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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:

<table>
<thead>
<tr>
<th>Convention</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>boldface</strong></td>
<td>Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.</td>
</tr>
<tr>
<td><em>italic</em></td>
<td>Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.</td>
</tr>
<tr>
<td>Convention</td>
<td>Meaning</td>
</tr>
<tr>
<td>------------</td>
<td>---------</td>
</tr>
<tr>
<td>monospace</td>
<td>Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.</td>
</tr>
</tbody>
</table>
Chapter 1
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 4: 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 6: 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 7: Installing the Application Server Component of Oracle Utilities Application Framework.

7. Install the meter data framework for the application as described in Chapter 8: Installing the Application Server Component of Oracle Utilities Meter Data Framework.

8. Install Oracle Utilities Meter Data Management as described in Chapter 9: Installing the Application Server Component of Oracle Utilities Meter Data Management.

9. Follow the installation guidelines described in Chapter 10: Additional Tasks.
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 / Business Application Server, or Business Logic Tier

This tier is implemented in a Web application or business application 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.

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

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
- 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.
Requirements by Tier

The application is deployed on multiple Tiers:

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

Tier 1, Desktop: Software and Hardware Requirements

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

* The Recommended configuration will support better performance of the client.

** 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 with Internet Explorer 7.x or 8.x

Tier 2, Web/Business Application 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 application and business servers on the same machine and the system running with 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:

<table>
<thead>
<tr>
<th>Location</th>
<th>Size</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>$SPLEBASE</td>
<td>5 GB minimum</td>
<td>This location is where the application and Framework get installed. Startup, shutdown and other online log files are stored here. The size and space that is used should be monitored because various debugging options can significantly affect the size of log files.</td>
</tr>
<tr>
<td>$SPLAPP</td>
<td>2 GB minimum</td>
<td>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.</td>
</tr>
<tr>
<td>Location of the application Web work files on the Web servers</td>
<td>1.5 GB minimum</td>
<td>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.</td>
</tr>
<tr>
<td>Installation temporary area</td>
<td>4 GB</td>
<td>The application gets installed from this location. You need enough space to uncompress the files and install the application.</td>
</tr>
<tr>
<td>Oracle data area</td>
<td>4 GB minimum</td>
<td>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.</td>
</tr>
</tbody>
</table>

### 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 6: 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 2.0.0 has been tested and certified.

<table>
<thead>
<tr>
<th>Browser</th>
<th>Operating System (Client)</th>
<th>Operating System (Server)</th>
<th>Chipset</th>
<th>Application Server</th>
<th>Database</th>
</tr>
</thead>
<tbody>
<tr>
<td>IE 7.x</td>
<td>Windows XP SP3</td>
<td>Oracle Enterprise Linux 5.4 (64-bit) Red Hat Enterprise Linux 5.4 (64-bit)</td>
<td>x86_64</td>
<td>WebLogic 10.3.3</td>
<td>Oracle 11.2.0.1</td>
</tr>
<tr>
<td>IE 8.x</td>
<td>Windows 7</td>
<td>Sun Solaris 10 Update 8 (64-bit) SPARC</td>
<td>x86_64</td>
<td>WebLogic 10.3.3</td>
<td>Oracle 11.2.0.1</td>
</tr>
</tbody>
</table>

Oracle Database Servers

Oracle Utilities Meter Data Management version 2.0.0 is supported with Oracle Database Server 11.2.0.1 on all of the operating systems listed above.

The Oracle 11.2.0.1 client is required for this version of the database server.

The following Oracle Database Server Editions are supported:

- Oracle Database Server Standard Edition
- Oracle Database 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 that in a test environment prior to updating the Oracle Utilities Meter Data Management production environment.

The only exception from this rule is Hibernate software. For this the exact version mentioned in this guide must be installed. Please always check with Oracle Utilities Meter Data Management support prior to installing Hibernate updates.

Always contact Oracle Utilities Meter Data Management support prior to applying vendor updates that do not guarantee backward compatibility.
Chapter 4
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
The following diagram provides an overview of the steps that need to be taken to install and configure Oracle Utilities Meter Data Management:
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 4-3 for more information).
   - Oracle client 11.2.0.1 (for connecting to Oracle database)
   - Java 6
   - Hibernate 3.3.2
3. Install Web Server.
   - Oracle WebLogic 10.3.3
4. Verify that all software installed.
5. Set up environment variables.
8. Install Oracle Utilities Meter Data Framework.
9. Install Oracle Utilities Meter Data Management.
10. Deploy Oracle Utilities Meter Data Management application.
11. 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 6: 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 Chapter 7: 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 Chapter 6: 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.

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 used 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 two different types of values given:

• Default values are the values that will be defaulted when running the installation utility.
• Example Values show examples of values that you can be used for a default installation.

Passwords are entered in silent mode and are encrypted as they are entered.

Install the Oracle Client software specified in Supported Platforms on page 3-5 prior to running any of the installation utilities.

The following prompt will appear when executing the installation utility:

4-4 Oracle Utilities Meter Data Management Installation Guide
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.

