

Oracle Utilities Meter Data Management

Installation Guide

Release 2.2.0

E80249-01

December 2016

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Preface

This guide provides an overview of installing Oracle Utilities Meter Data Management. This preface contains these topics:

- [Audience](#)
- [Related Documents](#)
- [Conventions](#)
- [Acronyms](#)

Audience

Oracle Utilities Smart Grid Gateway 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

The following documentation is included with this release.

Installation, Configuration, and Release Notes

- *Oracle Utilities Meter Data Management Release Notes*
- *Oracle Utilities Meter Data Management Quick Install Guide*
- *Oracle Utilities Meter Data Management Installation Guide*
- *Oracle Utilities Meter Data Management Database Administrator Guide*
- *Oracle Utilities Meter Data Management Licensing Information User Manual*

User Guides

- *Oracle Utilities Meter Data Management Business User Guide*
- *Oracle Utilities Meter Data Management Administrative User Guide*

Supplemental Documents

- *Oracle Utilities Meter Data Management Security Guide*
- *Oracle Utilities Meter Data Management Server Administration Guide*

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

Acronyms

The following acronyms and terms are used in this document:

Acronym	Definition
ADF	Oracle Application Development Framework
EAR	Enterprise Archive
EJB	Enterprise JavaBeans
HTML	HyperText Markup Language
JAR	Java Archive
JDBC	Java database connectivity
JMX	Java Management Extensions
JNDI	Java Naming and Directory Interface
JSP	JavaServer Pages
JVM	Java Virtual Machine.
MPL	Multi Purpose Listener
OUAF	Oracle Utilities Application Framework
OAM	Oracle Access Manager
OIM	Oracle Identity Management
ONS	Oracle Notification Service
Oracle RAC FCF	Oracle Real Application Clusters Fast Connection Failover
RMI	Remote Method Invocation

Acronym	Definition
SOAP	Simple Object Access Protocol
SOA	Service-oriented architecture
SPLEBASE	The location where the application will be installed.
SPLOUTPUT	This location is used for storing batch log files and output from batch jobs
WAR	Web application Archive
WLS	WebLogic
XAIApp	XML Application Integration

Chapter 1

Introduction

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

- [Installation Overview](#)
- [Application Architecture](#)
- [Installation Components](#)
- [Installation Types](#)
- [Media Pack Components](#)

Installation Overview

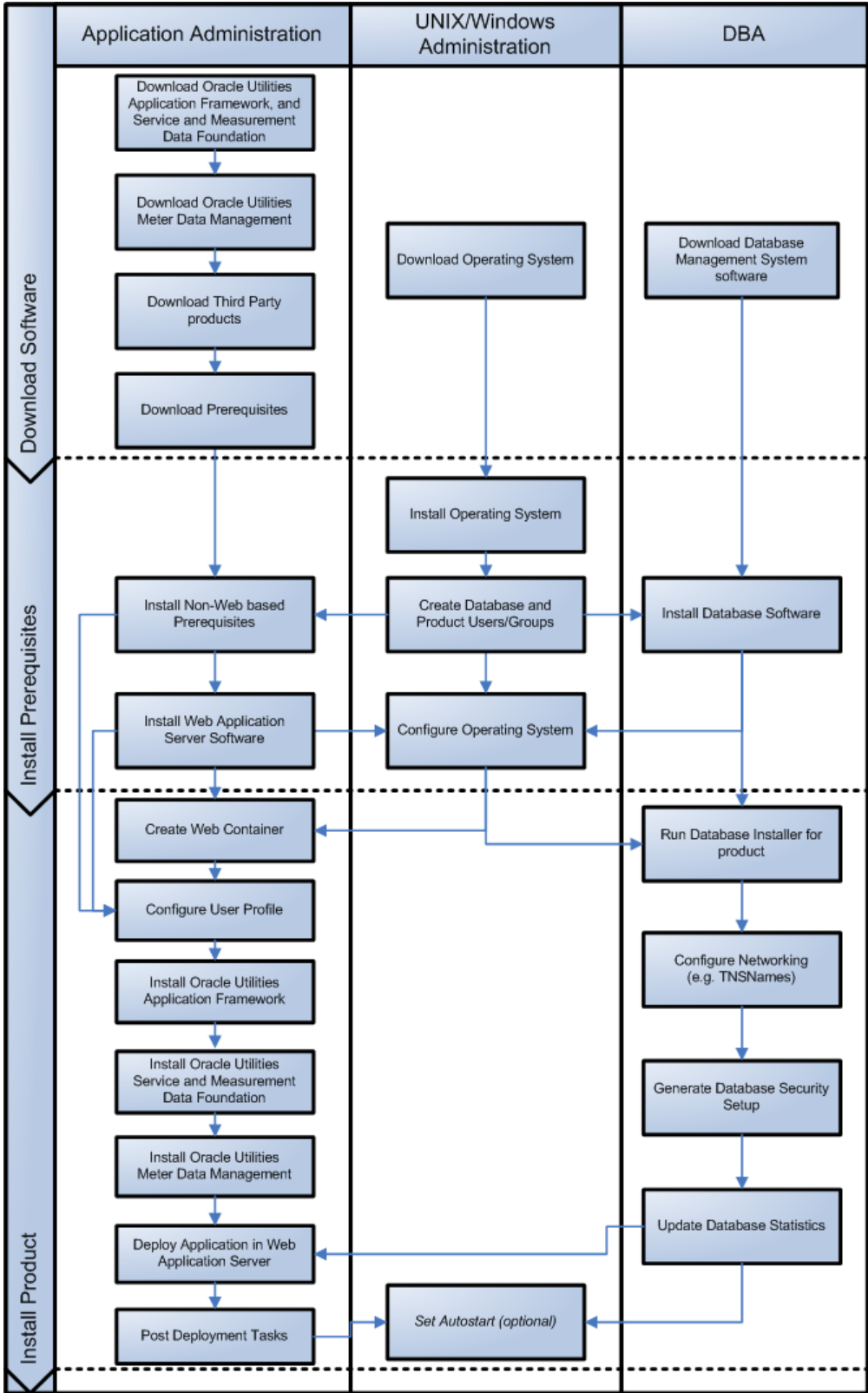
Installing Oracle Utilities Meter Data Management involves the following steps:

1. Review the different tiers of the application architecture as described in the section [Application Architecture](#) of this chapter.
2. Understand the hardware requirements for installing the application and the supported platforms for the application and database servers as described in the [Chapter 2: 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 the [Chapter 3: Planning the Installation](#). This chapter includes lists of the required software for each supported combination of operating system and application server.
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 the [Installing Prerequisite Software](#) section in the [Chapter 3: Planning the Installation](#).
6. Install the framework for the application.
7. Install the Oracle Utilities Service and Measurement Data Foundation for the application.
8. Install Oracle Utilities Meter Data Management.
9. Follow the installation guidelines described in the [Chapter 7: Additional Tasks](#).

The following diagram provides an overview of the steps that need to be taken to install and configure Oracle Utilities Meter Data Management:



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

Application Architecture

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

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

Tier 1: Desktop/Client, or Presentation Tier

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

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

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

Tier 3: Database, or Persistence Tier

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

Installation Components

The Oracle Utilities Meter Data Management product installation consists of the following components:

- Database Components:
 - Oracle Utilities Application Framework database
 - Oracle Utilities Service and Measurement Data Foundation database
 - Oracle Utilities Meter Data Management database
- Application Components:
 - Oracle Utilities Application Framework application
 - Oracle Utilities Service and Measurement Data Foundation application
 - Oracle Utilities Meter Data Management application

For a successful installation, you must install ALL of the above components.

Installation Types

The first step in the installation procedure is to determine the installation type that meets your business requirements. The following are the possible installation types:

- [Initial Installation](#) - A base installation, typically used for a production environment.
- [Demo Installation](#) - A base installation with pre-populated demo data, typically used for demonstration or training purposes.
- [Upgrade Installation](#) - An upgrade installation from version 2.1.0.3 to version 2.2.0.

Please see [Recommendations for Creating a Production Environment](#) for information about which installation type is appropriate for a production environment.

The following sections describe these installation types in detail.

Initial Installation

This installation type is applicable when installing Oracle Utilities Meter Data Management for the first time or from scratch. For an initial install, you must install all of the following components:

- Database components:
Refer to the “Initial Install” section of the Oracle Utilities Meter Data Management *Database Administrator’s Guide* for more information.
- Application components:
 - Oracle Utilities Application Framework application
 - Oracle Utilities Application Framework Single Fix Pre-Requisite Rollup for Oracle Utilities Service and Measurement Data Foundation
 - Oracle Utilities Service and Measurement Data Foundation application
 - Oracle Utilities Meter Data Management application

Refer to chapter “[Installing Oracle Utilities Meter Data Management - Initial Installation](#)” for the steps involved in installing each of the above components.

Demo Installation

This installation type is applicable when installing a demo application of Oracle Utilities Meter Data Management for demonstration or training purposes. For a demo install, you must install all of the following components:

- Demo Database components:
Refer to the “Demo Install” section of the Oracle Utilities Meter Data Management *Database Administrator’s Guide* for more information.
- Application components:
 - Oracle Utilities Application Framework application
 - Oracle Utilities Application Framework Single Fix Pre-Requisite Rollup for Oracle Utilities Service and Measurement Data Foundation
 - Oracle Utilities Service and Measurement Data Foundation application
 - Oracle Utilities Meter Data Management application

Refer to chapter “[Installing Oracle Utilities Meter Data Management - Demo Installation](#)” for the steps involved in installing each of the above components.

Upgrade Installation

This installation type is applicable when upgrading Oracle Utilities Meter Data Management from version 2.1.0.3 to 2.2.0.

Note: If you have a version prior to 2.1.0.3, you must install 2.1.0.3 before upgrading to 2.2.0.

For an upgrade, you must upgrade all of the following components:

- Database components:
Refer to the “Upgrade Install” section of the Oracle Utilities Meter Data Management *Database Administrator’s Guide* for more information.
- Application components:
 - Oracle Utilities Application Framework application
 - Oracle Utilities Application Framework Single Fix Pre-Requisite Rollup for Oracle Utilities Service and Measurement Data Foundation
 - Oracle Utilities Service and Measurement Data Foundation application
 - Oracle Utilities Meter Data Management application

Refer to chapter “[Upgrading Oracle Utilities Meter Data Management](#)” for the steps involved in upgrading each of the above components.

Recommendations for Creating a Production Environment

For a production environment, Oracle recommends that you use the Initial Installation installation type as described above.

If there is any custom configuration that needs to be migrated from a development or “gold” environment into production, the migration can be done by using the Configuration Migration Assistant (CMA). Please refer to the appendix “Configuration Migration Assistant” in the *Oracle Utilities Meter Data Management Configuration Guide* for more details about CMA.

Oracle does not recommend creating a production environment by using the Demo Installation installation type, or by cloning an existing Demo installation.

Media Pack Components

The Oracle Utilities Meter Data Management Media Pack consists of the following packages:

Documentation Packages

- *Oracle Utilities Meter Data Management V2.2.0.0.0 Release Notes*
- *Oracle Utilities Meter Data Management V2.2.0.0.0 Quick Install Guide*
- *Oracle Utilities Meter Data Management V2.2.0.0.0 Install Documentation*
- *Oracle Utilities Meter Data Management V2.2.0.0.0 User Documentation*
- *Oracle Utilities Meter Data Management V2.2.0.0.0 Supplemental Documentation*

Installation Packages

- Oracle Utilities Application Framework V4.3.0 Service Pack 3 Multiplatform
- Oracle Utilities Application Framework V4.3.0 Service Pack 3 Single Fix Prerequisite Rollup for SMDM V2.2.0
- Oracle Utilities Service and Measurement Data Foundation V2.2.0.0.0 Multiplatform
- Oracle Utilities Meter Data Management V2.2.0.0.0 Multiplatform
- Oracle Utilities Meter Data Management V2.2.0.0.0 Oracle Database
- Oracle Utilities Meter Data Management V2.2.0.0.0 Reports
- Oracle Utilities Meter Data Management V2.2.0.0.0 Bugs PFD

Chapter 2

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](#)
- [Operating Systems and Application Servers](#)
- [Hardware and Web Browser Requirements](#)
- [Application Server Memory Requirements](#)
- [Additional Notes on 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.

Operating Systems and Application Servers

The following table details the operating system and application server combinations on which this version of Oracle Utilities Meter Data Management is supported.

Operating System and Web Browser (Client)	Operating System (Server)	Chipset	Application Server	Database
Windows 7, 8.1, 10 (Internet Explorer 11, Firefox ESR 45)	AIX 7.1 TL01+ AIX 7.2 TL00+	POWER 64-bit	WebLogic 12.1.3.0+*	Oracle 12.1.0.1+
	Oracle Linux 6.5+, 7.x (64-bit) (based on Red Hat Enterprise Linux (64-bit)**)	x86_64	WebLogic 12.1.3.0+*	Oracle 12.1.0.1+
	Oracle Solaris 11 (64-bit)	SPARC	WebLogic 12.1.3.0+*	Oracle 12.1.0.1+
	Windows Server 2012 R2 (64-bit)	x86_64	WebLogic 12.1.3.0+*	Oracle 12.1.0.1+

* A plus sign (+) after the fourth digit in the version number indicates that this and all higher versions of WebLogic are supported. For example, 12.1.3.0+ means that 12.1.3.0 and any higher 12.1.3.x.x versions are supported.

WebLogic 12.1.3.0+ is currently supported for both embedded and native installations. In future releases of the application, using a later version of WebLogic, for example 12.2.*, embedded installations will be not be supported. Only the native installation will be supported.

** Oracle Utilities Meter Data Management is supported on the versions of Oracle Linux specified. Because Oracle Linux is 100% userspace-compatible with Red Hat Enterprise Linux, Oracle Utilities Meter Data Management also is supported on Red Hat Enterprise Linux for this release.

Windows Server is **not** supported for Production environments. Wherever Windows Server is referenced within this guide, it is supported for Test or Development environments **only**.

The platforms listed above are current at the time of release. For the most current supported platforms, please refer to Oracle Utilities Product Matrix on My Oracle Support (MOS) Knowledge Article (Doc ID 1454143.1).

