and then click **Java Virtual Machine**.
7. Go to **Additional Properties**, and then click **Custom Properties**.
8. Click **New**.

Enter the following information:

- **Name:** javax.xml.transform.TransformerFactory
  - **Value:** org.apache.xalan.processor.TransformerFactoryImpl
9. Click **OK**.
  10. Click **Save** to commit the setting.

## Setting the Web Container Custom Properties.

To set the Web Container Custom Properties:

1. Connect to the WebSphere administrative console.
2. Select **Servers, Server Types, WebSphere application servers**.
3. Select the server name.
4. Go to **Container Settings**, and then click **Web Container Settings**.
5. Select **Web container**.
6. Go to **Additional Properties**, and then click **Custom properties**.
7. Click **New**.

Enter the following information:

- **Name:** com.ibm.ws.webcontainer.invokefilterscompatibility
  - **Value:** true
8. Click **OK**.
  9. Click **Save** to commit the setting.

## Starting and Stopping WebSphere Servers

To start WebSphere on AIX use the `$WAS_HOME/profiles/<profile_name>/bin/startServer.sh` script. For example, run:

```
$WAS_HOME/profiles/<profile_name>/bin/startServer.sh <server_name>
```

To stop WebSphere on AIX, use the `$WAS_HOME/profiles/<profile_name>/bin/stopServer.sh` script. For example, run:

```
$WAS_HOME/profiles/<profile_name>/bin/stopServer.sh <server_name>
```

**Note:** The Oracle Utilities Application Framework script **spl.sh** does not stop or start the IBM WebSphere servers. It only stops and starts the Oracle Utilities Application Framework-based applications.

## Deployment Using Supplied Script

The application deployment script is `initialSetup.sh -d`, located in `$SPLEBASE/bin` (this script deploys both the `SPLService.ear` and `SPLWeb.ear`)

**Note:** Before running the script ensure you have initialized the environment by running `splenvron.sh`

## Deployment via the Admin Console

Follow these steps to deploy the application using the Admin Console:

### Deployment Overview

The application needs to be deployed in the following order:

1. `SPLService.ear`
2. `SPLWeb.ear`

**Note:** The SPLService.ear must be successfully deployed before deploying SPLWeb.ear

### Deploy SPLService.ear

1. Select the ear file to deploy.
  - Select **Applications, Install New Application.**
  - Select **Remote file system.**
  - Browse to the SPLService.ear or enter the full path to the file.
  - The ear files can be found under \$SPLEBASE/splapp/applications.
  - Click **Next.**
2. Select **Option Fast Path - Prompt only when additional information is required.** Click **Next.**
3. On the Select installation options page ensure that **Deploy enterprise beans** is checked. Click **Next.**
4. Assign the module to the WebSphere server instance.

When deploying an application from the console make sure you select the correct server and click **Apply.**
5. Review the summary page. Review the installation options.
6. Click **Finish.** The application will then deploy. The deployment process takes about 5 minutes.
7. Click **Save.** The save process can take more than 20 minutes.

### Deploying SPLWeb.ear

1. Select the ear file to deploy.
  - Select **Applications, Install New Application.**
  - Select **Remote file system.**
  - Browse to the SPLWeb.ear or enter the full path to the file.
  - The ear files can be found under \$SPLEBASE/splapp/applications.
  - Click **Next.**
2. Select **Option Fast Path - Prompt only when additional information is required.** Click **Next.**
3. Assign the module to the WebSphere server instance.

When deploying an application from the console make sure you select the correct server and click **Apply.**
4. Review the summary page. Review the installation options.
5. Click **Finish.** The application will then deploy. The deployment process takes about 5 minutes.
6. Click **Save.** The save process can take about more than 20 minutes.

### Configure the Applications

You need to apply these steps to both the SPLWeb and SPLService applications unless specified.

1. Set the startup order of the applications (this applies only to SPLWeb):
  - Select the SPLWeb application from **Applications, Enterprise Applications.**
  - Select **Startup behavior.**

- Change the startup order to 2.
  - Click **OK**.
  - Click **OK** and Save directly to master configuration.
2. Set the class loading order (for both SPLService.ear and SPLWeb.ear): Select Class loading and update detection.
    - Set Polling interval to 0.
    - Under Class loader order select Classes loaded with application class loader first. Click **OK** and Save to master configuration.
  3. Set the module starting weight:
    - **SPLService only:** Set the Starting weight to 1.
    - **SPLWeb only:** For each module (.war) set the Starting weight to 10000 and change the Class loader order to Classes loaded with application class loader first

### Configure Application Security

After using the supplied script to deploy the application to WebSphere you will need to configure each application's security before starting the application.

Using the WebSphere administration console select **Applications, Application Types, WebSphere enterprise applications, <Business Server Application Name>, <server name>** (for example, SPLService-server2), **Security role to user/group mapping**.

For role cisusers:

- Check **Select** and the click **Map Users:**
- Search for SYSUSER and add to the Selected users list.
- Click **OK**.