### Third Party Software Configuration

<table>
<thead>
<tr>
<th>Menu Option</th>
<th>Name Used In Documentation</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Client Home Directory</td>
<td>ORACLE_CLIENT_HOME</td>
<td>The home directory of the Oracle Client. The application will use the Perl included under this Oracle Client.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Example Location: /oracle/client/product/11.2.0.1</td>
</tr>
<tr>
<td>Web Java Home Directory</td>
<td>JAVA_HOME</td>
<td>Java home that will be used by the Web application server.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Example Location: /ouaf/java/jdk1.6.0_18</td>
</tr>
<tr>
<td>* Child JVM Home Directory</td>
<td>CHILD_JVM_JAVA_HOME</td>
<td>Java home that will be used by the child java process that handles COBOL related requests.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Example Location: /ouaf/java/jdk1.6.0_18</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Note: This menu option is not applicable to Oracle Utilities Meter Data Management.</td>
</tr>
<tr>
<td>Menu Option</td>
<td>Name Used In Documentation</td>
<td>Usage</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-----------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>* COBOL Home Directory</td>
<td>COBDIR</td>
<td>COBOL installation location directory.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Example Location: /opt/SPLcobAS51WP4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Note: This menu option is not applicable to Oracle Utilities Meter Data Management.</td>
</tr>
<tr>
<td>Hibernate JAR Directory</td>
<td>HIBERNATE_JAR_DIR</td>
<td>Location on the disk where the hibernate3.jar is installed.</td>
</tr>
<tr>
<td>Database Home Directory</td>
<td>DATABASE_HOME</td>
<td>Location on the disk where database client is installed for your particular installation.</td>
</tr>
<tr>
<td>Web Application Server Home Directory</td>
<td>WEB_SERVER_HOME</td>
<td>Location on the disk where the application server is installed.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Example Location: WebLogic: /ouaf/middleware/wlserver_10.3</td>
</tr>
<tr>
<td>* ADF Home Directory</td>
<td>ADF_HOME</td>
<td>Location on the disk where ADF is installed.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Example Location: /ouaf/jdev11_1_1_2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Note: This menu option is not applicable to Oracle Utilities Meter Data Management.</td>
</tr>
</tbody>
</table>

* Denotes optional Menu Options and Variables.
## Environment Installation Options

### 50. Environment Installation Options

<table>
<thead>
<tr>
<th>Environment Mount Point:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log Files Mount Point:</td>
</tr>
<tr>
<td>Environment Name:</td>
</tr>
<tr>
<td>Database Type:</td>
</tr>
<tr>
<td>Web Application Server Type:</td>
</tr>
<tr>
<td>Install Only Web Component: (\text{false})</td>
</tr>
</tbody>
</table>

### Menu Option | Name Used In Documentation | Usage | Customer Install Value |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Environment Mount Point</td>
<td>(&lt;\text{SPLDIR}&gt;)</td>
<td>The mount point into which the application is installed. For example: (/\text{ouaf}) for UNIX and (\text{C:\ouaf}) for Windows. This mount point MUST exist and the Oracle Utilities Application Framework administrator user id MUST be able to write to this directory. (This is the user id that is created specifically to administer the Oracle Utilities Application Framework environments; the default is cissys). The installation sets permissions on all subdirectories installed under this directory. See (&lt;\text{SPLENVIRON}&gt;) below for more information on how this mount point is used.</td>
<td></td>
</tr>
<tr>
<td>Log File Mount Point</td>
<td>(&lt;\text{SPLDIROUT}&gt;)</td>
<td>A mount point that will contain any application output or application logs. Default value is (/\text{ouaf}/\text{sploutput}) for UNIX installation or (\text{C:\ouaf}\text{\textbackslash sploutput}) for Windows. Before you start the install, ensure that this mount point exists and that the Oracle Utilities Application Framework administrator user id (cissys) can write to this directory. For each environment initialized, the application logs will be written to the directory (&lt;\text{SPLDIROUT}&gt;/\text{SPLENVIRON}&gt;). Note: Later in the installation, the splenviron.sh (splenviron.cmd) script will set the (\text{SPLOUTPUT}) ((%\text{SPLOUTPUT}%) environment variable to point to:(&lt;\text{SPLDIROUT}&gt;/\text{SPLENVIRON}&gt;)</td>
<td></td>
</tr>
<tr>
<td>Menu Option</td>
<td>Name Used in Documentation</td>
<td>Usage</td>
<td>Customer Install Value</td>
</tr>
<tr>
<td>---------------------</td>
<td>----------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>Environment Name</td>
<td><code>&lt;SPLENVIRON&gt;</code></td>
<td>A descriptive name to be used as both a directory name under the mount point <code>&lt;SPLDIR&gt;</code> and an environment descriptor. This value typically identifies the purpose of the environment. For example, DEV01 or CONV.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>On installation a directory <code>&lt;SPLDIR&gt;/</code> <code>&lt;SPLENVIRON&gt;</code> is created, under which the Oracle Utilities Application Framework and Oracle Utilities Application software resides.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>When multiple environments are set up on the machine you will typically have directories such as: <code>/ouaf/DEV01/...</code> <code>/ouaf/CONV/...</code></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Each of these contains a complete version of the Oracle Utilities Application Framework and Oracle Utilities Meter Data Management.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Note: Later in the installation process, the splenviron.sh (splenviron.cmd) script will set <code>$SPLEBASE</code> ( <code>%SPLEBASE%</code>) environment variable to point to <code>&lt;SPLDIR&gt;/&lt;SPLENVIRON&gt;</code></td>
<td></td>
</tr>
<tr>
<td>Database Type</td>
<td><code>&lt;CMPDB&gt;</code></td>
<td>Type of a database to connect an environment to.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Valid Values: oracle: Oracle</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Note: Not all Database Types are supported on all platforms; refer to the Supported Platforms section for details.</td>
<td></td>
</tr>
<tr>
<td>Web Application Server Type</td>
<td><code>&lt;SPLWAS&gt;</code></td>
<td>A Web Application Server for the environment to be used. The following value must be selected:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Valid Values: WLS: WebLogic</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Note: Not all Web Application servers are supported on all platforms; refer to Supported Platforms section for details.</td>
<td></td>
</tr>
<tr>
<td>Install Web Only Component</td>
<td></td>
<td>For future releases of the Oracle Utilities Application Framework installations.</td>
<td></td>
</tr>
</tbody>
</table>
Environment Description

1. Environment Description
   Environment Description:

<table>
<thead>
<tr>
<th>Menu Option</th>
<th>Name used in this Documentation</th>
<th>Usage</th>
<th>Customer Install Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environment Description</td>
<td>DESC</td>
<td>This is a free form text field to describe the use of the environment.</td>
<td></td>
</tr>
</tbody>
</table>
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

Note: The WebLogic parameters above and in the worksheet are for a WebLogic installation. The parameters for your installation will include your type of application server.