Hardware and Web Browser Requirements

Client Side Hardware Requirements

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

* The Recommended configuration supports 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 web browsers listed below are supported when used on each of the operating systems indicated:

Browsers	Windows OS
Internet Explorer 11 Firefox ESR 45	Windows OS 7, 8.1, 10 (64-bit)

Application Server Memory Requirements

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

Disk Space Requirements

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

Location	Size	Usage
\$\$PLEBASE	5 GB minimum	This is the location 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.
\$\$PLAPP	2 GB minimum	This location is used for storing batch log files and output from batch jobs. The size of this space should be influenced by which batches are run and how often, and the amount of debugging information that is collected.

Location	Size	Usage
Location of the application Web work files on the Web servers	1.5 GB minimum	This location is used by the various Web server vendors to expand the application. It should be considered when installing these products. Refer to the individual Web server documentation to determine the location of the temporary files.
Installation temporary area	4 GB	The application gets installed from this location. You need enough space to uncompress the files and install the application.
Oracle data area	4 GB minimum	This location is where the Oracle database data files are stored. The size of this space should be based on the requirements of the production environment. For an initial or demo database install 4 GB should be sufficient.

Additional Notes on Supported Platforms

Oracle Database Server - This version of Oracle Utilities Meter Data Management is certified on Oracle Database Server 12.1.0.1+ on the operating systems listed in the section above. The following version of the database is supported:

- Oracle Database Enterprise Edition

Note: Oracle Database Enterprise Edition and the Partitioning and Advanced Compression options are strongly recommended in all situations.

Oracle VM Support - This version of Oracle Utilities Meter Data Management is supported on Oracle VM Server for x86 for supported releases of Oracle Linux and Microsoft Windows operating systems.

Oracle Support Policy on VMWare - Refer to My Oracle Support knowledge base article 249212.1 for Oracle's support policy on VMWare.

Support for Software Patches and Upgrades

Due to the ongoing nature of software improvement, vendors will periodically issue patches and service packs for the operating systems, application servers and database servers on top of specific versions that Oracle products have already been tested against.

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

The exception from this rule is Hibernate software version 4.1.0. This version should not be upgraded.

Always contact Oracle Support prior to applying vendor updates that do not guarantee backward compatibility.

Chapter 3

Planning the Installation

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

- [Before You Install](#)
- [Prerequisite Software List](#)
- [Installing Prerequisite Software](#)
- [Readiness Checklist](#)

Before You Install

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

Application Server Clustering

If you are considering application server clustering, refer to the following whitepaper, available on My Oracle Support, for additional information:

- Implementing Oracle ExaLogic and/or Oracle WebLogic Clustering (Doc Id: 1334558.1)

Additional information about Weblogic clustering can be found at http://docs.oracle.com/cd/E17904_01/web.1111/e13709/toc.htm

Prerequisite Software List

Before you install Oracle Utilities Meter Data Management, you must install prerequisite software.

Refer to the respective installation documentation of the software for instructions on downloading and installing.

Prerequisite Software for Database Server

The prerequisite software for the database component of Oracle Utilities Meter Data Management is as follows:

Oracle Database Server 12.1.0.1+: This is required for installing the database component of the Oracle Utilities Meter Data Management product. The following version of the database server is supported:

- Oracle Database Enterprise Edition

The follow database feature is required:

- Oracle Locator

Note: Oracle Spatial is not required.

Prerequisite Software for Application Server

The prerequisite software for the application component of Oracle Utilities Meter Data Management is as follows:

- Oracle Database 12c Client
- JDK 1.8.0_92+ (64-bit)
- JDK 1.8.0_92+ (64-bit) required for Weblogic 12c (12.1.3.0+)
- Hibernate 4.1.0 Final

Web Browser Requirements

The web browsers listed below are supported when used on each of the operating systems indicated:

Browsers	Windows OS
Internet Explorer 11 Firefox ESR 45	Windows OS 7, 8.1, 10 (64-bit)

Installing Prerequisite Software

This section describes the software that needs to be installed for each of the supported operating system and application server combinations, including:

- [AIX 7.1 TL01+/AIX 7.2 TL00+ Application Server](#)
- [Oracle Linux 6.5+, 7.x or Red Hat Linux 6.5+, 7.x Operating System](#)
- [Oracle Solaris 11 Application Server](#)
- [Windows Server 2012 R2 Application Server](#)

AIX 7.1 TL01+/AIX 7.2 TL00+ Application Server

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

Supported Application Servers

Operating System	Chipset	Application Server
AIX 7.1 TL01+/ AIX 7.2 TL00+	POWER 64-bit	Oracle WebLogic 12c (12.1.3.0+) 64-bit version

Web/Application Server Tier

AIX 7.1 TL01 Operating System Running on Power5 and Power6 Architecture

UNIX Administrator User ID

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

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

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

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

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

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

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

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

```
set +o noclobber
```


Security Configuration

Various options exist to secure a system. In this application all files will be created with the minimum permissions required to ensure that group-readable, group-writable and group-executable files will have the correct user groups and to restrict the permissions available to legitimate users. In this way, a low privileged end user cannot directly edit configuration files and thereby bypass application security controls.

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

Please replace these users and groups for your installation defaults:

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

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

Oracle Client 12c — Runtime Option

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

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

IBM Java Software Development Kit version 8.0 SR15 64-bit, IBM SDK, Java Technology Edition, Version 8.0

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

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

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

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

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

Hibernate 4.1.0 FINAL

You must install Hibernate 4.1.0 before installing Oracle Utilities Meter Data Management.

To install Hibernate:

1. Create a Hibernate jar external depot:

```
export HIBERNATE_JAR_DIR=<Hibernate 3rd party jars depot>
```

2. Download the hibernate-release-4.1.0.Final.zip file from

```
http://sourceforge.net/projects/hibernate/files/hibernate4/
```

Click the “4.1.0.Final” link to download the zip file.

3. Extract the contents of the archive file:

```
jar xvf hibernate-release-4.1.0.Final.zip
```

Note: You must have Java JDK installed on the machine to use the jar command. Be sure to install the JDK that is supported for your platform.

4. Copy the jar files to your Hibernate jar directory (\$HIBERNATE_JAR_DIR) using the following commands:

```
copy hibernate-release-4.1.0.Final/lib/optional/
  ehcache/ehcache-core-2.4.3.jar $HIBERNATE_JAR_DIR
copycopy hibernate-release-4.1.0.Final/lib/optional/
  ehcache/hibernate-ehcache-4.1.0.Final.jar $HIBERNATE_JAR_DIR
copy hibernate-release-4.1.0.Final/lib/required/
  hibernate-commons-annotations-4.0.1.Final.jar $HIBERNATE_JAR_DIR
copy hibernate-release-4.1.0.Final/lib/required/
  hibernate-core-4.1.0.Final.jar $HIBERNATE_JAR_DIR
copy hibernate-release-4.1.0.Final/lib/required/
  hibernate-jpa-2.0-api-1.0.1.Final.jar $HIBERNATE_JAR_DIR
copy hibernate-release-4.1.0.Final/lib/required/
  javassist-3.15.0-GA.jar $HIBERNATE_JAR_DIR
copy hibernate-release-4.1.0.Final/lib/required/
  jboss-logging-3.1.0.CR2.jar $HIBERNATE_JAR_DIR
copy hibernate-release-4.1.0.Final/lib/required/
  jboss-transaction-api_1.1_spec-1.0.0.Final.jar $HIBERNATE_JAR_DIR
```

Oracle Linux 6.5+, 7.x or Red Hat Linux 6.5+, 7.x Operating System

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

Supported Application Servers

Operating System	Chipset	Application Server
Oracle Enterprise Linux 6.5+, 7.x (64-bit) (based on Red Hat Enterprise Linux (64-bit))	x86_64	Oracle WebLogic 12c (12.1.3.0+) 64-bit version

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

UNIX Administrator User ID

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

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

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

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

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

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

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

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

```
set +o noclobber
```

Security Configuration

Various options exist to secure a system. In this application all files will be created with the minimum permissions required to ensure that group-readable, group-writable and group-executable files will have the correct user groups and to restrict the permissions available to legitimate users. In this way, a low privileged end user cannot directly edit configuration files and thereby bypass application security controls.

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

Please replace these users and groups for your installation defaults:

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

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

Oracle Client 12c — Runtime Option

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

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

Oracle Java Development Kit Version 8.0 Update 92+

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

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

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

For the userid cissys, ensure that the environment variable JAVA_HOME is setup, and that java_home/bin and java_home/lib can be found in cissys' PATH variable.

Note: JDK 8.0 Update 92 or higher version is required for Weblogic12c (12.1.3.0+).

Hibernate 4.1.0 FINAL

You must install Hibernate 4.1.0 before installing Oracle Utilities Meter Data Management.

To install Hibernate:

1. Create a Hibernate jar external depot:


```
export HIBERNATE_JAR_DIR=<Hibernate 3rd party jars depot>
```
2. Download the hibernate-release-4.1.0.Final.zip file from

<http://sourceforge.net/projects/hibernate/files/hibernate4/>

Click the “4.1.0.Final” link to download the zip file.

3. Extract the contents of the archive file:

```
jar xvf hibernate-release-4.1.0.Final.zip
```

Note: You must have Java JDK installed on the machine to use the jar command. Be sure to install the JDK that is supported for your platform.

4. Copy the jar files to your Hibernate jar directory (\$HIBERNATE_JAR_DIR) using the following commands:

```
copy hibernate-release-4.1.0.Final/lib/optional/
  ehcache/ehcache-core-2.4.3.jar $HIBERNATE_JAR_DIR
copy hibernate-release-4.1.0.Final/lib/optional/
  ehcache/hibernate-ehcache-4.1.0.Final.jar $HIBERNATE_JAR_DIR
copy hibernate-release-4.1.0.Final/lib/required/
  hibernate-commons-annotations-4.0.1.Final.jar $HIBERNATE_JAR_DIR
copy hibernate-release-4.1.0.Final/lib/required/
  hibernate-core-4.1.0.Final.jar $HIBERNATE_JAR_DIR
copy hibernate-release-4.1.0.Final/lib/required/
  hibernate-jpa-2.0-api-1.0.1.Final.jar $HIBERNATE_JAR_DIR
copy hibernate-release-4.1.0.Final/lib/required/
  javassist-3.15.0-GA.jar $HIBERNATE_JAR_DIR
copy hibernate-release-4.1.0.Final/lib/required/
  jboss-logging-3.1.0.CR2.jar $HIBERNATE_JAR_DIR
copy hibernate-release-4.1.0.Final/lib/required/
  jboss-transaction-api_1.1_spec-1.0.0.Final.jar $HIBERNATE_JAR_DIR
```

Oracle WebLogic 12c (12.1.3.0+) 64-bit

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

- Download and install 64-bit Java (as documented above) before installing WebLogic.
- Download and install WebLogic Server 12c (12.1.3.0+).

Oracle Solaris 11 Application Server

This section describes the software requirements for operating the application using the Oracle Solaris 11 application server.

Supported Application Servers

Operating System	Chipset	Application Server
Oracle Solaris 11 (64-bit)	SPARC	Oracle WebLogic 12c (12.1.3.0+) 64-bit version

Oracle Solaris 11 Operating System Running on SPARC-based 64-bit Architecture

UNIX Administrator User ID

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

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

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

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

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

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

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

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

```
set +o noclobber
```

Security Configuration

Various options exist to secure a system. In this application all files will be created with the minimum permissions required to ensure that group-readable, group-writable and group-executable files will have the correct user groups and to restrict the permissions available to legitimate users. In this way, a low privileged end user cannot directly edit configuration files and thereby bypass application security controls.

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

Please replace these users and groups for your installation defaults:

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

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

Oracle Client 12c — Runtime Option

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

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

Oracle Java Development Kit Version 8.0 Update 92+

This software is only required for Oracle WebLogic installations.

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

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

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

For the userid cissys, ensure that the environment variable JAVA_HOME is setup, and that java_home/bin and java_home/lib can be found in cissys' PATH variable.

Note: JDK 8.0 Update 92 or higher version is required for Weblogic12c (12.1.3.0+).

Hibernate 4.1.0 FINAL

You must install Hibernate 4.1.0 before installing Oracle Utilities Meter Data Management.

To install Hibernate:

1. Create a Hibernate jar external depot:

```
export HIBERNATE_JAR_DIR=<Hibernate 3rd party jars depot>
```

2. Download the hibernate-release-4.1.0.Final.zip file from

<http://sourceforge.net/projects/hibernate/files/hibernate4/>

Click the "4.1.0.Final" link to download the zip file.

3. Extract the contents of the archive file:

```
jar xvf hibernate-release-4.1.0.Final.zip
```

Note: You must have Java JDK installed on the machine to use the jar command. Be sure to install the JDK that is supported for your platform.

4. Copy the jar files to your Hibernate jar directory (\$HIBERNATE_JAR_DIR) using the following commands:

```
copy hibernate-release-4.1.0.Final/lib/optional/  
    ehcache/ehcache-core-2.4.3.jar $HIBERNATE_JAR_DIR  
copy hibernate-release-4.1.0.Final/lib/optional/  
    ehcache/hibernate-ehcache-4.1.0.Final.jar $HIBERNATE_JAR_DIR  
copy hibernate-release-4.1.0.Final/lib/required/  
    hibernate-commons-annotations-4.0.1.Final.jar $HIBERNATE_JAR_DIR  
copy hibernate-release-4.1.0.Final/lib/required/  
    hibernate-core-4.1.0.Final.jar $HIBERNATE_JAR_DIR  
copy hibernate-release-4.1.0.Final/lib/required/  
    hibernate-jpa-2.0-api-1.0.1.Final.jar $HIBERNATE_JAR_DIR  
copy hibernate-release-4.1.0.Final/lib/required/  
    javassist-3.15.0-GA.jar $HIBERNATE_JAR_DIR  
copy hibernate-release-4.1.0.Final/lib/required/  
    jboss-logging-3.1.0.CR2.jar $HIBERNATE_JAR_DIR  
copy hibernate-release-4.1.0.Final/lib/required/  
    jboss-transaction-api_1.1_spec-1.0.0.Final.jar $HIBERNATE_JAR_DIR
```

Oracle WebLogic 12c (12.1.3.0+) 64-bit

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

- Download and install 64-bit Java (as documented above) before installing WebLogic.
- Download and install WebLogic Server 12c (12.1.3.0+).