**Note:** Repeat the process for <Web Server Application Name>-<server name> (for example, SPLWeb-server2).

### Restart the WebSphere Server

It is recommended to stop and then restart the WebSphere server.

If the application is deployed in server1 you can use the admin console to stop and start the server. If the application is deployed in another server you will need to use the scripts that are supplied with WebSphere (stopServer.sh, startServer.sh).

**Note:** WebSphere admin console runs under server1.

### Application URL

The Web link to the WebSphere application will be:

`http://<hostname>:<WC_default_port>/<context_root>/loginPage.jsp`

For example, `http://oracle.test:9081/ouaf/loginPage.jsp`



# Chapter 9

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## Installing the Application Server Component of Oracle Utilities Application Framework

Installing the Oracle Utilities Application Framework is the prerequisite and foundation for installing a framework-based application such as Oracle Utilities Meter Data Management. This section describes the process for installing the Oracle Utilities Application Framework, including:

- **Installation Overview**
- **Preinstallation Tasks**
- **Installing Oracle Utilities Application Framework**

## Installation Overview

This process replaces any previously delivered and installed version of the Oracle Utilities Application Framework Server. Before you proceed:

1. Make sure that you have installed all the required third-party software as described in **Chapter 6: Installing Application Server Prerequisite Software**.
2. Complete the database installation (refer to the Oracle Utilities Meter Data Management *Database Administrator's Guide*).
3. If you plan to upgrade a previously installed application server make a backup before you start a new installation.

The application server installation process of Oracle Utilities Meter Data Management consists of the following:

1. Oracle Utilities Application Framework installation
2. Oracle Utilities Meter Data Framework application installation
3. Oracle Utilities Meter Data Management application installation

As a first step of the application server installation, the framework application server installation package must be downloaded and installed. The application server environment is created and configured by the framework installation process.

Once the Oracle Utilities Application Framework installation is successfully completed and the framework application environment is created, the Oracle Utilities Meter Data Framework can be installed on top of the framework environment.

You can download the installation packages from the Oracle Software Delivery Cloud.

This section describes how to install a working Oracle Utilities Application Framework Server, which can then be further configured manually to allow for production performance levels.

Application server installation packages delivered for this version are multi-platform and are ready to install on any supported platform (as described in the section **Supported Platforms**). You must complete the database installation before installing the application server.

# Preinstallation Tasks

## Hardware and Software Version Prerequisites

The section **Supported Platforms** contains all of the available platforms that are required with this release of the product.

## Database Installation

Verify that the database has been installed and is operational. See Oracle Utilities Meter Data Management *Database Administrator's Guide* for more information.

## Installation Prerequisites

**Chapter 6: Installing Application Server Prerequisite Software** describes all preparations that need to be done on the server prior to installing the application server. Please read carefully the server setup requirements and make sure that all prerequisite software is installed and that all required environment variables are set. Correct server setup and proper environment variable settings are an essential prerequisite for successful environment installation.

## System Architecture Overview

Oracle Utilities Application Framework V4.1.0 is a decoupled system architecture involving a Business Service Application tier and a Web Application tier. Typically both will run on the same server, but the design does allow each tier to be installed on separate servers.

The design implements a stateless session bean (EJB technology, under Java EE 6), to provide remote access to service invocations. The root Web app and XAI Web apps can be configured to access service processing locally (as in previous versions), or to make a remote EJB call to perform the service request. In the latter case, the served containers, effectively, run as very thin servlet wrappers around the remote call.

For all supported application servers except for WebLogic expanded configuration (SDK environment), the deployment is in the form of two Enterprise Archive (ear) Files: SPLService.ear and SPLWeb.ear. Web Archive (war) files are created during the installation process but are not deployed.

## Copying and Decompressing Install Media

The Oracle Utilities Application Framework installation file is delivered in jar format for both UNIX and Windows platforms.

If you are planning to install multiple Oracle Utilities Framework environments operated by different Oracle Utilities Administrator user ids, you must complete each of the following installation steps for each Administrator userid.

1. Log in to the application server host as the Oracle Utilities Framework administrator user ID (default cissys).
2. Create a temporary directory such as c:\ouaf\temp or /ouaf/temp. (Referred to below as <TEMPDIR>.)

This directory must be located outside any current or other working Oracle Utilities application environment. All files that are placed in this directory as a part of the installation can be deleted after completing a successful installation.

3. Copy the file FW-V4.1.0-MultiPlatform.jar from the delivered package to the <TEMPDIR>. If you are using FTP to transfer this file, remember to use the BINARY option for the FTP transfer.

4. Decompress the file:

```
cd <TEMPDIR>

jar -xvf FW-V4.1.0-MultiPlatform.jar
```

**Note:** You will need to have Java JDK installed on the machine used to (un)jar the application server installation package. Please install the JDK that is supported for the install on your platform to be able to use the jar command. This is the location of Java packages:

<http://www.oracle.com/technetwork/java/archive-139210.html>

A sub-directory named “FW.V4.1.0” is created. It contains the installation software for the Oracle Utilities framework application server.