<table>
<thead>
<tr>
<th>Menu Option</th>
<th>Name used in this Documentation</th>
<th>Usage</th>
<th>Customer Install Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Server Host</td>
<td>BSN_WLHOST</td>
<td>The host name on which business application server resides.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default Value: &lt;current server name&gt;</td>
<td></td>
</tr>
<tr>
<td>WebLogic Server Name</td>
<td>BSN_WLS_SVRNAME</td>
<td>The name of the WebLogic server where the business application resides.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default value: myserver</td>
<td></td>
</tr>
<tr>
<td>Business Server Application Name</td>
<td>BSN_APP</td>
<td>The name of the business application server.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default: SPLService</td>
<td></td>
</tr>
<tr>
<td>MPL Admin Port number</td>
<td>MPLADMINPORT</td>
<td>The port number for the Multi Purpose Listener (MPL) Admin Server.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Example Value: 6502</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Note: MPL is deprecated and is retained for backward compatibility.</td>
<td></td>
</tr>
<tr>
<td>MPL Automatic Startup</td>
<td>MPLSTART</td>
<td>Automatically starts the MPL Listener whenever environment starts.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default value: false</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Note: MPL has been deprecated and is retained for backward compatibility.</td>
<td></td>
</tr>
</tbody>
</table>
# Web Application Server Configuration

3. Web Application Server Configuration

<table>
<thead>
<tr>
<th>Web Server Host:</th>
<th>&lt;machine_name&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web Server Port Number:</td>
<td></td>
</tr>
<tr>
<td>WebLogic SSL Port Number:</td>
<td></td>
</tr>
<tr>
<td>Web Context Root:</td>
<td>ouaf</td>
</tr>
<tr>
<td>WebLogic JNDI User ID:</td>
<td></td>
</tr>
<tr>
<td>WebLogic JNDI Password:</td>
<td></td>
</tr>
<tr>
<td>WebLogic Admin System User ID:</td>
<td></td>
</tr>
<tr>
<td>WebLogic Admin System Password:</td>
<td></td>
</tr>
<tr>
<td>WebLogic Server Name:</td>
<td>myserver</td>
</tr>
<tr>
<td>Web Server Application Name:</td>
<td>SPLWeb</td>
</tr>
<tr>
<td>Application Admin User ID:</td>
<td></td>
</tr>
<tr>
<td>Application Admin Password:</td>
<td></td>
</tr>
<tr>
<td>Expanded Directories:</td>
<td>false</td>
</tr>
<tr>
<td>Application Viewer Module:</td>
<td>true</td>
</tr>
</tbody>
</table>

---

**Note:** The WebLogic parameters above and in the worksheet are for a WebLogic installation. The parameters for your installation will include your type of application server.

<table>
<thead>
<tr>
<th>Menu Option</th>
<th>Name used in this Documentation</th>
<th>Usage</th>
<th>Customer Install Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web Server Host</td>
<td>WEB_WLHOST</td>
<td>The host name on which the Web application Server resides. Default Value: &lt;current server name&gt;</td>
<td></td>
</tr>
<tr>
<td>Web Server Port Number</td>
<td>WEB_WLPORT</td>
<td>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</td>
<td></td>
</tr>
<tr>
<td>WebLogic SSL Port Number:</td>
<td>WEB_WLSSPORT</td>
<td>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. The Secure Sockets implementation is disabled in the default configuration. Example Value: 6501</td>
<td></td>
</tr>
<tr>
<td>Web Context Root</td>
<td>WEB_CONTEXT_ROOT</td>
<td>A context root name that allows customers to run multiple instances of Web application on the same server. Default Value: ouaf</td>
<td></td>
</tr>
<tr>
<td>Menu Option</td>
<td>Name used in this Documentation</td>
<td>Usage</td>
<td>Customer Install Value</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>---------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>WebLogic JNDI User ID</td>
<td>WEB_WLSYSUSER</td>
<td>The user ID the application uses to connect to the EJB component through JNDI. This is the EJB container User ID.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Note: A new installation requires use of the user ID of system.</td>
<td></td>
</tr>
<tr>
<td>WebLogic JNDI Password</td>
<td>WEB_WLSYSPASS</td>
<td>The password the application uses to connect to the EJB component through JNDI</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Note: A new installation requires the use of the password ouafadmin. This value will be saved in encrypted format</td>
<td></td>
</tr>
<tr>
<td>WebLogic Server User ID</td>
<td>WLS_WEB_WLSYSUSER</td>
<td>User ID to login to WebLogic console and to administer WebLogic. The WebLogic startup and stop script use this user ID.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Note: A new installation requires use of the user ID of the system. This value will be saved in encrypted format.</td>
<td></td>
</tr>
<tr>
<td>WebLogic Server Password</td>
<td>WLS_WEB_WLSYSPASS</td>
<td>On the configuration step of install process you can change this password to a different value. This should only be done if you have changed the password on an existing system following the Oracle WebLogic instructions. The WebLogic startup and stop script use this password.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Note: A new installation requires the use of the password ouafadmin. This value will be saved in encrypted format.</td>
<td></td>
</tr>
<tr>
<td>WebLogic Server Name</td>
<td>WEB_WLS_SVRNAME</td>
<td>The name of the WebLogic server where the Web application resides.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default Value: myserver</td>
<td></td>
</tr>
<tr>
<td>Web Server Application Name</td>
<td>WEB_APP</td>
<td>The name of the Web application server.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default Value: SPLWeb</td>
<td></td>
</tr>
<tr>
<td>Application Admin User ID</td>
<td>WEB_SPLUSER</td>
<td>This is the default user ID to login to the application through the browser.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Example Value: SYSUSER</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Note: This value is also used in communication within the XAI application.</td>
<td></td>
</tr>
<tr>
<td>Menu Option</td>
<td>Name used in this Documentation</td>
<td>Usage</td>
<td>Customer Install Value</td>
</tr>
<tr>
<td>------------------------</td>
<td>----------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Application Admin</td>
<td>WEB_SPLPASS</td>
<td>This is the password of the application admin user.</td>
<td></td>
</tr>
<tr>
<td>Userid Password</td>
<td></td>
<td>Example Value: sysuser00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Note: This value will be saved in encrypted format</td>
<td></td>
</tr>
<tr>
<td>Expanded Directories</td>
<td>WEB_ISEXPANDED</td>
<td>When the value is “true” the Web application will be deployed in exploded directory format (no WAR files).</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>When the value is “false”, the web application will be deployed in ear file format.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default Value: false</td>
<td></td>
</tr>
<tr>
<td>Application Viewer</td>
<td>WEB_ISAPPVIEWER</td>
<td>When the value is “true” the application viewer will be deployed to the Web server.</td>
<td></td>
</tr>
<tr>
<td>Module</td>
<td></td>
<td>When the value is “false”, the application viewer will not be deployed to the Web Server.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Note: With either value the application viewer module will still be managed by the upgrade process.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default Value: true</td>
<td></td>
</tr>
</tbody>
</table>
## Database Configuration