Windows Server 2012 R2 Application Server

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

Supported Application Servers

Operating System	Chipset	Application Server
Windows Server 2012 R2 (64-bit)	x86_64	Oracle WebLogic 12c (12.1.3.0+) 64-bit version

Oracle Client 12c — Runtime Option

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

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

Oracle Java Development Kit Version 8.0 Update 92+

This software is required for the Oracle WebLogic Installation.

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

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

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

For the userid cissys, ensure that the environment variable JAVA_HOME is setup, and that java_home/bin and java_home/lib can be found in cissys' PATH variable.

Note: JDK 8.0 Update 92 or higher version is required for Weblogic12c (12.1.3.0+).

Hibernate 4.1.0 FINAL

You must install Hibernate 4.1.0 before installing Oracle Utilities Meter Data Management.

To install Hibernate:

1. Create a Hibernate jar external depot:

```
export HIBERNATE_JAR_DIR=<Hibernate 3rd party jars depot>
```

2. Download the hibernate-release-4.1.0.Final.zip file from

<http://sourceforge.net/projects/hibernate/files/hibernate4/>

Click the “4.1.0.Final” link to download the zip file.

3. Extract the contents of the archive file:

```
jar xvf hibernate-release-4.1.0.Final.zip
```

Note: You must have Java JDK installed on the machine to use the jar command. Be sure to install the JDK that is supported for your platform.

4. Copy the jar files to your Hibernate jar directory (\$HIBERNATE_JAR_DIR) using the following commands:

```
copy hibernate-release-4.1.0.Final/lib/optional/ehcache/ehcache-core-2.4.3.jar $HIBERNATE_JAR_DIR
```

```
copy hibernate-release-4.1.0.Final/lib/optional/  
    ehcache/hibernate-ehcache-4.1.0.Final.jar $HIBERNATE_JAR_DIR  
copy hibernate-release-4.1.0.Final/lib/required/  
    hibernate-commons-annotations-4.0.1.Final.jar $HIBERNATE_JAR_DIR  
copy hibernate-release-4.1.0.Final/lib/required/  
    hibernate-core-4.1.0.Final.jar $HIBERNATE_JAR_DIR  
copy hibernate-release-4.1.0.Final/lib/required/  
    hibernate-jpa-2.0-api-1.0.1.Final.jar $HIBERNATE_JAR_DIR  
copy hibernate-release-4.1.0.Final/lib/required/  
    javassist-3.15.0-GA.jar $HIBERNATE_JAR_DIR  
copy hibernate-release-4.1.0.Final/lib/required/  
    jboss-logging-3.1.0.CR2.jar $HIBERNATE_JAR_DIR  
copy hibernate-release-4.1.0.Final/lib/required/  
    jboss-transaction-api_1.1_spec-1.0.0.Final.jar $HIBERNATE_JAR_DIR
```

Oracle WebLogic 12c (12.1.3.0+) 64-bit

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

- Download and install 64-bit Java (as documented above) before installing WebLogic.
- Download and install WebLogic Server 12c (12.1.3.0+).

Readiness Checklist

The following checklist guides you through the installation process of Oracle Utilities Meter Data Management. The details for each step are presented in subsequent chapters.

1. Confirm that the recommended hardware is ready. Refer to [Supported Platforms and Hardware Requirements](#) for more details.
2. Install prerequisite software. Refer to the [Prerequisite Software List](#) for more details.
3. Ensure that you have downloaded the Oracle Utilities Meter Data Management V2.2.0 components.
4. Go through the [Installation and Configuration Worksheets](#) to understand the configuration menu.
5. Determine the type of the installation:
 - **Initial Installation** - For initial installation follow the instructions mentioned in chapter [Installing Oracle Utilities Meter Data Management - Initial Installation](#).
 - **Demo Installation** - For demo installation follow the instructions mentioned in chapter [Installing Oracle Utilities Meter Data Management - Demo Installation](#).
 - **Upgrade Installation** - For upgrade installation to V2.2.0, follow the instructions mentioned in chapter [Upgrading Oracle Utilities Meter Data Management](#).
6. Perform post-installation tasks.

Chapter 4

Installing Oracle Utilities Meter Data Management - Initial Installation

This chapter provides instructions for installing Oracle Utilities Meter Data Management from scratch. This chapter includes:

- [Before You Install](#)
- [Initial Installation Procedure](#)
- [After the Installation](#)
- [Operating the Application](#)

Before You Install

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

Initial Installation Procedure

The initial installation procedure consists of:

- [Database Component Installation](#)
- [Application Components Installation](#)

Database Component Installation

Installation of the database component of Oracle Utilities Meter Data Management must be complete before you can proceed with the following sections. Refer to the section “**Initial Install**” of the Oracle Utilities Meter Data Management *Database Administrator's Guide*, which provides instructions on installing the database component.

Application Components Installation

A successful installation consists of the following steps:

- [Installing the Oracle Utilities Application Framework V4.3.0 Service Pack 3 \(4.3.0.3\) Application Component](#)
- [Installing Oracle Utilities Application Framework V4.3.0.3 Single Fix Prerequisite Rollup for SMDV V2.2.0](#)
- [Installing Oracle Utilities Service and Measurement Data Foundation V2.2.0 Application Component](#)
- [Installing the Oracle Utilities Meter Data Management V2.2.0 Application Component](#)

Installing the Oracle Utilities Application Framework V4.3.0 Service Pack 3 (4.3.0.3) Application Component

This section describes how to install the application component of Oracle Utilities Application Framework V4.3.0 Service Pack 3, including:

- [Copying and Decompressing Install Media](#)
- [Setting Permissions for the cistab file in UNIX](#)
- [Installing the Application Component](#)

Copying and Decompressing Install Media

The Oracle Utilities Application Framework V4.3.0 Service Pack 3 installation file is delivered in jar format for both UNIX and Windows platforms. If you are planning to install multiple Oracle Utilities Application Framework V4.3.0 Service Pack 3 environments operated by different Oracle Utilities administrator user ids, you must complete each of the following installation steps for each administrator userid.

To copy and decompress the install media, follow these steps:

1. Log in to the application server host with the Oracle Utilities Application Framework administrator user ID.
2. Download the Oracle Utilities Application Framework V4.3.0.3.0 Multiplatform from Oracle Software Delivery Cloud.
3. Create a temporary directory such as `c:\ouaf\temp` or `/ouaf/temp`. (Referred to below as <TEMPDIR>.)

Note: 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.

4. Copy the file `FW-V4.3.0.3.0-MultiPlatform.jar` from the delivered package to the <TEMPDIR>. If you are using FTP to transfer this file, remember to use the `BINARY` option for the FTP transfer.
5. Decompress the file:

```
cd <TEMPDIR>
jar -xvf FW-V4.3.0.3.0-MultiPlatform.jar
```

Note: You will need to have Java JDK installed on the machine used to (un)jar the application server installation package. Please install the JDK that is supported for the install on your platform to be able to use the `jar` command. This is the location of Java packages: <http://www.oracle.com/technetwork/java/archive-139210.html>

A sub-directory named “FW.V4.3.0.3.0” is created. It contains the installation software for the Oracle Utilities framework application server.

Setting 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.V4.3.0.3.0` directory named `cistab_<SPLENVIRON>.sh`. Run the generated script using the root account before continuing with the installation process. The script initializes the `cistab` file in `/etc` directory (if it is the first Oracle Utilities Framework application environment on the server) and registers a new environment.

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

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

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

Installing the Application Component

This section outlines the steps for installing the application component of Oracle Utilities Application Framework V4.3.0 Service Pack 3.

1. Login to the Application Server host as administrator (the default is `cissys` on UNIX) or as a user with Administrator privileges (on Windows).
2. Change directory to the `<TEMPDIR>/FW.V4.3.0.3.0` directory.
3. Set the `ORACLE_CLIENT_HOME` and `PATH` variables as Oracle Client Perl is required to run the installer.

UNIX:

```
export ORACLE_CLIENT_HOME=<ORACLE CLIENT INSTALL LOCATION>
export PERL_HOME=${ORACLE_CLIENT_HOME}/perl
export PATH=${PERL_HOME}/bin:$PATH
export PERL5LIB=${PERL_HOME}/lib:${PERL_HOME}/lib/site_perl:<OUAF
    Installer Decompressed location/bin/perl>
export PERLLIB=${PERL_HOME}/lib:${PERL_HOME}/lib/site_perl:<OUAF
    Installer Decompressed location/bin/perl>
export LD_LIBRARY_PATH=${ORACLE_CLIENT_HOME}/lib:$LD_LIBRARY_PATH
```

Windows:

```
set ORACLE_CLIENT_HOME=<ORACLE CLIENT INSTALL LOCATION>
set PERL_HOME=%ORACLE_CLIENT_HOME%\perl
set PATH=%PERL_HOME%\bin;%PATH%
```

4. Start the application installation utility by executing the appropriate script:

UNIX:

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

Windows:

```
install.cmd
```

5. The Oracle Utilities Application Framework specific menu appears.
6. Follow the messages and instructions that are produced by the application installation utility.
7. Select each menu item to configure the values. For detailed description of the values, refer to [Appendix B: Installation and Configuration Worksheets](#).
8. Below are the mandatory list of configurable items along with descriptions for a few items. Where you see <Mandatory>, enter values suitable to your environment. You can assign default values to the rest of the menu items.

```

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

2. Keystore Options
   Store Type:                      JCEKS
   Alias:                            ouaf.system
   Alias Key Algorithm:              AES
   Alias Key Size:                  128
   HMAC Alias:                      ouaf.system.hmac
   Padding:                         PKCS5Padding
   Mode:                            CBC

50. Environment Installation Options
   Environment Mount Point: <Mandatory> - Install Location
   Log Files Mount Point:<Mandatory> - ThreadPoolWorker Logs
                                   Location

   Environment Name:<Mandatory>
   Web Application Server Type:      WLS
   Install Application Viewer Module: true

```

Each item in the above list should be configured for a successful install.

Choose option (1,2,50, <P> Process, <X> Exit):

9. Once you enter 'P' after entering mandatory input values in the above menu, the system populates another configuration menu.

```

*****
* Environment Configuration *
*****
1. Environment Description
   Environment Description:      <Mandatory>

2. Business Application Server Configuration
   Business Server Host:        <Mandatory> - Hostname on which
                                   application being installed
   WebLogic Server Name:       myserver
   Business Server Application Name: SPLService
   MPL Admin Port Number:      <Mandatory> - Multipurpose Listener
                                   Port
   MPL Automatic startup:      false

```

3. Web Application Server Configuration

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

4. Database Configuration

Application Server Database User ID: <Mandatory>
Application Server Database Password: <Mandatory>
MPL Database User ID: <Mandatory>
MPL Database Password: <Mandatory>
XAI Database User ID: <Mandatory>
XAI Database Password: <Mandatory>
Batch Database User ID: <Mandatory>
Batch Database Password: <Mandatory>
Database Name: <Mandatory>
Database Server: <Mandatory>
Database Port: <Mandatory>
ONS Server Configuration:
Database Override Connection String:
Oracle Client Character Set NLS_LANG:

5. General Configuration Options

Batch RMI Port: <Mandatory> - *RMI port for batch*
Batch Mode: <Mandatory> - *CLUSTERED or DISTRIBUTED*
Coherence Cluster Name: <Mandatory> - *Unique name for batch*
Coherence Cluster Address: <Mandatory> - *Unique Multicast address*
Coherence Cluster Port: <Mandatory> - *Unique port for batch cluster*
Coherence Cluster Mode: <Mandatory> - *prod*

Each item in the above list should be configured for a successful install.

Choose option (1,2,3,4,5, <P> Process, <X> Exit):

10. When you are done with the parameter setup, proceed with the option P. The utility writes the configured parameters and their values into the configuration file.
11. Once the install has finished, the installation log location appears on the screen. If the log does not list any error messages, the installation of the application component of Oracle Utilities Application Framework is complete. You can now install Oracle Utilities Service and Measurement Data Foundation as described in the following section.

Installing Oracle Utilities Application Framework V4.3.0.3 Single Fix Prerequisite

Rollup for SMDF V2.2.0

1. Create a <TEMPDIR> directory on the host server that is independent of any current or other working application environment.
2. Copy the file "Oracle Utilities Application Framework V4.3.0 Service Pack 3 Single Fix Prerequisite Rollup.zip" in the delivered package to <TEMPDIR>. If you are using FTP to transfer this file, remember to use the BINARY option for the FTP transfer.
3. Upon extracting the zip, file 'Application-Server-Multiplatform' sub-directory will be created.
4. Refer to the Readme.txt inside 'Application-Server-Multiplatform' file for instructions on installing the Oracle Utilities Application Framework 4.3.0 Service Pack 3 Prerequisite Single Fixes.

These patches are also available for download separately from My Oracle Support.

See [Appendix E](#) for a list of the patches contained in the rollup.

Installing Oracle Utilities Service and Measurement Data Foundation V2.2.0 Application Component

This section describes how to install the application component of Oracle Utilities Service and Measurement Data Foundation, including:

- [Copying and Decompressing Install Media](#)
- [Installing Oracle Utilities Service and Measurement Data Foundation V2.2.0](#)

Copying and Decompressing Install Media

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

The Oracle Utilities Service and Measurement Data Foundation is delivered as a separate installation package. Please refer to the chapter [Supported Platforms and Hardware Requirements](#) for installation details regarding the database and operating system versions supported for the Service and Measurement Data Foundation. Also see the section [Installing 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 application 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 Application Framework.
3. Copy the file SMDF-V2.2.0.0.0-MultiPlatform.jar in the delivered package to a <TEMPDIR> on your application 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 SMDF-V2.2.0.0.0-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.V2.2.0.0.0 is created. The contents of the installation directory are identical for both platforms. The directory contains the install software for the application product.

Installing Oracle Utilities Service and Measurement Data Foundation V2.2.0

This section outlines the steps for installing the Service and Measurement Data Foundation:

Preparing for the Installation

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

UNIX:

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

Windows:

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

3. Stop the environment if running.

UNIX:

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

Windows:

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

Installing the Application

1. Change to the <TEMPDIR>/MDF.V2.2.0.0.0 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

The configuration menu for the Oracle Utilities Service and Measurement Data Foundation Application appears.