## Set Permissions for the cistab File in UNIX

Every Oracle Utilities Application Framework environment installed on a server must be registered in the /etc/cistab file located on that server. On UNIX servers, generally only the root user ID has write permissions to the /etc directory. Since the installation process is run by the Oracle administrator user ID (cissys), this user ID may not be able to write to /etc/cistab table.

The install utility checks permissions and if it identifies a lack of the necessary permissions, it generates a script in the <TEMPDIR>/FW.V4.1.0 directory named cistab\_<SPLENVIRON>.sh. Run the generated script using the root account before continuing with the installation process. The script initializes the cistab file in /etc directory (if it is the first Oracle Utilities Framework application environment on the server) and registers a new environment.

The generated script also changes the owner of /etc/cistab file to the Oracle Utilities Framework administrator user ID, so that the next time a new environment is created by the same Oracle Utilities Framework administrator user ID, you do not need to run the generated script with the root user ID. Instead the install utility itself proceeds with the registration.

If you are reinstalling an existing environment, only the validation of /etc/cistab entry is done by the install utility, no new registration occurs. The install utility interactively instructs you about every step that needs to occur in each specific case.

If you are planning to upgrade an existing environment it is your responsibility to take a backup prior to the installation process. The installation utility does not create a backup of existing environment.

# Installing Oracle Utilities Application Framework

This section outlines the steps for installing the Application Framework.

## Brief Description of the Installation Process

1. Log on as the Oracle Utilities Framework administrator (the default is cissys on UNIX) or as a user with Administrator privileges (on Windows).
2. Configure your application server and any third-party software required for your platform, as outlined in **Chapter 6: Installing Application Server Prerequisite Software**.
3. Change directory to the <TEMPDIR>/FW.V4.1.0 directory.
4. Start the application installation utility by executing the appropriate script:  
**UNIX:** ksh ./install.sh  
**Windows:** install.cmd
5. Follow the messages and instructions that are produced by the application installation utility. Use the completed worksheets in the section **Application Framework Installation and Configuration Worksheets** to assist you.
6. Installation of Oracle Utilities Framework Application Server is complete if no errors occurred during installation.

## Detailed Description of the Installation Process

1. Log on to the host server as Oracle Utilities Application Framework administrator.  
Logon as cissys (on UNIX) or as a user with Administrator privileges (on Windows)
2. Configure application server and third-party software.  
Complete all steps outlined in **Chapter 6: Installing Application Server Prerequisite Software**. You will need to obtain specific information for the install.
3. Change directory to the <TEMPDIR>/FW.V4.1.0 directory and start the application installation utility by executing the appropriate script:  
**UNIX:** ksh ./install.sh  
**Windows:** install.cmd
4. On the Environment Installation Options menu, select item 1: Third Party Software Configuration.  
Use the completed Third Party Software Configuration worksheet to complete this step. See **Application Framework Installation and Configuration Worksheets**.
5. Select menu item 50: Environment Installation Options.  
Use the completed Environment Installation Options Worksheet to complete this step. See **Application Framework Installation and Configuration Worksheets**.  
**Note:** You must create the directory for output (the Log Mount Point). The installation process fails if this directory does not exist.
  - Specify the environment name and the environment directory names for a new installation on a menu screen.
  - Specify the type of the database your environment will be connected to (the default will be Oracle).
  - Specify the Web Application Server your environment will run with (the default will be WebLogic).

- Enter **P** to accept the selected options.
  - During this step, the specification of a new environment is checked for validity against /etc/cistab and the permissions on mount points and directories.
6. Configure environment parameters.
- During this step you will configure environment parameters such as Web server hosts and ports, database name, and userid.
  - The application installation utility shows default values for some configuration options.
  - Use the completed Environment Configuration Worksheet to assist you.
- Note:** Every option requires a value for a successful install. It is important to provide all values.
- When you are done with the parameters setup, proceed with the option **P. Write Configuration File.**
- All of the options will be written in the following File: \$ SPLEBASE/etc/ ENVIRON.INI.
- You will be warned if you did not edit a section. You may proceed if you want to keep the default settings.
  - The application installation utility copies the installation media to a new environment.
    - The installation utility copies the new version software from the temporary installation media directory to the new environment.
    - If any manual or electronic interruption occurs during this step, you can rerun the install utility from the beginning and follow the interactive instructions. The application installation utility is able to recover from such a failure.
  - The application installation utility generates environment configuration parameters:
    - The application installation utility automatically executes the script initialSetup.sh (on UNIX) or initialSetup.cmd (on Windows), located in \$SPLEBASE/bin (%SPLEBASE%\bin on Windows) directory. This script populates different application template configuration files with the new environment variables values and completes the rest of the installation steps.
7. Set up environment variables.