4. Database Configuration

- **JDBC Name:**
  - MPL Database User ID:
  - MPL Database Password:
  - XAI Database User ID:
  - XAI Database Password:
  - Batch Database User ID:
  - Batch Database Password:
  - JDBC Database User ID:
  - JDBC Database Password:
  - Database Name:
  - Database Server:
  - Database Port:
  - ONS Server Configuration:
  - Database Override Connection String:
  - Oracle Client Character Set NLS_LANG: AMERICAN_AMERICA.UTF8

<table>
<thead>
<tr>
<th>Menu Option</th>
<th>Name Used in this Documentation</th>
<th>Usage</th>
<th>Customer Install Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>JDBC Name</td>
<td>JDBC_NAME</td>
<td>The connection pool name to use for the JDBC driver to create physical database connections. The connection pool contains a group of JDBC connections that are created when starting up WebLogic Server or when deploying the connection pool to a target server. Example Value: [YOUR_NAME]-jdbc</td>
<td></td>
</tr>
<tr>
<td>MPL Database User ID</td>
<td>MPL_DBUSER</td>
<td>The database user ID that has been configured on the database for the MPL server connection.</td>
<td></td>
</tr>
<tr>
<td>MPL Database Password</td>
<td>MPL_DBPASS</td>
<td>The database password that has been configured on the database for the MPL server connection. Note: This value will be saved in encrypted format.</td>
<td></td>
</tr>
<tr>
<td>XAI Database User ID</td>
<td>XAI_DBUSER</td>
<td>The database user ID that has been configured on the database for the XAI server connection.</td>
<td></td>
</tr>
<tr>
<td>XAI Database Password</td>
<td>XAI_DBPASS</td>
<td>The database password that has been configured on the database for the XAI server connection. Note: This value will be saved in encrypted format.</td>
<td></td>
</tr>
<tr>
<td>Menu Option</td>
<td>Name Used in this Documentation</td>
<td>Usage</td>
<td>Customer Install Value</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>---------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Batch Database User ID</td>
<td>DBUSER</td>
<td>The database user ID that has been configured on the database for the batch connection.</td>
<td></td>
</tr>
<tr>
<td>Batch Database Password</td>
<td>DBPASS</td>
<td>The database password that has been configured on the database for the batch connection. Note: This value will be saved in encrypted format.</td>
<td></td>
</tr>
<tr>
<td>JDBC Database User ID</td>
<td></td>
<td>The database user ID that has been configured on the database for the WebLogic JDBC connection.</td>
<td></td>
</tr>
<tr>
<td>JDBC Database Password</td>
<td></td>
<td>The database password that has been configured on the database for the WebLogic JDBC server connection. Note: This value will be saved in encrypted format.</td>
<td></td>
</tr>
<tr>
<td>Database Name</td>
<td>DBNAME</td>
<td>The name of the database instance that the application will be connecting to.</td>
<td></td>
</tr>
<tr>
<td>Database Server</td>
<td>DBSEROVER</td>
<td>Host name of the server where database resides.</td>
<td></td>
</tr>
<tr>
<td>Database Port</td>
<td>DBPORT</td>
<td>Database port number on the database server used for connecting to the database</td>
<td></td>
</tr>
<tr>
<td>ONS Server Configuration</td>
<td>ONSCONFIG</td>
<td>ONS Server Configuration is required for Oracle RAC FCF. This option is for future use.</td>
<td></td>
</tr>
<tr>
<td>Database Override Connection String</td>
<td>DB_OVERRIDE_CONNECTION</td>
<td>This connection string can be used to override the database information entered above for RAC installation. Set this string to override the standard database connection string, as entered above.</td>
<td></td>
</tr>
<tr>
<td>Oracle Client Character Set NLS_LANG</td>
<td>NLS_LANG</td>
<td>The Oracle Database Character Set. Select the Language and Territory that are in use in your country. Default Value: AMERICAN_AMERICA.UTF8</td>
<td></td>
</tr>
</tbody>
</table>
General Configuration Options

5. General Configuration Options

<table>
<thead>
<tr>
<th>Batch RMI Port</th>
<th>BATCH_RMI_PORT</th>
<th>Unique port used by the Batch RMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Batch Mode</td>
<td>BATCH_MODE</td>
<td>Valid Values: CLUSTERED or DISTRIBUTED</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default Value: CLUSTERED</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Note: CLUSTERED is currently the only supported mode for production environments.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coherence Cluster Name</th>
<th>COHERENCE_CLUSTER_NAME</th>
<th>Unique name for the batch CLUSTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coherence Cluster Address</td>
<td>COHERENCE_CLUSTER_ADDRESS</td>
<td>Unique multicast address.</td>
</tr>
<tr>
<td>Coherence Cluster PORT</td>
<td>COHERENCE_CLUSTER_PORT</td>
<td>Unique port for the batch CLUSTER</td>
</tr>
<tr>
<td>Coherence Cluster Mode</td>
<td>COHERENCE_CLUSTER_MODE</td>
<td>Valid Values: dev (Development) prod (Production)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default Value: dev</td>
</tr>
</tbody>
</table>