3. Select menu item 8 to configure OSB.
Use the completed OSB configuration worksheet to assist you in this step. See the [Appendix B: Installation and Configuration Worksheets](#).
4. Select menu item 9 to configure SOA.
Use the completed SOA configuration worksheet to assist you in this step. See the [Appendix B: Installation and Configuration Worksheets](#).
5. Select menu item 10 to configure the SOA Configuration Plan.
Use the completed SOA Configuration Plan (MDF) worksheet to assist you in this step. See the [Appendix B: Installation and Configuration Worksheets](#).
6. When you are done with the parameter setup, choose option P to proceed with the installation.
7. Change to the <TEMPDIR>/MDF.V2.2.0.0.0 directory.
8. Execute the following command:

UNIX:

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

Windows:

```
postinstall.cmd
```

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

Installation of Oracle Utilities Service and Measurement Data Foundation Application Server is complete if no errors occurred during installation.

Installing the Oracle Utilities Meter Data Management V2.2.0 Application Component

This section describes how to install the application component of Oracle Utilities Meter Data Management, including:

- [Installation Prerequisite](#)
- [Copying and Decompressing Install Media](#)
- [Installing the Application Component](#)

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

You must initialize the Service and Measurement Data Foundation environment. For detailed instructions see the Preparing for the Installation section.

Installation Prerequisite

Oracle Utilities Service and Measurement Data Foundation 2.2.0 must be installed prior to installing Oracle Utilities Meter Data Management 2.2.0.

Copying and Decompressing Install Media

The Oracle Utilities Meter Data Management installation file is delivered in jar format for both UNIX and Windows platforms.

To copy and decompress the install media, follow these steps:

1. Log in to the application server host 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. Download the Oracle Utilities Meter Data ManagementV2.2.0.0.0 Multiplatform from Oracle Software Delivery Cloud.
3. 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 Application Framework.
4. Copy the file MDM-V2.2.0.0.0-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.
5. Decompress the file:

```
cd <TEMPDIR>  
jar -xvf MDM-V2.2.0.0.0-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.V2.2.0.0.0 is created. The contents of the installation directory are identical for both platforms. The directory contains the install software for the application product.

Installing the Application Component

Follow the steps below to install Oracle Utilities Meter Data Management application component:

1. Log in to the application server host as Oracle Utilities Meter Data Management Administrator (default cissys).

2. Change directory:

```
cd <install_dir>/bin
```

where <install_dir> is the location where the Oracle Utilities Service and Measurement Data Foundation application component is installed.

3. Initialize the environment by running the appropriate command:

UNIX:

```
./splenviron.sh -e <ENV_NAME>
```

Windows:

```
splenviron.cmd -e <ENV_NAME>
```

4. If the environment is running, stop it by running the appropriate command:

UNIX:

```
./spl.sh stop
```

Windows:

```
spl.cmd stop
```

5. Change to the <TEMPDIR>/MDM.V2.2.0.0.0 Directory.

6. Execute the install script:

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

UNIX:

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

Windows:

```
install.cmd
```

Choose option P to proceed with the installation.

7. Change to the <TEMPDIR>/MDMV2.2.0.0.0 directory.

8. Execute the following command:

UNIX:

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

Windows:

```
postinstall.cmd
```

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

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

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

UNIX:

```
spl.sh start
```

Windows:

```
spl.cmd start
```

Follow the message on the screen and review 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.

Note: The first time you start Oracle Utilities Meter Data Management, you need to log into 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`

After the Installation

After completing the installation, verify the following:

1. Verify installation logs created under decompressed installer location for any errors.
2. Confirm installation logs do not contain any errors.
3. Confirm all the configurations are correct. Refer to [Appendix B: Installation and Configuration Worksheets](#) for details.
4. Confirm that the database is ready.
5. Start the application server. For instructions, refer to [Appendix C: Common Maintenance Activities](#).
6. To operate the application, refer to the following section.

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 system.

Chapter 5

Installing Oracle Utilities Meter Data Management - Demo Installation

This chapter provides instructions for setting up a demo application of Oracle Utilities Meter Data Management useful for demonstration or training purposes. This chapter includes:

- [Before You Install](#)
- [Demo Installation Procedure](#)
- [Operating the Application](#)

Before You Install

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

Demo Installation Procedure

The demo installation procedure consists of:

- [Database Component Installation](#)
- [Application Components Installation](#)

Database Component Installation

Installation of the database component of Oracle Utilities Meter Data Management must be complete before you can proceed with the following sections. Refer to the section “**Demo Install**” of the *Oracle Utilities Meter Data Management Database Administrator's Guide*, which provides instructions on installing the database component with pre-populated demo data.

Application Components Installation

A successful installation consists of the following steps:

- [Installing the Oracle Utilities Application Framework V4.3.0 Service Pack 3 \(4.3.0.3\) Application Component](#)
- [Installing Oracle Utilities Application Framework V4.3.0.3 Single Fix Prerequisite Rollup for SMDF V2.2.0](#)
- [Installing Oracle Utilities Service and Measurement Data Foundation V2.2.0 Application Component](#)

-
- [Installing the Oracle Utilities Meter Data Management V2.2.0 Application Component](#)

Installing the Oracle Utilities Application Framework V4.3.0 Service Pack 3 (4.3.0.3) Application Component

This section describes how to install the application component of Oracle Utilities Application Framework, including:

- [Copying and Decompressing Install Media](#)
- [Setting Permissions for the cistab file in UNIX](#)
- [Installing the Application Component](#)

Copying and Decompressing Install Media

The Oracle Utilities Application Framework 4.3.0 Service Pack 3 installation file is delivered in jar format for both UNIX and Windows platforms. If you are planning to install multiple Oracle Utilities Application Framework environments operated by different Oracle Utilities administrator user ids, you must complete each of the following installation steps for each administrator userid.

To copy and decompress the install media, follow these steps:

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

Note: 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-V4.3.0.3.0-MultiPlatform.jar` from the delivered package to the `<TEMPDIR>`. If you are using FTP to transfer this file, remember to use the BINARY option for the FTP transfer.
4. Decompress the file:

```
cd <TEMPDIR>
jar -xvf FW-V4.3.0.3.0-MultiPlatform.jar
```

Note: You will need to have Java JDK installed on the machine used to (un)jar the application server installation package. Please install the JDK that is supported for the install on your platform to be able to use the jar command. This is the location of Java packages: <http://www.oracle.com/technetwork/java/archive-139210.html>

A sub-directory named “FW.V4.3.0.3.0” is created. It contains the installation software for the Oracle Utilities framework application server.

Setting 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.V4.3.0.3.0` directory named `cistab_<SPLENVIRON>.sh`. Run the generated script using the root account before continuing with the installation process. The script initializes the `cistab` file in `/etc` directory (if it is the first Oracle Utilities Framework application environment on the server) and registers a new environment.

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

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

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

Installing the Application Component

This section outlines the steps for installing the application component of Oracle Utilities Application Framework V4.3.0 Service Pack 3.

1. Login to the Application Server host as administrator (the default is cissys on UNIX) or as a user with Administrator privileges (on Windows).
2. Change directory to the <TEMPDIR>/FW.V4.3.0.3.0 directory.
3. Set the ORACLE_CLIENT_HOME and PATH variables as Oracle Client Perl is required to run the installer.

UNIX:

```
export ORACLE_CLIENT_HOME=<ORACLE CLIENT INSTALL LOCATION>
export PERL_HOME=${ORACLE_CLIENT_HOME}/perl
export PATH=${PERL_HOME}/bin:$PATH
export PERL5LIB=${PERL_HOME}/lib:${PERL_HOME}/lib/site_perl:<OUAF
    Installer Decompressed location/bin/perl>
export PERLLIB=${PERL_HOME}/lib:${PERL_HOME}/lib/site_perl:<OUAF
    Installer Decompressed location/bin/perl>
export LD_LIBRARY_PATH=${ORACLE_CLIENT_HOME}/lib:$LD_LIBRARY_PATH
```

Windows:

```
set ORACLE_CLIENT_HOME=<ORACLE CLIENT INSTALL LOCATION>
set PERL_HOME=%ORACLE_CLIENT_HOME%\perl
set PATH=%PERL_HOME%\bin;%PATH%
```

4. Start the application installation utility by executing the appropriate script:

UNIX:

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

Windows:

```
install.cmd
```

5. The Oracle Utilities Application Framework specific menu appears.
6. Follow the messages and instructions that are produced by the application installation utility.
7. Select each menu item to configure the values. For detailed description of the values, refer to [Appendix B: Installation and Configuration Worksheets](#).
8. Below are the mandatory list of configurable items along with descriptions for a few items. Where you see <Mandatory>, enter values suitable to your environment. You can assign default values to the rest of the menu items.

```

* Environment Installation Options *
*****
1. Third Party Software Configuration
   Oracle Client Home Directory: <Mandatory>
   Web Java Home Directory:      <Mandatory>
   Child JVM Home Directory:
   COBOL Home Directory:
   Hibernate JAR Directory: <Mandatory>
   ONS JAR Directory:
   Web Application Server Home Directory: <Mandatory>
   ADF Home Directory:
   OIM OAM Enabled Environment:
2. Keystore Options
   Store Type:                    JCEKS
   Alias:                         ouaf.system
   Alias Key Algorithm:           AES
   Alias Key Size:                128
   HMAC Alias:                    ouaf.system.hmac
   Padding:                       PKCS5Padding
   Mode:                          CBC
50. Environment Installation Options
    Environment Mount Point: <Mandatory> - Install Location
    Log Files Mount Point:<Mandatory> - ThreadPoolWorker Logs
                                   Location

    Environment Name:<Mandatory>
    Web Application Server Type:
    Install Application Viewer Module:

```

Each item in the above list should be configured for a successful install.

Choose option (1,2,50, <P> Process, <X> Exit):

9. Once you enter 'P' after entering mandatory input values in the above menu, the system populates another configuration menu.

```

*****
* Environment Configuration *
*****
1. Environment Description
   Environment Description:      <Mandatory>

2. Business Application Server Configuration
   Business Server Host:        <Mandatory> - Hostname on which
                                   application being installed

   WebLogic Server Name:       myserver
   Business Server Application Name: SPLService
   MPL Admin Port Number:      <Mandatory> - Multipurpose Listener
                                   Port

   MPL Automatic startup:      false

3. Web Application Server Configuration
   Web Server Host:            <Mandatory>
   Web Server Port Number:     <Mandatory>
   Web Context Root:           ouaf
   WebLogic JNDI User ID:      <Mandatory>
   WebLogic JNDI Password:     <Mandatory>
   WebLogic Admin System User ID: <Mandatory>
   WebLogic Admin System Password: <Mandatory>
   WebLogic Server Name:       myserver
   Web Server Application Name: SPLWeb

```

Application Admin User ID:	<Mandatory>
Application Admin Password:	<Mandatory>
Expanded Directories:	false
Application Viewer Module:	true

4. Database Configuration

Application Server Database User ID:	<Mandatory>
Application Server Database Password:	<Mandatory>
MPL Database User ID:	<Mandatory>
MPL Database Password:	<Mandatory>
XAI Database User ID:	<Mandatory>
XAI Database Password:	<Mandatory>
Batch Database User ID:	<Mandatory>
Batch Database Password:	<Mandatory>
Database Name:	<Mandatory>
Database Server:	<Mandatory>
Database Port:	<Mandatory>
ONS Server Configuration:	
Database Override Connection String:	
Oracle Client Character Set NLS_LANG:	

5. General Configuration Options

Batch RMI Port:	<Mandatory> - <i>RMI port for batch</i>
Batch Mode:	<Mandatory> - <i>CLUSTERED or DISTRIBUTED</i>
Coherence Cluster Name:	<Mandatory> - <i>Unique name for batch</i>
Coherence Cluster Address:	<Mandatory> - <i>Unique multicast address</i>
Coherence Cluster Port:	<Mandatory> - <i>Unique port for batch cluster</i>
Coherence Cluster Mode:	<Mandatory> - <i>prod</i>

Each item in the above list should be configured for a successful install.

Choose option (1,2,3,4,5, <P> Process, <X> Exit):

10. When you are done with the parameter setup, proceed with the option P. The utility writes the configured parameters and their values into the configuration file.
11. Once the install has finished, the installation log location appears on the screen. If the log does not list any error messages, the installation of the application component of Oracle Utilities Application Framework is complete. You can now install Oracle Utilities Service and Measurement Data Foundation as described in the following section.

Installing Oracle Utilities Application Framework V4.3.0.3 Single Fix Prerequisite Rollup for SMDF V2.2.0

1. Create a <TEMPDIR> directory on the host server that is independent of any current or other working application environment.
2. Copy the file 'Oracle Utilities Application Framework V4.3.0 Service Pack 3 Single Fix Prerequisite Rollup.zip' in the delivered package to <TEMPDIR>. If you are using FTP to transfer this file, remember to use the BINARY option for the FTP transfer.
3. Upon extracting the zip file 'Application-Server-Multiplatform' sub-directory will be created.

-
4. Refer to the Readme.txt inside 'Application-Server-Multiplatform' file for instructions on installing the Oracle Utilities Application Framework 4.3.0 Service Pack 3 Prerequisite Single Fixes.

These patches are also available for download separately from My Oracle Support.

See [Appendix E](#) for a list of the patches contained in the rollout.

Installing Oracle Utilities Service and Measurement Data Foundation V2.2.0 Application Component

This section describes how to install the application component of Oracle Utilities Service and Measurement Data Foundation, including:

- [Copying and Decompressing Install Media](#)
- [Installing Oracle Utilities Service and Measurement Data Foundation](#)

Copying and Decompressing Install Media

The Oracle Utilities Service and Measurement Data Foundation Base installation file is delivered in jar format for both UNIX and Windows platforms. Oracle Utilities Service and Measurement Data Foundation is delivered as a separate installation package. Please refer to the Supported Platforms section for installation details regarding the database and operating system versions supported by the product. Also see the section Installing for prerequisite third-party software installation instructions.

1. Log in to the application 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 application 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 Application Framework.
3. Copy the file SMDF-V2.2.0.0.0-MultiPlatform.jar in the delivered package to a <TEMPDIR> on your application 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 SMDF-V2.2.0.0.0-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.V2.2.0.0.0 is created. The contents of the installation directory are identical for both platforms. The directory contains the install software for the application product.

Installing Oracle Utilities Service and Measurement Data Foundation

Follow the steps below to install the application component of Oracle Utilities Service and Measurement Data Foundation Base:

Preparing for the Installation

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

UNIX:

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

Windows:

-
- ```
%SPLEBASE%\bin\splenvirom.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.V2.2.0.0.0 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

The configuration menu for the Oracle Utilities Service and Measurement Data Foundation Application appears.