Once the ENVIRON.INI file is created and contains the correct environment parameters, the application installation utility starts a sub shell to the current process by executing the splenviron.sh (on UNIX) or splenviron.cmd (on Windows) script, located in \$SPLEBASE/bin (or %SPLEBASE%\etc for Windows) directory. This script sets up all the necessary environment variables and shell settings for the application server to function correctly.

From this point, a number of environment variables have been set up. Some key ones are:

- \$PATH - an adjustment to \$PATH is made so that all of the environment scripts and objects will be in the path.
- \$SPLEBASE (%SPLEBASE%) - stands for <SPLEDIR>/<SPLENVIRON> directory
- \$SPLEOUTPUT (%SPLEOUTPUT%) - stands for <SPLEDIROUT>/<SPLENVIRON> directory

**Note:** Make sure that this directory exists. Otherwise the installation script will fail.

- \$SPLENVIRON (%SPLENVIRON%) - environment name

For future operations or any post installation steps, you need to first execute the following command to connect your session to the new environment:

**UNIX:** \$SPLEBASE/bin/splenvron.sh -e \$SPLENVIRON

**Windows:** %SPLEBASE%\bin\splenvron.cmd -e %SPLENVIRON%

You need to execute this script each time you want to be connected to the specific environment before performing manual operations such as shutdown, startup or performing an additional application product installation.

When you have finished the install process, your current online session will be connected to the new environment.

See the chapter **Planning the Installation** for settings and configuration.



# Chapter 10

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## Installing the Application Server Component of Oracle Utilities Meter Data Framework

Installing Oracle Utilities Meter Data Framework is a prerequisite for installing Oracle Utilities Meter Data Management. This section describes the process for installing Oracle Utilities Meter Data Framework on top of the previously created Oracle Utilities Application Framework environment. This section includes:

- **Preinstallation Tasks**
- **Installing Oracle Utilities Meter Data Framework**

To proceed with the Oracle Utilities Meter Data Framework installation you need to be connected to the target framework application environment. See the detailed installation instructions in the following section.

You must initialize the Framework environment along with the required set of patches prior to proceeding with the Oracle Utilities Meter Data Framework application installation. For detailed instructions see **Preparing for the Installation** on page 10-3.

## Preinstallation Tasks

This section describes the steps that should be taken before installing Oracle Utilities Meter Data Framework.

### Installing Prerequisite Patches

Oracle Utilities Application Framework patches must be installed prior to installing Oracle Utilities Meter Data Framework 2.0.1.5. These patches are available as a convenience rollup along with this Media Pack. Please refer to the instructions contained inside the rollup directory for steps to install the patches in a single group. These patches are also available for download separately from My Oracle Support.

See Appendix B for a list of the patches contained in the rollup.

### Copying and Decompressing Install Media

The installation file is delivered in jar format for both UNIX and Windows platforms.

Oracle Utilities Meter Data Framework is delivered as a separate installation package. Please refer to the **Supported Platforms** section for installation details regarding the database and operating system versions supported for the Meter Data Framework. Also see the chapter **Installing Application Server Prerequisite Software** for prerequisite third-party software installation instructions.

Download the installation package and proceed as follows:

1. Log in to the host server as the Oracle Utilities Application Framework administrator user ID (default cissys). This is the same user ID that was used to install the Oracle Utilities Application Framework.
2. Create a <TEMPDIR> directory on the host server, which is independent of any current or other working Oracle Utilities Meter Data Framework application environment. This can be the same <TEMPDIR> used during the installation of the Oracle Utilities Application Framework.
3. Copy the file MDF-V2.0.1.5-MultiPlatform.jar in the delivered package to a <TEMPDIR> on your host server. If you are using FTP to transfer this file, remember to use the BINARY option for the FTP transfer.
4. Decompress the file:

```
cd <TEMPDIR>
jar -xvf MDF-V2.0.1.5-MultiPlatform.jar
```

For Windows installations, include the location of the JDK in your path before you execute the jar command.

For both Unix and Windows platforms, a sub-directory named MDFV2.0.1 is created. The contents of the installation directory are identical for both platforms. The directory contains the install software for the application.

# Installing Oracle Utilities Meter Data Framework

This section outlines the steps for installing the Meter Data Framework.

## Preparing for the Installation

1. Log on as Oracle Utilities Meter Data Framework Administrator (default cissys).
2. Initialize the Framework environment that you want to install the product into.

### UNIX:

```
$SPLEBASE/bin/splenvron.sh -e $SPLENVIRON
```

### Windows:

```
%SPLEBASE%\bin\splenvron.cmd -e %SPLENVIRON%
```

3. Stop the environment if running.

### UNIX:

```
$SPLEBASE/bin/spl.sh stop
```

### Windows:

```
%SPLEBASE%\bin\spl.cmd stop
```

## Installing the Application

1. Change to the <TEMPDIR>/MDFV2.0.1 Directory.
2. Execute the script:

### UNIX:

```
ksh ./install.sh
```

### Windows:

```
install.cmd
```

**Note:** On UNIX, ensure that you have the proper execute permission on install.sh

The configuration menu for the Oracle Utilities Meter Data Framework Application appears

3. Select menu item 8 to configure OSB.

Use the completed OSB configuration worksheet to assist you in this step. See the **Meter Data Framework Installation and Configuration Worksheets** in the chapter **Planning the Installation**.