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

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

**Unix:**

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

**Windows**

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

Advanced Environment Miscellaneous Configuration

50. Advanced Environment Miscellaneous Configuration

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>This is a development environment</td>
<td>false</td>
</tr>
<tr>
<td>Preload All Pages on Startup</td>
<td>false</td>
</tr>
<tr>
<td>Maximum Age of a Cache Entry for Text</td>
<td>28800</td>
</tr>
<tr>
<td>Maximum Age of a Cache Entry for Images</td>
<td>28800</td>
</tr>
<tr>
<td>JSP Recompile Interval (s)</td>
<td>43200</td>
</tr>
<tr>
<td>Authentication Login Page Type</td>
<td>FORM</td>
</tr>
<tr>
<td>Online JVM Batch Server Enabled</td>
<td>false</td>
</tr>
<tr>
<td>Online JVM Batch Number of Threads</td>
<td>5</td>
</tr>
<tr>
<td>Online JVM Batch Scheduler Daemon Enabled</td>
<td>false</td>
</tr>
<tr>
<td>JMX Enablement System User ID</td>
<td></td>
</tr>
<tr>
<td>JMX Enablement System Password</td>
<td></td>
</tr>
<tr>
<td>RMI Port number for JMX Business</td>
<td></td>
</tr>
<tr>
<td>RMI Port number for JMX Web</td>
<td></td>
</tr>
<tr>
<td>RAC Initial Limit</td>
<td>0</td>
</tr>
<tr>
<td>RAC Minimum Limit</td>
<td>0</td>
</tr>
<tr>
<td>RAC Maximum Limit</td>
<td>0</td>
</tr>
<tr>
<td>GIS Service Running on the same Web Server</td>
<td>true</td>
</tr>
<tr>
<td>GIS Service URL</td>
<td></td>
</tr>
<tr>
<td>GIS WebLogic System User ID</td>
<td></td>
</tr>
<tr>
<td>GIS WebLogic System Password</td>
<td></td>
</tr>
<tr>
<td>DOC1 Host Directory</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Menu Option</th>
<th>Name used in this Documentation</th>
<th>Usage</th>
<th>Customer Value Install</th>
</tr>
</thead>
<tbody>
<tr>
<td>This is a development environment</td>
<td>WEB ISDEVELOPMENT</td>
<td>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</td>
<td>false</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default Value: false</td>
<td></td>
</tr>
<tr>
<td>Menu Option</td>
<td>Name used in this Documentation</td>
<td>Usage</td>
<td>Customer Value Install</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>----------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Preload All Pages on Startup</td>
<td>WEB_PRELOADALL</td>
<td>This controls if the pages should be pre-loaded during the startup of the application or not.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Valid Values: true, false</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default Value: false</td>
<td></td>
</tr>
<tr>
<td>Maximum Age of a Cache Entry for Text</td>
<td>WEB_MAXAGE</td>
<td>Default Value: 28800</td>
<td></td>
</tr>
<tr>
<td>Maximum Age of a Cache Entry for Images</td>
<td>WEB_MAXAGEI</td>
<td>Default Value: 28800</td>
<td></td>
</tr>
<tr>
<td>JSP Recompile Interval (s)</td>
<td>WEB_wlpageCheckSeconds</td>
<td>Default Value: 43200</td>
<td></td>
</tr>
<tr>
<td>Authentication Login Page Type</td>
<td>WEB_WLAUTHMETHOD</td>
<td>Specifies which authentication mode should be used. To switch off OUAF Login Page enter: BASIC</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Valid Values: FORM, BASIC</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default Value: FORM</td>
<td></td>
</tr>
<tr>
<td>Online JVM Batch Server Enabled</td>
<td>BATCHENABLED</td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default Value: false</td>
<td>Note: This functionality should only be used in low volume environments.</td>
</tr>
<tr>
<td>Online JVM Batch Number of Threads</td>
<td>BATCHTHREADS</td>
<td>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 threadpool is specified.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default Value: 5</td>
<td>Note: This will be only used and activated when BATCHENABLED is set to true.</td>
</tr>
<tr>
<td>Menu Option</td>
<td>Name used in this Documentation</td>
<td>Usage</td>
<td></td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>---------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Online JVM Batch Scheduler Daemon Enabled</td>
<td>BATCHDAEMON</td>
<td>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. Valid Values: true, false Default Value: false Note: This will be only used and activated when BATCHENABLED is set to true.</td>
<td></td>
</tr>
<tr>
<td>JMX Enablement System User ID</td>
<td>BSN_JMX_SYSUSER</td>
<td>Example Value: user</td>
<td></td>
</tr>
<tr>
<td>JMX Enablement System Password</td>
<td>BSN_JMX_SYSPASS</td>
<td>Example Value: admin</td>
<td></td>
</tr>
<tr>
<td>RMI Port number for JMX Business</td>
<td>BSN_JMX_RMI_PORT_PERFORMANCE</td>
<td>This needs to be set to an available port number on the machine</td>
<td></td>
</tr>
<tr>
<td>RMI Port number for JMX Web</td>
<td>WEB_JMX_RMI_PORT_PERFORMANCE</td>
<td>This needs to be an available port number for the environment running on the machine</td>
<td></td>
</tr>
<tr>
<td>RAC Initial Limit</td>
<td>RACInicialLIMIT</td>
<td>Required for Oracle RAC FCF. This is for future use. Default Value: 0</td>
<td></td>
</tr>
<tr>
<td>RAC Minimum Limit</td>
<td>RAC_MINLIMIT</td>
<td>Required for Oracle FCF Default Value: 0</td>
<td></td>
</tr>
<tr>
<td>RAC Maximum Limit</td>
<td>RAC_MAXLIMIT</td>
<td>Required for Oracle FCF Default Value: 0</td>
<td></td>
</tr>
<tr>
<td>GIS Service Running on the same Web Server</td>
<td>GIS</td>
<td>Geographical information (GEOCODING) - GIS Service running on the same Web application server Valid Values: true, false</td>
<td></td>
</tr>
<tr>
<td>GIS Service URL</td>
<td>GIS_URL</td>
<td>This is the URL of the external Web server. Note: This value will be only be used when GIS is set to true.</td>
<td></td>
</tr>
<tr>
<td>GIS WebLogic System User ID</td>
<td>GIS_WLSYSUSER</td>
<td>GIS WebLogic System User ID Note: This value will be only be used when GIS is set to true.</td>
<td></td>
</tr>
</tbody>
</table>
### Advanced Environment Memory Configuration