3. Select menu item 8 to configure OSB.  
Use the completed OSB configuration worksheet to assist you in this step. See the [Appendix B: Installation and Configuration Worksheets](#).
4. Select menu item 9 to configure SOA.  
Use the completed SOA configuration worksheet to assist you in this step. See the [Appendix B: Installation and Configuration Worksheets](#).
5. Select menu item 10 to configure the SMDF SOA Configuration Plan.  
Use the completed SOA Configuration Plan (SMDF) worksheet to assist you in this step. See the [Appendix B: Installation and Configuration Worksheets](#).
6. When you are done with the parameter setup, choose option P to proceed with the installation.
7. Change to the <TEMPDIR>/MDF.V2.2.0.0.0 directory.
8. Execute the following command:

**UNIX:**

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

**Windows:**

```
postinstall.cmd
```

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

Installation of Oracle Utilities Service and Measurement Data Foundation Application Server is complete if no errors occurred during installation.

### Installing Service Packs and Patches

Periodically, Oracle Utilities releases a service pack of single fixes for its products. A service pack is an update to an existing release that includes solutions to known problems and other product enhancements. A service pack is not a replacement for an installation, but a pack consisting of a collection of changes and additions for it. The service pack may include changes to be applied to

---

the application server, the database, or both. The service pack includes all files necessary for installing the collection of changes, including installation instructions.

Between services packs, Oracle Utilities releases patches to fix individual bugs. For information on installing patches, refer to knowledge base article ID 974985.1 on My Oracle Support.

Service packs and patches can be downloaded from My Oracle Support (<https://support.oracle.com/>).

## Installing the Oracle Utilities Meter Data Management V2.2.0 Application Component

This section describes how to install the application component of Oracle Utilities Meter Data Management, including:

- [Installation Prerequisite](#)
- [Copying and Decompressing Install Media](#)
- [Preparing for the Installation](#)
- [Installing the Application](#)

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

You *must* initialize the Service and Measurement Data Foundation environment. For detailed instructions see the Preparing for the Installation section.

### Installation Prerequisite

The Oracle Utilities Service and Measurement Data Foundation 2.2.0 application must be installed prior to installing Oracle Utilities Meter Data Management 2.2.0.

### 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 and Hardware Requirements](#) chapter for versions and installation details regarding the database and operating system. Also see the [Installing Prerequisite Software](#) section in the Chapter 3: Planning the Installation 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 Service and Measurement Data Foundation administrator user ID (default `cissys`). This is the same user ID that was used to install the Oracle Utilities Service and Measurement Data Foundation.
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 Service and Measurement Data Foundation.
3. Copy the file `MDM-V2.2.0.0.0-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-V2.2.0.0.0-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.V2.2.0.0.0 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/splenvron.sh -e $SPLENVIRON
```

**Windows:**

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

3. Stop the environment if running.

UNIX:

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

**Windows:**

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

### Installing the Application

1. Change to the <TEMPDIR>/MDM.V2.2.0.0.0 directory.
2. Execute the install script:

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

UNIX:

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

Windows:

```
install.cmd
```

Choose option P to proceed with the installation.

3. Change to the <TEMPDIR>/MDMV2.2.0.0.0 directory.
4. Execute the following command:

UNIX:

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

**Windows:**

```
postinstall.cmd
```

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

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

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

UNIX:

```
spl.sh start
```

**Windows:**

```
spl.cmd start
```

Follow the message on the screen and review 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.

**Note:** The first time you start Oracle Utilities Meter Data Management, you need to log into 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`

## 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 system.

# Chapter 6

---

## Upgrading Oracle Utilities Meter Data Management

This release supports the following upgrade paths:

- Oracle Utilities Meter Data Management version 2.1.0.3 to version 2.2.0

**Note:** If you have a version prior to 2.1.0.3, you must install 2.1.0.3 before upgrading to 2.2.0.

This chapter includes:

- [Before You Upgrade](#)
- [Upgrade Procedure](#)
- [Operating the Application](#)

### Before You Upgrade

Review the list of operating system, application server and database server combinations that this version of Oracle Utilities Meter Data Management is certified to operate on, in the [Chapter 2: Supported Platforms and Hardware Requirements](#).

For further assistance, contact My Oracle Support before you upgrade.

**Note:** If you are upgrading a previously installed application server, it is recommended that you make a backup before you start the upgrade procedure. The upgrade installation will remove your existing environment including your configurations.

### Upgrade Procedure

The upgrade installation procedure consists of:

- [Database Component Upgrade](#)
- [Application Components Upgrade](#)

### Database Component Upgrade

Upgrade of the database component of Oracle Utilities Meter Data Management must be complete before you can proceed with the following sections. Refer to the section “**Upgrade Install**” of the Oracle Utilities Meter Data Management *Database Administrator's Guide*, which provides instructions on upgrading the database component.



---

## Application Components Upgrade

A successful upgrade consists of the following steps:

- [Upgrading the Oracle Utilities Application Framework Application Component to V4.3.0 Service Pack 3 \(4.3.0.3\)](#)
- [Installing Oracle Utilities Application Framework V4.3.0.3 Single Fix Prerequisite Rollup for SMDF V2.2.0](#)
- [Upgrading the Oracle Utilities Service and Measurement Data Foundation Application Component to V2.2.0](#)
- [Upgrading the Oracle Utilities Meter Data Management Application Component to V2.2.0](#)

### Upgrading the Oracle Utilities Application Framework Application Component to V4.3.0 Service Pack 3 (4.3.0.3)

This section describes how to upgrade the application component of Oracle Utilities Application Framework, including:

- [Copying and Decompressing Install Media](#)
- [Setting Permissions for the cistab file in UNIX](#)
- [Upgrading the Application Component Over Oracle Utilities Meter Data Management V2.1.0.3](#)

#### 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 Application Framework environments operated by different Oracle Utilities administrator user ids, you must complete each of the following installation steps for each administrator userid.

To copy and decompress the install media, follow these steps:

1. Log in to the application server host with the Oracle Utilities Application Framework administrator user ID.
2. Download the Oracle Utilities Application Framework V4.3.0.3 Multiplatform from Oracle Software Delivery Cloud.
3. Create a temporary directory such as `c:\ouaf\temp` or `/ouaf/temp`. (Referred to below as <TEMPDIR>.)

**Note:** 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.

4. Copy the file `FW-V4.3.0.3.0-MultiPlatform.jar` from the delivered package to the <TEMPDIR>. If you are using FTP to transfer this file, remember to use the `BINARY` option for the FTP transfer.
5. Decompress the file:

```
cd <TEMPDIR>
jar -xvf FW-V4.3.0.3.0-MultiPlatform.jar
```

**Note:** You will need to have Java JDK installed on the machine used to (un)jar the application server installation package. Please install the JDK that is supported for the install on your platform to be able to use the `jar` command. This is the location of Java packages: <http://www.oracle.com/technetwork/java/archive-139210.html>

---

A sub-directory named “FW.V4.3.0.3.0” is created. It contains the installation software for the Oracle Utilities framework application server.

### Setting 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.V4.3.0.3.0` directory named `cistab_<SPLENVIRON>.sh`. Run the generated script using the root account before continuing with the installation process. The script initializes the `cistab` file in `/etc` directory (if it is the first Oracle Utilities Framework application environment on the server) and registers a new environment.

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

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

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

### Upgrading the Application Component Over Oracle Utilities Meter Data Management V2.1.0.3

This section outlines the steps for upgrading the application component of Oracle Utilities Application Framework over Oracle Utilities Meter Data Management 2.1.0.3.

**Note:** Customers who have a version prior to 2.1.0.3 must install 2.1.0.3 before upgrading to 2.2.0.

1. Login to the Application Server host as administrator (the default is `cissys` on UNIX) or as a user with Administrator privileges (on Windows).

2. Change directory to the `bin` folder.

```
cd <install_dir>/bin
```

where `<install_dir>` is the location where the Oracle Utilities Service and Measurement Data Foundation Base application component is installed.

3. Initialize the environment by running the appropriate command:

**UNIX:**

```
./splenviron.sh -e <ENV NAME>
```

**Windows:**

```
splenviron.cmd -e <ENV NAME>
```

4. Stop the environment, if running:

**UNIX:**

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

**Windows:**

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

- 
- Change directory to the <TEMP\_DIR>/FWV4.3.0.3.0 directory.

**NOTE:** While installing the FW V4.3.0.3 from the previous environment V2.1.0.3, the install utility removes the existing environment and re-creates the environment. Take a backup before you proceed with installing FW V4.3.0.3 to retain any configurations for future reference.

- Start the application installation utility by executing the appropriate script:

**UNIX:**

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

**Windows:**

```
install.cmd
```

- The Oracle Utilities Application Framework specific menu appears.
- Follow the messages and instructions that are produced by the application installation utility.
- Select each menu item to configure the values. For detailed description of the values, refer to [Appendix B: Installation and Configuration Worksheets](#).
- Below is the mandatory list of configurable items along with descriptions for a few items. Where you see <Mandatory>, enter values suitable to your environment. You can assign default values to the rest of the menu items.

```

* Environment Installation Options *

1. Third Party Software Configuration
 Oracle Client Home Directory: <Mandatory>
 Web Java Home Directory: <Mandatory>
 Child JVM Home Directory:
 COBOL Home Directory:
 Hibernate JAR Directory: <Mandatory>
 ONS JAR Directory:
 Web Application Server Home Directory: <Mandatory>
 ADF Home Directory:
 OIM OAM Enabled Environment:
2. Keystore Options
 Store Type: JCEKS
 Alias: ouaf.system
 Alias Key Algorithm: AES
 Alias Key Size: 128
 HMAC Alias: ouaf.system.hmac
 Padding: PKCS5Padding
 Mode: CBC
50. Environment Installation Options
 Environment Mount Point: <Mandatory> - Install Location
 Log Files Mount Point:<Mandatory> - ThreadPoolWorker Logs
 Location
 Environment Name:<Mandatory>
 Web Application Server Type: WLS
 Install Application Viewer Module: true
```

Each item in the above list should be configured for a successful install.

Choose option (1,2,50, <P> Process, <X> Exit):

- Once you enter 'P' after entering mandatory input values in the above menu, the system populates another configuration menu.

```

* Environment Configuration *

1. Environment Description
 Environment Description: <Mandatory>

2. Business Application Server Configuration
 Business Server Host: <Mandatory> - Hostname on which
 application being installed
 WebLogic Server Name: myserver
 Business Server Application Name: SPLService
 MPL Admin Port Number: <Mandatory> - Multipurpose Listener
 Port
 MPL Automatic startup: false

3. Web Application Server Configuration
 Web Server Host: <Mandatory>
 Web Server Port Number: <Mandatory>
 Web Context Root: ouaf
 WebLogic JNDI User ID: <Mandatory>
 WebLogic JNDI Password: <Mandatory>
 WebLogic Admin System User ID: <Mandatory>
 WebLogic Admin System Password: <Mandatory>
 WebLogic Server Name: myserver
 Web Server Application Name: SPLWeb
 Application Admin User ID: <Mandatory>
 Application Admin Password: <Mandatory>
 Expanded Directories: false
 Application Viewer Module: true

4. Database Configuration
 Application Server Database User ID: <Mandatory>
 Application Server Database Password: <Mandatory>
 MPL Database User ID: <Mandatory>
 MPL Database Password: <Mandatory>
 XAI Database User ID: <Mandatory>
 XAI Database Password: <Mandatory>
 Batch Database User ID: <Mandatory>
 Batch Database Password: <Mandatory>
 Database Name: <Mandatory>
 Database Server: <Mandatory>
 Database Port: <Mandatory>
 ONS Server Configuration:
 Database Override Connection String:
 Oracle Client Character Set NLS_LANG:

5. General Configuration Options
 Batch RMI Port: <Mandatory> - RMI port
 for batch
 Batch Mode: <Mandatory> - CLUSTERED
 or DISTRIBUTED
 Coherence Cluster Name: <Mandatory> - Unique
 name for batch
 Coherence Cluster Address: <Mandatory> - Unique
 multicast address
 Coherence Cluster Port: <Mandatory> - Unique
 port for batch cluster
 Coherence Cluster Mode: <Mandatory> - prod

```

Each item in the above list should be configured for a successful install.

---

Choose option (1,2,3,4,5, <P> Process, <X> Exit):

12. When you are done with the parameter setup, proceed with the option P. The utility writes the configured parameters and their values into the configuration file.
13. Once the upgrade install has finished, the installation log location appears on the screen. If the log does not list any error messages, the upgrade installation of the application component of Oracle Utilities Application Framework is complete. You can now upgrade Oracle Utilities Service and Measurement Data Foundation as described in the following section.

### **Installing Oracle Utilities Application Framework V4.3.0.3 Single Fix Prerequisite Rollup for SMDF V2.2.0**

1. Create a <TEMPDIR> directory on the host server that is independent of any current or other working application environment.
2. Copy the file 'Oracle Utilities Application Framework V4.3.0 Service Pack 3 Single Fix Prerequisite Rollup.zip' in the delivered package to <TEMPDIR>. 

If you are using FTP to transfer this file, remember to use the BINARY option for the FTP transfer.
3. Upon extracting the zip file 'Application-Server-Multiplatform' sub-directory will be created.
4. Refer to the Readme.txt inside 'Application-Server-Multiplatform' file for instructions on installing the Oracle Utilities Application Framework 4.3.0 Service Pack 3 Prerequisite Single Fixes.

These patches are also available for download separately from My Oracle Support.

See [Appendix E](#) for a list of the patches contained in the rollup.

### **Upgrading the Oracle Utilities Service and Measurement Data Foundation Application Component to V2.2.0**

This section describes how to upgrade the application component of Oracle Utilities Service and Measurement Data Foundation, including:

- [Copying and Decompressing Install Media](#)
- [Upgrading the Application Component](#)

#### **Copying and Decompressing Install Media**

The Oracle Utilities Service and Measurement Data Foundation file is delivered in jar format for both UNIX and Windows platforms. If you are planning to install multiple Oracle Utilities Application 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 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. Download the Oracle Utilities Service and Measurement Data Foundation V2.2.0 Multiplatform from Oracle Software Delivery Cloud.
3. Create a <TEMPDIR> directory on the application 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 Application Framework.
4. Copy the file SMDF-V2.2.0.0.0-MultiPlatform.jar in the delivered package to a <TEMPDIR> on your application server. If you are using FTP to transfer this file, remember to use the BINARY option for the FTP transfer.

- 
- Decompress the file:

```
cd <TEMPDIR>
jar -xvf SMDF-V2.2.0.0.0-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.V2.2.0.0.0 is created. The contents of the installation directory are identical for both platforms. The directory contains the install software for the application product.