4. Select menu item 9 to configure SOA.

Use the completed SOA configuration worksheet to assist you in this step. See the **Meter Data Framework Installation and Configuration Worksheets** in the chapter **Planning the Installation**.

5. When you are done with the parameter setup, choose option P to proceed with the installation.
6. Change to the <TEMPDIR>/MDFV2.0.1 directory

7. Execute the following command:

**UNIX:**

```
ksh ./postinstall.sh
```

**Windows:**

```
postinstall.cmd
```

**Note:** On UNIX, ensure that you have the proper execute permission on `postinstall.sh`

Installation of Oracle Utilities Meter Data Framework Application Server is complete if no errors occurred during installation.

# Chapter 11

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## Installing the Application Server Component of Oracle Utilities Meter Data Management

This section describes the procedure for installing Oracle Utilities Meter Data Management on top of the previously installed Oracle Utilities Meter Data Framework environment. This section includes:

- **Preinstallation Tasks**
- **Installing the Application**
- **Installing User Documentation**
- **Operating the Application**

To proceed with the Oracle Utilities Meter Data Management installation you need to be connected to the target Oracle Utilities Meter Data Framework application environment. See the detailed installation instructions in the following section.

You *must* initialize the Meter Data Framework environment. For detailed instructions see **Preparing for the Installation** on page 11-2.

## Preinstallation Tasks

This section describes the steps that should be taken before installing Oracle Utilities Meter Data Management.

### Installation Prerequisite

The Oracle Utilities Meter Data Framework 2.0.1 application must be installed prior to installing Oracle Utilities Meter Data Management 2.0.1.

### Copying and Decompressing Install Media

The installation file is delivered in jar format for both UNIX and Windows platforms.

Oracle Utilities Meter Data Management is delivered as a separate installation package. Please refer to the **Supported Platforms** on page 3-5 for versions and installation details regarding the database and operating system. Also see **Chapter 7: Installing Application Server Prerequisite Software** for prerequisite third-party software installation instructions.

Download the installation package and proceed as follows:

1. Log in to the host server as the Oracle Utilities Meter Data Framework administrator user ID (default cissys). This is the same user ID that was used to install the Oracle Utilities Meter Data Framework.
2. Create a <TEMPDIR> directory on the host server, which is independent of any current or other working Oracle Utilities Meter Data Management application environment. This can be the same <TEMPDIR> used during the installation of the Oracle Utilities Meter Data Framework.
3. Copy the file MDM-V2.0.1-MultiPlatform.jar in the delivered package to a <TEMPDIR> on your host server. If you are using FTP to transfer this file, remember to use the BINARY option for the FTP transfer.

4. Decompress the file:

```
cd <TEMPDIR>

jar -xvf MDM-V2.0.1-MultiPlatform.jar
```

For Windows installations, include the location of the JDK in your path before you execute the jar command.

For both Unix and Windows platforms, a sub-directory named MDM.V2.0.1 is created. The contents of the installation directory are identical for both platforms. The directory contains the install software for the application product.

### Preparing for the Installation

1. Log on as Oracle Utilities Meter Data Management Administrator (default cissys).
2. Initialize the Framework environment that you want to install the product into.

#### UNIX:

```
$SPLBASE/bin/splenvron.sh -e $SPLENVIRON
```

#### Windows:

```
%SPLBASE%\bin\splenvron.cmd -e %SPLENVIRON%
```

3. Stop the environment if running.

**UNIX:**

```
$SPLEBASE/bin/spl.sh stop
```

**Windows:**

```
%SPLEBASE%\bin\spl.cmd stop
```

## Installing the Application

1. Change to the <TEMPDIR>/MDM.V2.0.1 directory.
2. Execute the install script:

**UNIX:**

```
ksh ./install.sh
```

**Windows:**

```
install.cmd
```

**Note:** On UNIX, ensure that you have the proper execute permission on install.sh.

3. Choose option P to proceed with the installation.
4. Change to the <TEMPDIR>/MDM.V2.0.1 directory
5. Execute the following command:

**UNIX:**

```
ksh ./postinstall.sh
```

**Windows:**

```
postinstall.cmd
```

**Note:** On UNIX, ensure that you have the proper execute permission on postinstall.sh

6. Once the install has finished successfully, you will need to execute Post Installation steps:

## Post Installation steps:

1. Start up the environment. Run the following command:

**UNIX:** spl.sh start

**Windows:** spl.cmd start

Follow the messages on the screen along with the logs in \$SPLSYSTEMLOGS directory to ensure that the environment was started successfully.

If the startup failed, identify the problem by reviewing the logs. Resolve any issues before attempting to restart the environment.

You should postpone the startup process until you are done with post installation steps.