51. Advanced Environment Memory Configuration

<table>
<thead>
<tr>
<th>JVM Child Memory Allocation:</th>
<th>512</th>
</tr>
</thead>
<tbody>
<tr>
<td>JVM Child Additional Options:</td>
<td></td>
</tr>
<tr>
<td>Web Application Java Initial Heap Size:</td>
<td>1024</td>
</tr>
<tr>
<td>Web Application Java Max Heap Size:</td>
<td>1024</td>
</tr>
<tr>
<td>Web Application Java Max Perm Size:</td>
<td>500</td>
</tr>
<tr>
<td>Web Application Additional Options:</td>
<td></td>
</tr>
<tr>
<td>Ant Min Heap Size:</td>
<td>200</td>
</tr>
<tr>
<td>Ant Max Heap Size:</td>
<td>800</td>
</tr>
<tr>
<td>Ant Additional Options:</td>
<td></td>
</tr>
<tr>
<td>Thread Pool Worker Java Min Heap Size:</td>
<td>512</td>
</tr>
<tr>
<td>Thread Pool Worker Java Max Heap Size:</td>
<td>1024</td>
</tr>
<tr>
<td>Thread Pool Worker Java Max Perm Size:</td>
<td>768</td>
</tr>
<tr>
<td>Thread Pool Worker Additional Options:</td>
<td></td>
</tr>
<tr>
<td>Additional Runtime Classpath:</td>
<td></td>
</tr>
<tr>
<td>-Dspl.runtime.cobol.remote.releaseThreadMemoryAfterEachCall=...</td>
<td></td>
</tr>
</tbody>
</table>

### Menu Option

<table>
<thead>
<tr>
<th>Menu Option</th>
<th>Name used in this Documentation</th>
<th>Usage</th>
<th>Customer Install Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIS WebLogic System Password</td>
<td>GIS_WLSYSPASS</td>
<td>GIS WebLogic System Password.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Note: This value will be only be used when GIS is set to true.</td>
<td></td>
</tr>
<tr>
<td>DOCI Host Directory</td>
<td>DOCHHOSTDIR</td>
<td>The location of the DOCI installation. This value is optional</td>
<td></td>
</tr>
</tbody>
</table>

### Usage

<table>
<thead>
<tr>
<th>Usage</th>
<th>Name used in this Documentation</th>
<th>Usage</th>
<th>Customer Install Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>JVM Child Memory Allocation</td>
<td>JVMMEMORYARG</td>
<td>Heap size for the JVM Child.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default Value: 512</td>
<td></td>
</tr>
<tr>
<td>JVM Child Additional Options</td>
<td>JVM_ADDITIONAL_OPT</td>
<td>Additional JVM options that are passed to the Child JVM.</td>
<td></td>
</tr>
<tr>
<td>Web Application Java Initial Heap Size</td>
<td>WEB_MEMORY_OPT_MIN</td>
<td>Initial heap size for the application server.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default Value: 1024</td>
<td></td>
</tr>
<tr>
<td>Web Application Java Max Heap Size</td>
<td>WEB_MEMORY_OPT_MAX</td>
<td>Maximum heap size for the application server.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default Value: 1024</td>
<td></td>
</tr>
<tr>
<td>Usage</td>
<td>Name used in this Documentation</td>
<td>Usage</td>
<td>Customer Install Value</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>---------------------------------</td>
<td>-----------------------------------------------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Web Application Java Max Perm Size</td>
<td>WEB_MEMORY_OPT_MAXPERMSIZE</td>
<td>Maximum Perm Size for the application server.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default Value: 500MB (Linux, Solaris) 300MB (Windows, HP-UX)</td>
<td></td>
</tr>
<tr>
<td>Web Application Additional Options</td>
<td>WEB_ADDITIONAL_OPTS</td>
<td>Additional options that will be passed in to the web application server JVM.</td>
<td>Optional Entry.</td>
</tr>
<tr>
<td>Ant Min Heap Size</td>
<td>ANT_OPT_MIN</td>
<td>Minimum Heap Size passed to ANT JVM.</td>
<td>Default Value: 200</td>
</tr>
<tr>
<td>Ant Max Heap Size</td>
<td>ANT_OPT_MAX</td>
<td>Maximum Heap Size passed to ANT JVM.</td>
<td>Default Value: 800</td>
</tr>
<tr>
<td>Ant Additional Options</td>
<td>ANT_ADDITIONAL_OPTS</td>
<td>Additional options that are passed into the ANT JVM.</td>
<td></td>
</tr>
<tr>
<td>Thread Pool Worker Java Min Heap Size</td>
<td>BATCH_MEMORY_OPTS_MIN</td>
<td>Minimum heap size passed to the Thread Pool Worker.</td>
<td>Default Value: 512</td>
</tr>
<tr>
<td>Thread Pool Worker Java Max Heap Size</td>
<td>BATCH_MEMORY_OPTS_MAX</td>
<td>Maximum heap size passed to the Thread Pool Worker.</td>
<td>Default Value: 1024</td>
</tr>
<tr>
<td>Thread Pool Worker Java Max Perm Size</td>
<td>BATCH_MEMORY_OPTS_MAXPERMSIZE</td>
<td>Maximum permanent heap size passed to the Thread Pool Worker.</td>
<td>Default Value: 768</td>
</tr>
<tr>
<td>Thread Pool Worker Additional Options</td>
<td>BATCH_MEMORY_ADDITIONAL_OPTS</td>
<td>Additional Memory Options passed into the Thread Pool Worker. This is an optional free form field.</td>
<td></td>
</tr>
<tr>
<td>Additional Runtime Classpath</td>
<td>ADDITIONAL_RUNTIME_CLASSPATH</td>
<td>Additional Classpath Options passed in when starting the WebLogic JVM</td>
<td>This is an optional free form field.</td>
</tr>
</tbody>
</table>
### Release Cobol Thread Memory Options