### Upgrading the Application Component

Follow the steps below to install the application component of Oracle Utilities Service and Measurement Data Foundation:

- Log on as Oracle Utilities Service and Measurement Data Foundation Administrator (default cissys).
- Initialize the Framework environment that you want to install the product into.

#### UNIX:

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

#### Windows:

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

- Stop the environment if it is running.

#### UNIX:

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

#### Windows:

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

### Installing the Application

- Change to the <TEMPDIR>/MDF.V2.2.0.0.0 directory.
- Execute the script:

#### UNIX:

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

#### Windows:

```
install.cmd
```

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

The configuration menu for the Oracle Utilities Service and Measurement Data Foundation Application appears.

- Select menu item 8 to configure OSB.  
Use the completed OSB configuration worksheet to assist you in this step. See the **Appendix B: Installation and Configuration Worksheets**.
- Select menu item 9 to configure SOA.  
Use the completed SOA configuration worksheet to assist you in this step. See the **Appendix B: Installation and Configuration Worksheets**.
- Select menu item 10 to configure the SOA Configuration Plan.

---

Use the completed SOA Configuration Plan (MDF) worksheet to assist you in this step. See the **Appendix B: Installation and Configuration Worksheets**.

When you are done with the parameter setup, choose option P to proceed with the installation.

6. Change to the <TEMPDIR>/MDF.V2.2.0.0.0 directory.
7. Execute the following command:

**UNIX:**

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

**Windows:**

```
postinstall.cmd
```

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

Installation of Oracle Utilities Service and Measurement Data Foundation Application Server is complete if no errors occurred during installation.

## Upgrading the Oracle Utilities Meter Data Management Application Component to V2.2.0

This section describes how to install the application component of Oracle Utilities Meter Data Management, including:

- [Copying and Decompressing Install Media](#)
- [Upgrading the Application Component](#)

### Copying and Decompressing Install Media

The Oracle Utilities Meter Data Management installation file is delivered in jar format for both UNIX and Windows platforms.

To copy and decompress the install media, follow these steps:

1. Log in to the application server host 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. Download the Oracle Utilities Meter Data Management V2.2.0.0.0 Multiplatform from Oracle Software Delivery Cloud.
3. 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 Application Framework.
4. Copy the file MDM-V2.2.0.0.0-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.
5. Decompress the file:

```
cd <TEMPDIR>
jar -xvf MDM-V2.2.0.0.0-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.V2.2.0.0.0 is created. The contents of the installation directory are identical for both platforms. The directory contains the install software for the application product.

---

## Upgrading the Application Component

Follow the steps below to install Oracle Utilities Meter Data Management application component:

1. Log in to the application server host as Oracle Utilities Meter Data Management Administrator (default cissys).
2. Change directory:

```
cd <install_dir>/bin
```

where <install\_dir> is the location where the Oracle Utilities Service and Measurement Data Foundation application component is installed.

3. Initialize the environment by running the appropriate command:

**UNIX:**

```
./splenviron.sh -e <ENV NAME>
```

**Windows:**

```
splenviron.cmd -e <ENV NAME>
```

4. If the environment is running, stop it by running the appropriate command:

**UNIX:**

```
./spl.sh stop
```

**Windows:**

```
spl.cmd stop
```

5. Change to the <TEMPDIR>/MDM.V2.2.0.0.0 Directory.
6. Execute the install script:

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

**UNIX:**

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

**Windows:**

```
install.cmd
```

Choose option P to proceed with the installation.

7. Change to the <TEMPDIR>/MDMV2.2.0.0.0 directory.
8. Execute the following command:

**UNIX:**

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

**Windows:**

```
postinstall.cmd
```

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

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

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

**UNIX:**



---

```
spl.sh start
```

**Windows:**

```
spl.cmd start
```

Follow the message on the screen and review 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.

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

After you complete the upgrade installation, verify the following:

1. Verify installation logs created under decompressed installer location for any errors.
2. Confirm installation logs do not contain any errors.
3. Confirm all the configurations are correct. Refer to [Appendix B: Installation and Configuration Worksheets](#) for details.
4. Confirm that the database is ready.
5. Start the application server. For instructions, refer to [Appendix C: Common Maintenance Activities](#).
6. To operate the application, refer to the following section.

## 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 system.

# Chapter 7

---

## Additional Tasks

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

- [Importing Self-Signed Certificates](#)
- [Customizing Configuration Files](#)
- [Integrating Existing Customer Modifications](#)
- [Generating the Application Viewer](#)
- [Configuring the Environment for Batch Processing](#)
- [Customizing the Logo](#)
- [Configuring Secure Sockets Layer \(SSL\)](#)
- [Domain Templates \(Linux Weblogic 12.1.3.0+ only\)](#)
- [Database Patching](#)

## Importing Self-Signed Certificates

If you are using self-signed certificates and the Inbound Web Services (IWS) feature, then it is necessary to import these certificates into the OUAF truststore file.

Perform the following commands:

1. Start Weblogic.
2. Initialize a command shell and setup the environment by running the following:

### Unix:

```
$SPLEBASE/bin/splenvron.sh -e $SPLENVIRON
For example:
/ouaf/TEST_ENVIRON1/bin/splenvron.sh -e TEST_ENVIRON1
```

### Windows:

```
%SPLEBASE%\bin\splenvron.cmd -e %SPLENVIRON%
For example:
D:\ouaf\TEST_ENVIRON1\bin\splenvron.cmd -e TEST_ENVIRON1
```

3. Execute the following script to generate all information:

### UNIX:

```
$SPLEBASE/bin/initialSetup.sh -i
```

### Windows:

```
%SPLEBASE%\bin\ initialSetup.cmd -i
```

**Note:** This needs to be performed before deploying the IWS application.

## Customizing Configuration Files

If you wish to make customer modifications to various configuration files, create a 'CM copy' of the template file or a user exit. This preserves your changes whenever initialSetup is executed; otherwise, your changes to the delivered template files will be lost if it is patched in the future:

For example, to customize hibernate properties of the SPLWeb web application, perform the following:

1. Locate the hibernate.properties.template in the \$SPLEBASE/templates directory
2. Copy the file to cm.hibernate.properties.template.
3. Apply your changes to cm.hibernate.properties.template.
4. Update application war file with the latest changes by executing the following command:

### Unix:

```
$SPLEBASE/bin/initialSetup.sh
```

### Windows:

```
%SPLEBASE%\bin\initialSetup.cmd
```

Refer to the Oracle Utilities Application Framework SDK documentation for more details.

## Integrating Existing Customer Modifications

Existing Customer Modifications (CM) applied to an application server on an earlier release cannot be applied directly to a later version. CM code needs to be applied from an SDK version compatible with this release.

Refer to SDK documentation for more information about migrating CM code.

## Generating the Application Viewer

You may extend application viewer capabilities within an environment by generating additional items. These include information about algorithm types, algorithms, maintenance objects and data dictionary information. The Javadoc indexes are also re-built.

To generate the additional items in the application viewer, perform the following:

1. Shut down the environment.
2. Initialize a command shell and setup the environment by running the following:

**Unix:**

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

For example:

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

**Windows:**

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

For example:

```
D:\ouaf\TEST_ENVIRON1\bin\splenvron.cmd -e TEST_ENVIRON1
```

3. Execute the following script to generate all information.

**UNIX:**

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

**Windows:**

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

4. Restart your application.

## Building Javadocs Indexes

Rebuilding Javadoc indexes is already part of generating application viewer above. However, there are times when you need to run it separately. For example, this is required after customer modifications (CM) have been applied to an environment when it includes Java code.

Perform the following to rebuild the Javadoc indexes.

**Windows:**

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

**UNIX:**

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

## Configuring the Environment for Batch Processing

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

## Customizing the Logo

To replace the Oracle Utilities logo on the main menu with another image, put the new image <customer\_logo\_file>.png file into the directory \$SPLBASE/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:

### Windows:

`http://<host name>:<port>/<Web Context>/cm/<customer_logo_file>.png`

### UNIX:

`http://<host name>:<port>/<Web Context>/cm/<customer_logo_file>.png`

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.

## Configuring Secure Sockets Layer (SSL)

Secure Sockets Layer (SSL) provides secure connections by allowing two applications connecting over a network to authenticate each other's identity and by encrypting the data exchanged between the applications. Authentication allows a server, and optionally a client, to verify the identity of the application on the other end of a network connection. Encryption makes data transmitted over the network intelligible only to the intended recipient.

Follow these steps to configure Secure Sockets Layer:

1. Obtain an identity (private key and digital certificates) and trust (certificates of trusted certificate authorities) for WebLogic Server.

Use the digital certificates, private keys, and trusted CA certificates provided by the WebLogic Server, the CertGen utility, the keytool utility, or a reputable vendor such as Entrust or Verisign to perform this step.

2. Store the identity and trust.

Private keys and trusted CA certificates which specify identity and trust are stored in keystores.

3. Configure the identity and trust keystores for WebLogic Server in the WebLogic Server Administration Console.

See "Configure keystores" in the Oracle WebLogic Server Administration Console Online Help.

For additional information on configuring keystores, refer to <http://docs.oracle.com/middleware/1213/wls/WLACH/taskhelp/security/ConfigureKeystoresAndSSL.html>

4. Set SSL configuration options for the private key alias and password in the WebLogic Server Administration Console.

Optionally, set configuration options that require the presentation of client certificates (for two-way SSL).

For additional information, refer to the following topics:

- Servers: Configuration: SSL (<http://docs.oracle.com/middleware/1213/wls/WLACH/pagehelp/Corecoreserverserverconfigs/title.html>)

- Configure two-way SSL (<http://docs.oracle.com/middleware/1213/wls/WLACH/taskhelp/security/ConfigureTwowaySSL.htm>)
- Obtaining and Storing Certificates for Production Environments ([http://docs.oracle.com/middleware/1213/wls/SECMG/identity\\_trust.htm#SECMG798](http://docs.oracle.com/middleware/1213/wls/SECMG/identity_trust.htm#SECMG798))
- Configuring Keystores with WebLogic Server ([http://docs.oracle.com/middleware/1213/wls/SECMG/identity\\_trust.htm#SECMG383](http://docs.oracle.com/middleware/1213/wls/SECMG/identity_trust.htm#SECMG383))

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

The identity and trust keystore files and other SSL certificate related options are configured using the `configureEnv.sh|cmd` utility.

## Setting Up an Application Keystore

This section describes how to set up a keystore in your system. The keystore is used for functionality such as digital signatures for document numbers, and encryption for credit card security.

Note that this is different from the Oracle Utilities Application Framework (also called the system) keystore and the weblogic SSL keystores.

For additional information about document numbers, digital signatures, and encryption, see the online help.

For additional information about using the Java keytool utility, see the following section of the Oracle Java SE documentation:

<http://docs.oracle.com/javase/7/docs/technotes/tools/solaris/keytool.html>

Follow this procedure to set up the keystore in your environment:

1. Generate the keystore. The following command creates the file ".mykeystore" in directory \${SPLEBASE}:

```
keytool -genkeypair -alias <keyalias> -keyalg RSA -sigalg
SHA256withRSA -keystore ${SPLEBASE}/<filename> -keysize 1024
-storetype JCEKS -dname "CN=<name>, OU=<unit>, O=<organization>,
C=<country>" -validity 365
```

For example:

```
keytool -genkeypair -alias ouaf.application -keyalg RSA -sigalg
SHA256withRSA -keystore ${SPLEBASE}/.mykeystore -keysize 1024
-storetype JCEKS -dname "CN=Mark Jones, OU=TUGBU, O=Oracle, C=US"
-validity 365
```

The utility will prompt you for the keystore and key passwords. Make sure that they are the same.

2. Configure the following template files by adding the following entries:

### For WebLogic Server:

- To enable in WebLogic, edit the following in \${SPLEBASE}/templates/startWeblogic.sh.template:

```
JAVA_OPTIONS="$JAVA_OPTIONS
-Dcom.oracle.ouaf.keystore.file=${SPLEBASE}/<filename>"
```

```
JAVA_OPTIONS="$JAVA_OPTIONS
-Dcom.oracle.ouaf.keystore.password=<keystore_password>"
```

For <keystore\_password>, use the same password entered in the keytool utility.

- To enable this in batch, edit the threadpoolworker.properties.template:

```
com.oracle.ouaf.keystore.file=@force_forward_slash(SPLEBASE)@/
.mykeystore
com.oracle.ouaf.keystore.password=<keystore_password>
```

**Note:** Because the path needs to be passed with forward slashes even on Windows platforms, the force\_forward\_slash function will convert any "\" to "/".

For <keystore\_password>, use the same password entered in the keytool utility.

List of spl.properties templates (located in `${SPLEBASE}/templates/` folder):

- spl.properties.iws.template
  - spl.properties.template
  - spl.properties.service.template
  - spl.properties.XAIApp.template
  - spl.properties.standalone.template
3. Re-initialize the environment to propagate these changes by executing the `initialSetup.sh/` cmd.
  4. Restart the environment.

## Domain Templates (Linux Weblogic 12.1.3.0+ only)

The intended use of the domain templates is for native/clustered installation of the Oracle Utilities Application Framework (OUAF) environment into a Weblogic domain. The domain template(s) defines the core set of resources within a Weblogic domain, including an Administration Server along with the basic configuration information for a Oracle Utilities Application Framework based application. The domain template is a “snapshot” of the delivered embedded “splapp” domain. When working with domain templates you will need to manage the application (stopping, starting, deployment, undeployment) utilizing the Weblogic delivered utilities.

- Install and configure application stack (OUAF and Edge Product)
  - Note:** Environment will need to be configuring to deploy in ear format.
- Review domain templates (Simple /Complex)
- Execute `config.sh` and enter the path of the domain template file
- Configure domain
- Complete domain configuration
  - Note:** Configure `nodemanager.properties` and `setDomainEnv.sh`
- Update SPLEBASE (ENVIRON.INI)

### Detailed Description

The product installation includes a two predefined WebLogic Server Domain templates. The delivered domain templates are located under the SPLEBASE:

`$(SPLEBASE)/tools/domaintemplates`

- Oracle-Utilities-Simple-Linux-12.1.3.0.0.jar
- Oracle-Utilities-Complex-Linux-12.1.3.0.0.jar

The Simple Domain Template is for use with one machine and does not include a Weblogic cluster, this domain configuration is similar to current delivered embedded splapp domain, with the exception that there will be two Weblogic servers (`utilities_server1` and a "Admin Server").

The Complex Domain Template is configured for use with a pre-configured Weblogic cluster, with one machine configured, node manager settings, and one managed server configured.

The delivered domain templates defines the full set of resources within an Oracle Utilities Application Framework domain including:

- Demo certificates (the demo certificates will need to be updated for production use)
- Setting of XML Registry Settings



- Setting of Default users and groups
- Machine configuration
- Default Users and Groups

Note: The Users and Groups match the delivered values delivered with the embedded domain.

- JTA Settings
- Node Manager Settings
- WebLogic Server

## Configure Node Manager Properties to allow SSL

Follow the steps below to update the nodemanager.properties with the correct Private Key Passphrase.

Under the following location: DOMAIN\_HOME/nodemanager update the following properties in the nodemanager.properties file:

- CustomIdentityKeyStorePassPhrase=
- CustomIdentityPrivateKeyPassPhrase=

Set these to the value "0uaf\_demo\_c3rt"

**Note:** At first when the node manager is started, the values in the file will be encrypted. These values will need to be updated in production configuration with the proper values based on your configuration.

## Configure setDomainEnv.sh Script

You will need to set the value of SPLEBASE with the proper value for your implementation. Under the following location, DOMAIN\_HOME/bin, update the setDomainEnv.sh file and add the following