(See the note below:)

Use the following utility to stop the environment:

**UNIX:** spl.sh stop

**Windows:** spl.cmd stop

**Note:** The first time you start Oracle Utilities Meter Data Management, you need to log in to the WebLogic console and give system access to cisusers role. The WebLogic console application can be accessed through the following URL:  
`http://<hostname>:<portname>/console`

## Installing User Documentation

This section provides instructions for installing the Oracle Utilities Meter Data Management user documentation that is supplied with the system. The Oracle Utilities Meter Data Management user documentation is provided in PDF format for printing.

The documentation is also provided in HTML format located inside the Oracle Utilities Meter Data Management application server installation package. It is automatically installed and can be launched from the user interface. The files are under the applications directory packaged in the file named help.war. User documentation is provided in English (ENG). The documentation material is divided into the following subdirectories underneath the language directory:

- D1: Oracle Utilities Meter Data Framework User Guide
- D2: Oracle Utilities Meter Data Management User Guide
- F1: Oracle Utilities Application Framework Administration and Business Process Guides

## Installing Stand-Alone Online Help

You can also use the Oracle Utilities Meter Data Management online help in stand-alone mode (that is, you do not have to launch it from the Oracle Utilities Meter Data Management application or access it on the application server).

To install the Oracle Utilities Meter Data Management help for stand-alone operation, copy the help.war from the Oracle Utilities Meter Data Management server (environment) or from the Oracle Utilities Meter Data Management installation package to the server or machine on which you want to access the help. If you want to copy the file from any installed Oracle Utilities Meter Data Management environment, you can locate the file in the \$SPLBASE/splapp/applications directory on the server.

Unzip the help.war file to any directory on your machine. To launch the Oracle Utilities Meter Data Management help in stand-alone mode, open the SPLHelp.html file (located inside the language directory that you wish to use).

**Note:** Do not change the subdirectory names. The documents use relative path names to link to other documents. Changing the subdirectory names will result in broken links.

### Customizing Help for Stand-Alone Operation

You can customize the SPLHelp.html file to open to the file and topic that you most frequently use. To do so, edit the SPLHelp.html file and change the DEFAULT\_BOOKMARK to the desired location. The default DEFAULT\_BOOKMARK is 'helpHome.html'.

### Installing Stand-Alone Help Under Web Server

You can also install Oracle Utilities Meter Data Management online help as a stand-alone web application. You can use any Web Application server like WebLogic. Configure the configuration file for your web application server to use web application help.

For example,

- For WebLogic, configure config.xml file for deployed application Name="help" with URI="help.war" and set WebServer DefaultWebApp="help"

- For WebSphere, configure application.xml with module id="WebModule\_help" and <web-uri>help.war</web-uri>
- For Tomcat, configure server.xml with Context path="/help" and docBase= full path of help.war file

Access the documentation from the browser by the following URL:

http://<host name>:<port name>/<WebContext>/<Lang>/SPLHelp.html, where <hostname>:<portname> is the URL of the web server, <Web Context> is the root web context name specified during Web application server configuration, <Lang> is the name of the language directory, for example, ENG.

Note: Stand-alone online help files are not automatically updated when changes are made to the help files on the application server. You will have to re-install the stand-alone online help files.

## Operating the Application

At this point your installation and custom integration process is complete.

Be sure to read the *Oracle Utilities Meter Data Management Server Administration Guide* for more information on further configuring and operating the Oracle Utilities Meter Data Management system.



# Chapter 12

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## Additional Tasks

This section describes tasks that should be completed after installing Oracle Utilities Meter Data Management, including:

- **Customizing Configuration Files**
- **Generating the Application Viewer**
- **Building Javadoc Indexes**
- **Configuring the Environment for Batch Processing**
- **Customizing the Logo**
- **WebLogic Production Server Considerations**
- **BI Publisher Report Configuration**

## Customizing Configuration Files

You may wish to make customer modifications to various configuration files. To do so, you should locate the configuration file you want to customize and edit it manually.

Configuration files are generated from delivered templates in the Oracle Utilities installation and are populated by values entered by the installation utility during the configuration process. In future upgrades of Oracle Utilities application software versions, some templates may be changed to reflect new software version requirements. In this case, the upgrade process will back up your customized configuration file and will regenerate a configuration file based on a new template. You will need to review the new configuration file and apply your customized changes back if still applicable for the new version.

For configuration files that are located in a Web application (for example, web.xml, hibernate.properties), of the Web application during installation process, you will not be able to edit the configuration files directly.

You will need to follow the procedure:

- Locate the configuration file you want to customize in the directory \$SPLEBASE/etc/conf.
- Apply your changes.
- Update application war file with the latest changes by executing the command:

**UNIX:** \$SPLEBASE/bin/genupdatewar.sh

**Windows:** %SPLEBASE%\bin\genupdatewar.cmd

## Generating the Application Viewer

You may extend Application Viewer capabilities within an environment by generating additional items. The additional items that can be generated include algorithm type and related algorithm information, maintenance object information and data dictionary information.

This section details the steps necessary to generate the additional items.