**Name used in this Documentation:** REL_CBL_THREAD_MEM

**Usage:**
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
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.
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:

- Oracle Enterprise Linux 5.4 or Red Hat Linux 5.4 Application Server
- Solaris 10 Application Server
- Windows 2008 Application Server
Oracle Enterprise Linux 5.4 or Red Hat Linux 5.4 Application Server

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

Supported Application Servers

<table>
<thead>
<tr>
<th>Operating System</th>
<th>Chipsets</th>
<th>Application Server</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Enterprise Linux 5.4 (64-bit)</td>
<td>x86_64</td>
<td>Oracle WebLogic 11gR1 (10.3.3)</td>
</tr>
<tr>
<td>Red Hat Enterprise Linux 5.4 (64-bit)</td>
<td>64-bit version</td>
<td></td>
</tr>
</tbody>
</table>

Web/Application Server Tier

Oracle Enterprise Linux 5.4 or Red Hat Enterprise Linux 5.4 Operating System Running on x86_64 64-bit Architecture

UNIX Administrator Userid

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

<table>
<thead>
<tr>
<th>Description</th>
<th>Default Value</th>
<th>Customer Defined Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Utilities Meter Data Management Administrator User ID</td>
<td>cissys</td>
<td></td>
</tr>
<tr>
<td>Oracle Utilities Meter Data Management User Group</td>
<td>cisusr</td>
<td></td>
</tr>
</tbody>
</table>

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 user id 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
```
Oracle Enterprise Linux 5.4 or Red Hat Linux 5.4 Application Server

Oracle 11.2.0.1 Client
The Java JDBC drivers must be installed as part of the client install.
Ensure that the userid cissys has been setup to be able to communicate with the Oracle database.
Use the command:

\texttt{tnsping \$ORACLE\_SID}

Use the cissys account to install the Oracle Client.
The Oracle 11.2.0.1 Client is required regardless of the version of the database server.

Sun Java Development Kit Version 6.0 Update 18
At time of release, Solaris Java packages could be obtained from:
\url{http://java.sun.com/products/archive/index.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:
\url{http://prdownloads.sourceforge.net/hibernate/}
or from the following link:
\url{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. \texttt{/opt/hibernate3.3.2}).
Extract the file hibernate3.jar from hibernate-3.3.2.ga.zip.

Oracle WebLogic 11gR1 (10.3.3) 64-bit
Oracle WebLogic software can be downloaded from the Oracle web site. This application server will run as a 64-bit application. 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).
Solaris 10 Application Server

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

Supported Application Servers

<table>
<thead>
<tr>
<th>Operating System</th>
<th>Chipsets</th>
<th>Application Server</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solaris 10 Update 8 (64-bit)</td>
<td>SPARC</td>
<td>Oracle WebLogic 11gR1 (10.3.3)</td>
</tr>
</tbody>
</table>

Web/Application Server Tier

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

UNIX Administrator Userid

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

<table>
<thead>
<tr>
<th>Description</th>
<th>Default Value</th>
<th>Customer Defined Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Utilities Meter Data Management Administrator User ID</td>
<td>cissys</td>
<td></td>
</tr>
<tr>
<td>Oracle Utilities Meter Data Management User Group</td>
<td>cisusr</td>
<td></td>
</tr>
</tbody>
</table>

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 user id 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
```

Oracle 11.2.0.1 Client

The Java JDBC drivers must be installed as part of the client install.
Ensure that the userid cissys has been setup to be able to communicate with the Oracle database.
Use the command:

```
tnsping $ORACLE_SID
```

Use the cissys account to install the Oracle Client.

The Oracle 11.2.0.1 Client is required regardless of the version of the database server.

**Sun Java Development Kit Version 6.0 Update 18 64-bit**
This software is only required for WebLogic installations.
Solaris Java packages used in the test cycle were downloaded from:

The Web server requires the 64-bit Java platform in order to function. Ensure that you install the 64-bit JDK. For Sun this involves installing the 32-bit java and then installing the 64-bit java patch.
Ensure that the environment variable JAVA_HOME is set, and that "java" can be found in cissys user 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
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\hibernate3.3.2).
Extract the file hibernate3.jar from hibernate-3.3.2.ga.zip.

**Oracle WebLogic 11gR1 (10.3.3) 64-bit**
Oracle WebLogic software can be downloaded from the Oracle web site. This application server will run as a 64-bit application. 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).
Windows 2008 Application Server

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

Supported Application Servers

<table>
<thead>
<tr>
<th>Operating System</th>
<th>Chipsets</th>
<th>Application Server</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows 2008 Server SP2 (64-bit)</td>
<td>x86_64</td>
<td>Oracle WebLogic 11gR1 (10.3.3)</td>
</tr>
</tbody>
</table>

Web/Application Server Tier

Oracle 11.2.0.1 Client

The Java JDBC drivers must be installed as part of the client install.

Ensure that the userid cissys has been setup to be able to communicate with the Oracle database.

Use the command:

```
tnsping $ORACLE_SID
```

Use the cissys account to install the Oracle Client.

The Oracle 11.2.0.1 Client is required regardless of the version of the database server.

Sun Java Development Kit version 6.0 Update 18 64-bit

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


The Web server requires the 64-bit Java platform. 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

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

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\hibernate3.3.2`).

Extract the file hibernate3.jar from hibernate-3.3.2.ga.zip.
Oracle WebLogic 11gR1 (10.3.3) 64-bit

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

The application server installation process of any framework-based application 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 E-Delivery site.