```
SPLEBASE="${SPLEBASE}"
```

**Note:** You will need to update \${SPLEBASE} with appropriate value based on your configuration.

## Update SPLEBASE

The following update in the configuration indicates if the embedded configuration is being utilized or if the environment is a native installation to Weblogic. When this item is populated in the environment, the delivered base tools will be able to identify that the starting and stopping of the environment are being done under the domain home.

1. Initialize the Environment: splenviron.sh -e <Environment\_Name>
2. Execute: configureEnv.sh -a
3. Select Menu Item: 52. Advanced Web Application Configuration

```
=====
```

4. 02. Configuration Option: Domain Home Location

Current Value <ENTER>:

The Weblogic Domain Home location, when this parameter is populated you will need to use the native Weblogic tools for maintenance (starting, stopping, deployment, and undeployment).

Enter Value: <Enter your domain home location>

- Once the Domain Home location has been completed, Enter <P> Process

### Update setDomainEnv.sh

Edit setDomainEnv.sh and change antlr, serializer and xalan jar versions to the following:

- antlr-2.7.7.jar
- serializer-2.7.2.jar
- xalan-2.7.2.jar

## Database Patching

The database patching utility is delivered under SPLEBASE and is Java-based so you are able to create a standalone package to be able to install database patches on a separate server that has Java 7 installed. You can also install database patches using the components that are delivered under SPLEBASE without the need to move the database patching utility to a different server.

The following is an overview of the process to install database patches on a separate server. You will need to create a jar file containing the utilities and supporting files to allow you to run the database patch installer on another server.

To generate the jar file:

1. Initialize a command shell:

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

#### UNIX:

Log on to your UNIX box as the Oracle Utilities Administrator (default cissys) and open a shell prompt.

In the following example, replace the variables

- \$SPLEBASE with the Full directory name that you installed the application into
- \$SPLENVIRON with the name you gave to the environment at installation time

To initialize the environment enter:

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

For example:

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

#### 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 following variables:

- %SPLEBASE%: The Full directory name that you installed the application into
- %SPLENVIRON%: The name you gave to the environment at installation time

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

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

For example:

```
D:\ouaf\DEMO\bin\splenviron.cmd -e DEMO
```

2. Execute the following script to generate the jar file.

**UNIX:**

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

**Windows:**

```
%SPLEBASE%\bin\createDBStandalone.cmd
```

**Note:** By default, the output jar `db_patch_standalone.jar` is created in `SPLEBASE/tools/dbstandalone`. You can use the `-l` option to change the default directory.

3. Transfer the generated jar (`db_patch_standalone.jar`) to the Windows/Unix machine where you want to run the database patching utility.
4. Extract the contents of the archive file:

```
jar xvf db_patch_standalone.jar
```

**Note:** You must have Java 7 JDK installed on the machine to use the `jar` command. Be sure to install the JDK that is supported for your platform.

**Overview of Database Patching Application**

The database patching utility requires you have Java 7 JDK installed on the machine to execute the database patch application process.

The patch application process will perform following items to account for executing patch application under SPLEBASE or on a standalone server.

The database patch application utility will look do the following when it is executed:

- Checks to see if the environment variable `$SPLEBASE` is set.

If the `$SPLEBASE` variable is set, the utility uses the libraries under `$SPLEBASE` to apply the patch.

- When the `$SPLEBASE` is not set, the utility checks to see if the `TOOLSBIN` environment variable is set.

If the `TOOLSBIN` is set, the utility uses the libraries under the `TOOLSBIN` location.

- When both `SPLEBASE` and `TOOLSBIN` environment are not set, the utility prompts for the location of the `TOOLSBIN`.

The `TOOLSBIN` is the location of the of the application scripts `ouafDatabasePatch.sh`[cmd]

**Unix Example:** - The `TOOLSBIN` location would be set to `/ouaf/dbpatch/bin`

```
export TOOLSBIN=/ouaf/dbpatch/bin
```

Unix Sample - Database Patch Application (`ouafDatabasePatch.sh`)

**Note:** The default permissions (`ouafDatabasePatch.sh`), may need to be adjusted to be executed by your user and group, when applying database fixes.

- Sample Execution – Passing a Password

```
./ouafDatabasePatch.sh -x ouafadm -p "-t O -d
CISADM_Z1_12C_43020_BLD001,slc04lds:1522:Z143Q12C"
```

- Sample Execution – Prompting for a Password

```
./ouafDatabasePatch.sh -p "-t O -d
CISADM_Z1_12C_43020_BLD001,slc04lds:1522:Z143Q12C"
```

- Sample Execution - passing in the tools bin location

```

/ouafDatabasePatch.sh -u
ouafDatabasePatch.sh [-h] [-u] [-v] [-x] [-t tools dir] [-p
ouafparms]
-h displays help of ouafpatch
-u displays usage of ouafDatabasePatch.sh
-v displays version of ouafpatch
-x password to be passed to ouafpatch
-b location of the tools bin directory
-p parameters directly passed to ouafpatch
must be the last parameter passed and
be enclosed with quotes

```

**WINDOWS Example:** - The TOOLSBIN location would be set to c:\ouaf\dbpatch\bin

```
SET TOOLSBIN=c:\ouaf\dbpatch\bin
```

Windows Sample - Database Patch Application (ouafDatabasePatch.cmd)

- Sample Execution – Passing a Password

```
ouafDatabasePatch.cmd -x password -p "-t O -d
SCHEMA_NAME,DBSERVER:DBPORT:DBSID"
```

- Sample Execution – Prompting for a Password

```
ouafDatabasePatch.cmd -p "-t O -d SCHEMA_NAME,DBSERVER:DBPORT:DBSID C"
```

- Sample Execution - passing in the tools bin location

```
ouafDatabasePatch.cmd -b "C:\temp\db_patch_standalone\bin" -p "-t O -d
SCHEMA_NAME,DBSERVER:DBPORT:DBSID -c
C:\temp\dbrollup\CDXPatch2\CDXPatch.ini"
```

Windows Sample Usage

```

ouafDatabasePatch.cmd -u
USAGE:
USAGE:ouafDatabasePatch.cmd[-h] [-u] [-v] [-x] [-b tools dir] [-
p ouafparms]
USAGE: -h displays help of ouafpatch
USAGE: -u displays usage of ouafDatabasePatch.cmd
USAGE: -v displays version of ouafpatch
USAGE: -x password to be passed to ouafpatch
USAGE: -b location of the tools bin directory
USAGE: -p parameters directly passed to ouafpatch
must be enclosed with quotes: " "
USAGE:
USAGE:
USAGE:

```

# Appendix A

---

---

## Installation Menu Functionality Overview

### Installation Menu Functionality Overview

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

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

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

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

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

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

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

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

### Installation Menu Functionality Details

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

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

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

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

---

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

- Default Values are the values that will be defaulted when running the installation utility.
- Security Values denote values that should be changed when in production.
- Example Values are values that can be used for a default installation.

**Note:** The production environment should not be run with default values. See the *Server Administration Guide* specific to this product, for additional information about configuring these values.

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

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

The following prompt will appear when executing the installation utility:

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

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

## Encryption Methods

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

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

When these passwords are entered in the command line, the input values are not reflected on the screen when performing the installation.

# Appendix B

## Installation and Configuration Worksheets

### 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. No Customer Install Value fields should be left blank.

**Note:** Some web application server information will not be available until the software installation steps have been completed as described in the [Installing Prerequisite Software](#) section in the [Chapter 3: Planning the Installation](#) for prerequisite third-party software installation instructions.

### Environment ID, Roles, Third Party Software Configuration

```

* Environment Installation Options *

1. Environment ID, Roles, Third Party Software Configuration
 Environment ID:
 Server Roles:
 Oracle Client Home Directory:
 Web Java Home Directory:
 Hibernate JAR Directory:
 ONS JAR Directory:
 Web Application Server Home Directory:
 WebLogic Server Thin-Client JAR Directory:
 ADF Home Directory:
 OIM OAM Enabled Environment: false
```

| Menu Option    | Name Used in Documentation | Usage                                                                                                                                                        | Customer Install Value |
|----------------|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| Environment ID | ENVIRONMENT_ID             | Identifier to associate different application servers as part of the same environment.<br><br>On a new installation, the default is a random 8 digit number. |                        |

| Menu Option                               | Name Used in Documentation | Usage                                                                                                                                                                                                                                                                                                                                   | Customer Install Value |
|-------------------------------------------|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| Server Roles                              | SERVER_ROLES               | The type of role the server performs whether for batch or online.<br><br>A server may be configured to have an online and/or batch role. Only the menu items appropriate to the role will appear on the menus, and only the appropriate scripts will be executable in the application server.                                           |                        |
| Oracle Client Home Directory              | ORACLE_CLIENT_HOME         | The home directory of the Oracle Client. The application will use the Perl included under this Oracle Client.<br><br>Example Location:<br>/oracle/client/product/12.1.0.2.0                                                                                                                                                             |                        |
| Web Java Home Directory                   | JAVA_HOME                  | Java home that will be used by the web application server.<br><br>Example Location:<br>/ouaf/java/jdk1.8.0_31                                                                                                                                                                                                                           |                        |
| Hibernate JAR Directory                   | HIBERNATE_JAR_DIR          | Location on the disk where the hibernate jar files are installed.                                                                                                                                                                                                                                                                       |                        |
| **ONS JAR Directory                       | ONS_JAR_DIR                | Location on the disk where the ons-12.1.0.1.jar file is installed.<br><br>**Required for Oracle RAC installation. See the <i>Server Administration Guide</i> for more information.                                                                                                                                                      |                        |
| Web Application Server Home Directory     | WEB_SERVER_HOME            | Location on the disk where the application server is installed.<br><br>Example Location:<br>WebLogic: /ouaf/middleware/wlserver_12.1.3<br><br>To validate the home directory, check if the following jar files exist in the appropriate path:<br>\$WEB_SERVER_HOME/server/lib/weblogic.jar<br>%WEB_SERVER_HOME%\server\lib\weblogic.jar |                        |
| WebLogic Server Thin-Client JAR Directory | WLTHINT3CLIENT_JAR_DIR     | Location where wlthint3client.jar is located. Populate only if WEB_SERVER_HOME is empty and if the application needs to access JMS from a batch job.                                                                                                                                                                                    |                        |
| * ADF Home Directory                      | ADF_HOME                   | Location on the disk where ADF is installed.<br><br>Example Location:<br>/ouaf/jdev11_1_1_8<br><br>Note: This is an optional value.                                                                                                                                                                                                     |                        |
| OIM OAM Enabled Environment               | OPEN_SPML_ENABLED_ENV      | Denotes if an environment will be integrating with Oracle Identity Manager for user propagation.<br><br><b>Valid values:</b> true<br>false<br>Defaulted value: false                                                                                                                                                                    |                        |

\* Denotes optional menu items that may be required for the product installation and variables.

\*\* In order to activate the RAC FCF, the application needs the external ons.jar file, from the ORACLE\_HOME path:



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

During the installation the relevant option should be populated with the folder location of the ons.jar.

## Keystore Options

**Note:** The keystore is a set of files used for encryption, decryption and hash generation. The files reside in the following location:

<SPLEBASE>/ks/.ouaf\_keystore

<SPLEBASE>/ks/.ouaf\_storepass

In order to run the application correctly, data encryption, decryption and hash generation of data in the database and on the application server must be performed using the same keystore; otherwise, the application will fail.

Please review the Security Guide for more information on setting up keystores.

### 2. Keystore Options

```
Import Keystore Directory:
Store Type: JCEKS
Alias: ouaf.system
Alias Key Algorithm: AES
Alias Key Size: 128
HMAC Alias: ouaf.system.hmac
Padding: PKCS5Padding
Mode: CBC
```

| Menu Option               | Name Used in Documentation | Usage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Customer Install Value |
|---------------------------|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| Import Keystore Directory | KS_IMPORT_KEystore_FOLDER  | <p>Specify this option if you want to import the keystore files from an external location or directory, during the installation process. This is needed when the customer has an existing environment that has a keystore and the database your new application server.</p> <p>After installation is complete, to configure keystore options, perform the following sequence:<br/>configureEnv.sh   cmd -i (enter keystore options)<br/>initialSetup.sh   cmd -s (loads keystore)<br/>configureEnv.sh   cmd (reenter ouaf encrypted security information such as passwords)<br/>initialSetup.sh   cmd (distribute the encrypted data)</p> <p>If this option is left empty, the install process creates a new keystore from scratch.</p> |                        |
| Store Type                | KS_STORETYPE               | Value used for keytool option -storetype<br><b>Default value:</b> JCEKS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                        |
| Alias                     | KS_ALIAS                   | Value used for keytool option -alias<br><b>Default value:</b> ouaf.system                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                        |
| Alias Key Algorithm       | KS_ALIAS_KEYALG            | Value used for keytool option -keyalg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                        |
| Alias Key Size            | KS_ALIAS_KEYSIZe           | Value used for keytool option -keysize                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                        |

| Menu Option | Name Used in Documentation | Usage                                                                                                                                                                                         | Customer Install Value |
|-------------|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| HMAC Alias  | KS_HMAC_ALIAS              | Value used for keytool option -alias<br>The following values are fixed:<br>- HMAC Alias Key Algorithm: HmacSHA256<br>- HMAC Alias Key Size: 256<br><br><b>Default value:</b> ouaf.system.hmac |                        |
| Padding     | KS_PADDING                 | Value used for encryption/decryption<br><b>Default value:</b> PKCS5Padding                                                                                                                    |                        |
| Mode        | KS_MODE                    | Value used for encryption/decryption<br>Default Vaule: CBC                                                                                                                                    |                        |

## Environment Installation Options

### 50. Environment Installation Options