1. Shut down the environment.
2. Initialize a command shell:

The scripts that are provided with the system need to be run from a shell prompt on the machine that you installed the application on. Before such scripts can be run the shell must be “initialized” by running the splenvron script provided with the system.

### For Windows:

The command window should be opened on the Windows server that you installed the application on.

In the below example you should replace the variables:

%SPLEBASE% with the Full directory name that you installed the application into  
and

%SPLENVIRON% with the name you gave to the environment at installation time.

To initialize the environment type the following in your command prompt:

%SPLEBASE%\bin\splenvron.cmd -e %SPLENVIRON%

For example:

D:\ouaf\TEST\_ENVIRON1\bin\splenvron.cmd -e TEST\_ENVIRON1

### For Unix:

You will need to logon to your UNIX box as the Oracle Utilities Administrator (default cissys) and open a shell prompt.

In the below example you should replace the variables

\$SPLEBASE with the Full directory name that you installed the application into  
and

\$SPLENVIRON with the name you gave to the environment at installation time.

To initialize the environment type:

```
$SPLEBASE/bin/splenviron.sh -e $SPLENVIRON
```

For example:

```
/ouaf/TEST_ENVIRON1/bin/splenviron.sh -e TEST_ENVIRON1
```

3. Execute the script to generate all information

Execute the following command for your operating system

**UNIX:**

```
ksh $SPLEBASE/bin/genappvieweritems.sh
```

**Windows:**

```
%SPLEBASE%\bin\genappvieweritems.cmd
```

4. Restart your application

## Building Javadoc Indexes

The following script allows rebuilding the Javadocs indexes in the appViewer java module. This is necessary after Customer Modifications have been applied to an environment. (This needs to be run only if the Customer Modification includes Java Code.)

**Windows:**

```
%SPLEBASE%\bin\buildJavadocsIndex.cmd
```

**UNIX:**

```
ksh $SPLEBASE/bin/buildJavadocsIndex.sh
```

## Configuring the Environment for Batch Processing

See the *Batch Server Administration Guide* for information on configuring the environment for batch processing.

## Customizing the Logo

The customer may want to replace the Oracle Utilities logo image on the Main menu with another logo image. To do this, put the logo <customer\_logo\_file>.gif file into the directory \$SPLEBASE/etc/conf/root/cm and create a new “External” Navigation Key called CM\_logoImage. To do that, run the Oracle Utilities application from the browser with the parameters: http://<hostname>:<port>/cis.jsp?utilities=true&tools=true. From the Admin menu, select Navigation Key. Add the above Navigation Key with its corresponding URL Override path. The syntax for the URL path is:

**For Windows:** http://<host name>:<port>/<Web Context>/cm/<customer\_logo\_file>.gif

**For UNIX:** http://<host name>:<port>/<Web Context>/cm/<customer\_logo\_file>.gif.

The root directory may be deployed in war file format for runtime environment (SPLApp.war). Use provided utilities to incorporate your cm directory into SPLApp.war file.

## WebLogic Production Server Considerations

By default, WebLogic Server is configured with two keystores, to be used for development only. These keystores should not be used in a production environment.

### Configure Identity and Trust

Private keys, digital certificates, and trusted certificate authority certificates establish and verify identity and trust in the WebLogic Server environment. WebLogic Server is configured with a default identity keystore DemoIdentity.jks and a default trust keystore DemoTrust.jks. In addition, WebLogic Server trusts the certificate authorities in the cacerts file in the JDK. This default keystore configuration is appropriate for testing and development purposes. However, these keystores should not be used in a production environment.

To configure identity and trust for a server:

1. Obtain digital certificates, private keys, and trusted CA certificates from the CertGen utility, Sun Microsystem's keytool utility, or a reputable vendor such as Entrust or Verisign. You can also use the digital certificates, private keys, and trusted CA certificates provided by the WebLogic Server kit. The demonstration digital certificates, private keys, and trusted CA certificates should be used in a development environment only.
2. Store the private keys, digital certificates, and trusted CA certificates. Private keys and trusted CA certificates are stored in a keystore.
3. Configure the identity and trust keystores for a WebLogic Server instance on the Configuration: Keystores page.

By default, WebLogic Server is configured with two keystores, to be used for development only.

- DemoIdentity.jks: Contains a demonstration private key for WebLogic Server. This keystore establishes an identity for WebLogic Server.
- DemoTrust.jks: Contains a list of certificate authorities trusted by WebLogic Server. This keystore establishes trust for WebLogic Server.

These keystores are located in the WL\_HOME\server\lib directory and the JAVA\_HOME\jre\lib\security directory. For testing and development purposes, the keystore configuration is complete. Use the steps in this section to configure identity and trust keystores for production use.

Refer to the WebLogic documentation to configure identity and trust keystores for production use (Secure servers and resources > Configure identity and trust/Set up SSL)

**Note:** Depending on your choice of implementation you may need to change some configuration files. These files are managed by templates and will be overwritten if the procedures documented in “Customizing Configuration Files” are not followed.