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 on page 3-5). You must complete the database installation before installing the application server.
Preinstallation Tasks

Hardware and Software Version Prerequisites

The section Supported Platforms on page 3-5 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 V4.0.2 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 5), 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 ceases).

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-V4.0.2-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.
Preinstallation Tasks

4. Decompress the file:
   
   ```
cd <TEMPDIR>
jar -xvf FW-V4.0.2-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://java.sun.com/products/archive/index.html
   
   A sub-directory named “FW.V4.0.2” 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.V4.0.2` 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.
   
   For example, create all environment variables such as HIBERNATE_JAR_DIR, JAVA_HOME, etc.

3. Change directory to the <TEMPDIR>/FW.V4.0.2 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 on page 4-5 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 such as setting the required environment variables (such as HIBERNATE_JAR and JAVA_HOME). You will need to obtain specific information for the install.

3. Change directory to the <TEMPDIR>/FW.V4.0.2 directory and start the application installation utility by executing the appropriate script:
   
   - UNIX: ksh ./install.sh
   - Windows: install.cmd


   Use the completed Third Party Software Configuration worksheet to complete this step. See Application Framework Installation and Configuration Worksheets on page 4-5.

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 on page 4-5.

   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).

• Specify if this environment will be used for the Oracle Utilities Customer Care and Billing or Oracle Enterprise Taxation Management product. Enter N if this environment will be used for Oracle Utilities Business Intelligence, Oracle Utilities Mobile Workforce Management, or Oracle Utilities Meter Data Management.

• 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. 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.

7. 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

• You will be warned if you did not edit a section. You may proceed if you want to keep the default settings.

• On completion of this step, $SPLEBASE/etc/ENVIRON.INI file is created. This file contains the specific environment profile parameters and their values.

8. 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 <SPLDIR>/SPLENVIRON directory

• $SPLOUTPUT (%SPLOUTPUT%) - stands for <SPLDIROUT>/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/splenviron.sh -e $SPLENVIRON

**Windows:** %SPLEBASE%\bin\splenviron.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.

9. Generate environment configuration parameters:

The application installation utility 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 configuration files with the new environment variables values and completes the rest of the installation steps.

Note: The initialSetup script encrypts the user ID and password values in the configuration files that it creates.

See the section **Chapter 4: Planning the Installation** for settings and configuration.
Installing the Oracle Utilities Meter Data Framework is a prerequisite for installing Oracle Utilities Meter Data Management. This section describes the process for installing the 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 8-4.
Preinstallation Tasks

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

Installing Prerequisite Patches

The following Oracle Utilities Application Framework patches must be installed prior to installing Oracle Utilities Meter Data Framework 2.0.0:

9822242  
9616703  
9661228  
9684590  
9689949  
9737372  
9767325  
9775120  
9801416  
9811585  
9826081  
9828777  
9829641  
9829895  
9835285  
9838405  
9847638  
9849771  
9657424  
9686955  
9793243  
9703273  
9832763  
9838096  
9577485  
9838068  
9841089  
9845537  
9846267  
9855596  
9862979  
9389603  
9853242  
9446572  
9797052  
9791887  
9493372  
9718849  
9835477  
9841515  
9849466  
9857116  
9846319  
9784805  
9864001  
9866988  
9885429  
9626855  
9657459  
9825724  
9837273  
9837552
Preinstallation Tasks

Installing the Application Server Component of Oracle Utilities Meter Data Framework

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.

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 Supported Platforms on page 3-5 for installation details regarding the database and operating system versions supported for the Meter Data Framework. Also see Chapter 6: 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-V2.0.0-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-V2.0.0-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 MDF.V2.0.0 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/splenviron.sh -e $SPLENVIRON`
   Windows:
   `%SPLEBASE%\bin\splenviron.cmd -e %SPLENVIRON%`
3. Stop the environment if running.
   UNIX:
   `$SPLEBASE/bin/spl.sh stop`
   Windows:
   `%SPLEBASE%\bin\spl.cmd stop`

Installing the Application

1. Change to the `<TEMPDIR>/MDF.V2.0.0` 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`
3. Choose option P to proceed with the installation: Write Configure file.
Chapter 9

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 9-2.
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 2.0.0 application must be installed prior to installing Oracle Utilities Meter Data Management 2.0.0:

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 6: 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-V2.0.0-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-V2.0.0-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.V2.0.0 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:
   ```
   $SPLEBASE/bin/splenviron.sh -e $SPLENVIRON
   ```

   Windows:
   ```
   %SPLEBASE%\bin\splenviron.cmd -e %SPLENVIRON%
   ```
3. Stop the environment if running.
Preinstallation Tasks

Installing the Application

1. Change to the <TEMPDIR>/MDM.V2.0.0 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. Once the install has finished successfully, you will need to execute Post Installation steps:

Post Installation steps:

1. Run the configureEnv script to change the configuration.
   UNIX:
   ```
   $ cd $SPLEBASE
   $ ksh ./configureEnv.sh
   ```
   Windows:
   ```
   C:\> cd %SPLEBASE%
   C:\> configureEnv.cmd
   ```
2. Choose option P to write the configuration.
3. Run the initialSetup script.
   UNIX:
   ```
   $ cd $SPLEBASE
   $ ksh ./initialSetup.sh
   ```
   Windows:
   ```
   C:\> cd %SPLEBASE%
   C:\> initialSetup.cmd
   ```
   Note: The above steps are mandatory for the initial installation of Oracle Utilities Meter Data Management
4. 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 $SPLEBASE/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.
This section describes tasks that should be completed after installing Oracle Utilities Meter Data Management, including:

- Customizing Configuration Files
- Generating the Application Viewer
- Building Javadocs Indexes
- Configuring the Environment for Batch Processing
- Customizing the Logo
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.
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 splenviron 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%in\splenviron.cmd -e %SPLENVIRON%

   For example:

   D:\ouaf\TEST_ENVIRON1\bin\splenviron.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 Javadocs 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.
Appendix A

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Third Party Products

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- Velocity
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