## BI Publisher Report Configuration

This release of Oracle Utilities Meter Data Management comes bundled with a sample BI Publisher report. To configure BI Publisher to access this report, follow these steps:

1. Install BI Publisher 10g (10.1.3.4.0).
2. Login as admin and create a Data Source to connect to the database where MDM is installed.
3. Create a shared folder for uploading the report.

4. Upload the sample report file D2\_VEEEME.xdo to the shared folder created above. This file is located under:  
`<INSTALL_DIR>/reports/BIPublisher`
5. Edit the report to point to the MDM Data Source.
6. Upload the template file VEEEME.rtf for the uploaded report. This file is located under:  
`<INSTALL_DIR>/reports/BIPublisher`
7. Update the reporting options in the MDM application to point to the correct BI Publisher server URL and shared folder location.



# Appendix A

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## Glossary of Acronyms

**ADF:** Oracle Application Development Framework

**EAR:** Enterprise Archive

**EJB:** Enterprise JavaBeans

**HTML:** HyperText Markup Language

**JAR:** Java Archive

**JDBC:** Java database connectivity

**JMX:** Java Management Extensions

**JNDI:** Java Naming and Directory Interface

**JSP:** JavaServer Pages

**JVM:** Java Virtual Machine.

**MPL:** Multi Purpose Listener

**OUAF:** Oracle Utilities Application Framework

**OAM:** Oracle Access Manager

**OIM:** Oracle Identity Management

**ONS:** Oracle Notification Service

**Oracle RAC FCF:** Oracle Real Application Clusters Fast Connection Failover

**RMI:** Remote Method Invocation

**SOAP:** Simple Object Access Protocol

**SOA:** Service-oriented architecture

**SPLEBASE:** The location where the application will be installed.

**SPLOUTPUT:** This location is used for storing batch log files and output from batch jobs

**WAR:** Web application Archive

**WAS:** WebSphere

**WASND:** WebSphere Network Deployment

**WLS:** WebLogic

**XAIApp:** XML Application Integration



# Appendix B

## Required Application Framework Patches

The following table lists the Oracle Utilities Application Framework patches that must be installed prior to installing Oracle Utilities Meter Data Framework. These patches are available as a convenience rollup included in the Media Pack.

8503140	10624363	11735716	12337775
8901782	10625739	11738085	12338323
9042555	10631948	11739404	12340553
9382171	10632029	11742563	12344492
9387114	10636556	11742578	12344520
9455478	10638783	11744412	12354548
9527752	10639236	11785204	12355193
9540205	10639817	11790352	12355336
9564113	10640366	11791685	12355345
9569173	10647519	11793264	12355355
9618908	10649131	11800924	12355359
9682934	11055998	11800964	12355545
9712702	11056031	11802408	12355578
9822605	11061063	11802524	12355589
9943141	11065275	11805029	12357553
10014729	11065841	11810803	12358078
10133277	11066173	11812272	12369181
10179538	11068621	11825658	12369294
10189618	11068834	11825757	12375706
10215092	11070215	11825763	12377282
10235438	11071551	11826984	12380588
10235446	11074152	11827061	12388252
10235453	11077044	11828290	12388695
10235472	11078114	11829323	12390834

8503140	10624363	11735716	12337775
10281572	11659316	11831954	12394303
10283802	11659469	11831962	12396557
10289114	11671144	11836696	12397361
10316317	11673372	11837168	12398660
10316391	11675596	11838963	12401741
10316953	11676685	11838977	12404368
10324881	11677625	11840470	12412886
10334495	11684041	11844142	12415869
10335027	11684640	11844499	12417483
10357429	11686129	11846353	12417960
10357830	11686789	11848622	12428239
10360341	11687677	11849058	12432357
10360688	11688966	11865125	12432996
10371591	11689021	11870260	12536674
10374359	11689086	11870708	12537292
10375560	11689155	11875008	12539014
10375682	11689215	11875029	12546120
10376226	11690177	11880325	12546220
10376879	11691074	11881465	12548444
10380556	11691830	11882316	12548945
10382474	11691896	11882984	12556076
10383911	11694867	11886308	12558316
10387212	11698997	11886487	12560045
10390304	11699913	11888040	12561191
10391114	11700127	11888244	12564985
10399826	11700177	11890627	12564994
10400934	11703071	11893511	12565011
10401066	11706217	11894700	12567535
10403427	11708221	11896216	12574075
10411296	11709380	11897375	12578692
10411845	11711736	11900153	12584797
10413650	11712334	11900457	12593383
10413698	11713020	11903828	12632749
10416888	11714753	11904426	12680209
10419736	11714946	11930834	12703227

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8503140	10624363	11735716	12337775
10419846	11718025	11935491	12774795
10422028	11718917	11935602	12844738
10424407	11724144	11937218	12874623
10428600	11725991	11937452	12875351
10428634	11729096	12327094	12932177
10435878	11731141	12327124	12938862
10623053	11735128	12329849	12958675



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