```

Environment Mount Point:
Log Files Mount Point:
Environment Name:
Web Application Server Type: WLS
Install Application Viewer Module: true
Install Demo Generation Cert Script: true
Install Sample CM Source Code: true

```

| Menu Option             | Name Used in Documentation | Usage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Customer Install Value |
|-------------------------|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| Environment Mount Point | <SPLDIR>                   | The mount point into which the application is installed.<br>For example:<br>/ouaf for UNIX and C:\ouaf for Windows.<br><br>This mount point MUST exist and the administrator user ID MUST be able to write to this directory. (This is the user ID that is created specifically to administer the product environments; the default is cissys). The installation sets permissions on all subdirectories installed under this directory.<br><br>See <SPLENVIRON> below for more information on how this mount point is used. |                        |

| Menu Option                 | Name Used in Documentation | Usage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Customer Install Value |
|-----------------------------|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| Log File Mount Point        | <SPLDIROUT>                | <p>A mount point that will contain any application output or application logs. Example value is /ouaf/sploutput for UNIX installation or C:\ouaf\sploutput for Windows.</p> <p>This mount point MUST exist and the administrator user ID MUST be able to write to this directory. (This is the user ID that is created specifically to administer the product environments; the default is cissys).</p> <p>For each environment initialized, the application logs will be written to the directory &lt;SPLDIROUT&gt;/&lt;SPLENVIRON&gt;</p> <p>Note: Later in the installation the splenviron.sh (splenviron.cmd) script will set the \$SPLOUTPUT (%SPLOUTPUT%) environment variable to point to:&lt;SPLDIROUT&gt;/&lt;SPLENVIRON&gt;</p>                                                                                                                                                                                     |                        |
| Environment Name            | <SPLENVIRON>               | <p>A descriptive name to be used as both a directory name under the mount point &lt;SPLDIR&gt; and an environment descriptor. This value typically identifies the purpose of the environment. For example, DEV01 or CONV.</p> <p>On installation a directory &lt;SPLDIR&gt;/&lt;SPLENVIRON&gt; is created, under which the Oracle Utilities Application Framework and Oracle Utilities Meter Data Management software resides.</p> <p>When multiple environments are set up on the machine you will typically have directories such as:<br/>/ouaf/DEV01/....<br/>/ouaf/CONV/....</p> <p>Each of these contains a complete version of the Oracle Utilities Application Framework and Oracle Utilities Meter Data Management.</p> <p>Note: Later in the installation process, the splenviron.sh (splenviron.cmd) script will set \$SPLEBASE (%SPLEBASE%) environment variable to point to &lt;SPLDIR&gt;/&lt;SPLENVIRON&gt;</p> |                        |
| Web Application Server Type | <SPLWAS>                   | <p>A web application server for the environment to be used. The following value must be selected:</p> <p><b>Valid values:</b><br/>WLS: WebLogic</p> <p>Note: Not all web application servers are supported on all platforms; refer to Supported Platforms section for details.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                        |

| Menu Option                            | Name Used in Documentation | Usage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Customer Install Value |
|----------------------------------------|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| Installation Application Viewer Module | <WEB_ISAPVIEWER>           | Denotes if the Application Viewer Web Module will be installed in the environment. When this value is set to false the application viewer will not be accessible in the environment.<br><br><b>Valid values:</b><br>true: Application Viewer module will be installed.<br>false: Application Viewer module will not be installed.<br><br><b>Default value:</b> true<br><br>Note: When the value of false is selected, the Application Viewer will only be installed at a later date by a complete reinstall of the application. |                        |
| Install Demo Generation Cert Script    | CERT_INSTALL_SCRIPT        | You can install/uninstall later by executing the following script:<br>perl [INSTALL_PACKAGE_FOLDER]/installAR.plx<br><br><b>Valid values:</b><br>true: Demo Generation Cert Script will be installed.<br>false: Demo Generation Cert Script will not be installed.<br><br><b>Default value:</b> true                                                                                                                                                                                                                            |                        |
| Install Sample CM Source Code          | CM_INSTALL_SAMPLE          | You can install/uninstall later by executing the following script:<br>perl [INSTALL_PACKAGE_FOLDER]/installAR.plx<br><br><b>Valid values:</b><br>true: Sample CM Source Code will be installed.<br>false: Sample CM Source Code will not be installed.<br><br><b>Default value:</b> true                                                                                                                                                                                                                                        |                        |

## Environment Description

- Environment Description  
Environment Description:

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

## WebLogic Business Application Server Configuration

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

- Business Application Server Configuration

Business Server Host:

<machine\_name>

```

WebLogic Server Name: myserver
Business Server Application Name: SPLService
MPL Admin Port Number:
MPL Automatic startup: false

```

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

## WebLogic Web Application Server Configuration

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

### 3. Web Application Server Configuration

```

Web Server Host: <machine_name>
Weblogic SSL Port Number:
Weblogic Console Port Number:
WebLogic Additional Stop Arguments:
Web Context Root:
WebLogic JNDI User ID:
WebLogic JNDI Password:
WebLogic Admin System User ID:
WebLogic Admin System Password:
WebLogic Server Name: myserver
Web Server Application Name: SPLWeb
Deploy Using Archive Files: true
Deploy Application Viewer Module: true
Enable The Unsecured Health Check Service: false
MDB RunAs User ID:
Super User Ids: SYSUSER

```

| Menu Option                        | Name Used in Documentation | Usage                                                                                                                                                                                                                                                                                                                                                                                                                       | Customer Install Value |
|------------------------------------|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| Web Server Host                    | WEB_WLHOST                 | The host name on which the web application server resides.<br><br><b>Default value:</b> <current server name>                                                                                                                                                                                                                                                                                                               |                        |
| Weblogic SSL Port Number           | WEB_WLSSLPORT              | 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.<br><br>For Production, additional actions are required. Do NOT run Production with Demo certificates<br><br>Example value: 6501                                                                                                                                  |                        |
| Weblogic Console Port Number       | WLS_ADMIN_PORT             | The port number to access the WebLogic Console using https<br>You will use this port when accessing the WebLogic Console<br><br>Example value: 6500                                                                                                                                                                                                                                                                         |                        |
| Weblogic Additional Stop Arguments | ADDITIONAL_STOP_WEBLOGIC   | This value will be needed when running the WebLogic Console using a different port number (e.g.)<br>-Dweblogic.security.TrustKeyStore=DemoTrust<br>-Dweblogic.security.TrustKeystoreType=CustomTrust                                                                                                                                                                                                                        |                        |
| Web Context Root                   | WEB_CONTEXT_ROOT           | A context root name that allows customers to run multiple instances of web application on the same server.<br><br><b>Default value:</b> ouaf                                                                                                                                                                                                                                                                                |                        |
| WebLogic JNDI User ID              | WEB_WLSYSUSER              | The user ID the application uses to connect to the EJB component through JNDI. This is the EJB container user ID.<br><br>Note: The required value for an initial installation is “ouafjndi”.<br><br>This is a security value.                                                                                                                                                                                               |                        |
| WebLogic JNDI Password             | WEB_WLSYSPASS              | The password the application uses to connect to the EJB component through JNDI.<br><br>Note: The required value for an initial installation is “jndiadmin”. This value will be saved in encrypted format.<br><br>This is a security value; it will be encrypted with the Oracle Application Framework Encryption Algorithm.                                                                                                 |                        |
| WebLogic Admin System User ID      | WLS_WEB_WLSYSUSER          | The user ID to log in to the Oracle WebLogic console and to administer Oracle WebLogic. The Oracle WebLogic startup and stop script also utilizes this user ID<br><br>Note: The installation utility will prompt you to enter “Y” to encrypt. For an initial installation, enter Y/y and specify the required value “system”.<br><br>This is a security value; it will be encrypted with the Weblogic Encryption Algorithm. |                        |

| Menu Option                      | Name Used in Documentation | Usage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Customer Install Value |
|----------------------------------|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| WebLogic Admin System Password   | WLS_WEB_WLSYSPASS          | <p>The password to login to Oracle WebLogic console and to administer Oracle WebLogic. The Oracle WebLogic startup and stop script also utilize this password.</p> <p>Note: The installation utility will prompt you to enter “Y” to encrypt. For an initial installation, enter Y/y, and specify the required value “ouafadmin”.</p> <p>This is a security value; it will be encrypted with the Weblogic Encryption Algorithm.</p>                                                                                                                                                                                                                                                                                        |                        |
| WebLogic Server Name             | WEB_WLS_SVRNAME            | <p>The name of the WebLogic server where the web application resides.</p> <p><b>Default value:</b> myserver</p> <p>Note: For an initial installation, use the default value of “myserver”.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                        |
| Web Server Application Name      | WEB_APP                    | <p>The name of the web application server.</p> <p><b>Default value:</b> SPLWeb</p> <p>Note: For an initial installation, use the default value of “SPLWeb”.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                        |
| Deploy Using Archive Files       | WEB_DEPLOY_EAR             | <p>When the value is “false” the web application will be deployed in exploded directory format (no WAR/EAR files).</p> <p>When the value is “true”, the web application will be deployed in ear file format.</p> <p>Note: The expanded application folders will always exist under the application folder (&lt;SPLEBASE&gt;/splapp/applications), regardless of the setting of this option.</p> <p><b>Valid values:</b><br/> true (Deploy EAR files)<br/> false (Deploy expanded application folders)</p> <p><b>Default value:</b> true</p>                                                                                                                                                                                |                        |
| Deploy Application Viewer Module | WEB_DEPLOY_APPVIEWER       | <p>When the value is “true” the application viewer will be deployed to the web server. When the value is “false”, the application viewer will not be deployed to the web Server.</p> <p>Note: With either value the application viewer module will still be managed by the upgrade process.</p> <p>Note: When the ‘Install Application Viewer module’ value is set to false from the installation menu, you will not be able to change this value to true to deploy the application viewer.</p> <p><b>Valid values:</b><br/> true: The application viewer module will be deployed to the web server<br/> false: The application viewer module will not be deployed to the web server</p> <p><b>Default value:</b> true</p> |                        |

| Menu Option                               | Name Used in Documentation | Usage                                                                                | Customer Install Value |
|-------------------------------------------|----------------------------|--------------------------------------------------------------------------------------|------------------------|
| Enable The Unsecured Health Check Service | WEB_ENABLE_HEALTHCHECK     | Enables the health check feature of the application                                  |                        |
| MDB RunAs User ID                         | WEB_IWS_MDB_RUNAS_USER     | The message drive Java Bean RunAs user.                                              |                        |
| Super User Ids                            | WEB_IWS_SUPER_USERS        | The application super users.<br><br>Enter the super users separating them by commas. |                        |

## Database Configuration

**Note:** The parameters below and in the worksheet are for the database configuration. Note that if changes are made to any of the database menu option items below, thus potentially connecting to a different schema, a warning will be displayed in the screen next to the actual option that has been changed:

### 4. Database Configuration

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

| Menu Option                         | Name Used in Documentation | Usage                                                                                                                                 | Customer Install Value |
|-------------------------------------|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| Application Server Database User ID | DBUSER                     | The database user ID that has been configured on the database for the application server connection.<br><br>This is a security value. |                        |



| <b>Menu Option</b>                   | <b>Name Used in Documentation</b> | <b>Usage</b>                                                                                                                                                                                                                                                                                                                    | <b>Customer Install Value</b> |
|--------------------------------------|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| Application Server Database Password | DBPASS                            | The database password that has been configured on the database for the application connection.<br><br>Note: This value will be saved in encrypted format.<br><br>This is a security value; it will be encrypted with the Oracle Utilities Framework Encryption Algorithm.                                                       |                               |
| MPL Database User ID                 | MPL_DBUSER                        | The database user ID that has been configured on the database for the MPL server connection.<br><br>This is a security value.                                                                                                                                                                                                   |                               |
| MPL Database Password                | MPL_DBPASS                        | The database password that has been configured on the database for the MPL server connection.<br><br>Note: This value will be saved in encrypted format.<br><br>This is a security value; it will be encrypted with the Oracle Utilities Application Framework Encryption Algorithm.                                            |                               |
| XAI Database User ID                 | XAI_DBUSER                        | The database user ID that has been configured on the database for the XAI server connection.<br><br>This is a security value.                                                                                                                                                                                                   |                               |
| XAI Database Password                | XAI_DBPASS                        | The database password that has been configured on the database for the XAI server connection.<br><br>Note: This value will be saved in encrypted format.<br><br>This is a security value; it will be encrypted with the Oracle Utilities Application Framework Encryption Algorithm.                                            |                               |
| Batch Database User ID               | BATCH_DBUSER                      | The database user ID that has been configured on the database for the batch connection.<br><br>This is a security value.                                                                                                                                                                                                        |                               |
| Batch Database Password              | BATCH_DBPASS                      | The database password that has been configured on the database for the batch connection.<br><br>Note: This value will be saved in encrypted format.<br><br>This is a security value; it will be encrypted with the Oracle Utilities Application Framework Encryption Algorithm.                                                 |                               |
| Web JDBC DataSource Name             | JDBC_NAME                         | Populate in order to activate JDBC data source for online.<br><br>If this is specified, and the environment is native/clustered, make sure that the data source specified, is manually created before the application deployment.<br>When on Weblogic, leave empty to use UCP connection pooling.<br><br>Example: TPWDataSource |                               |

| Menu Option                             | Name Used in Documentation | Usage                                                                                                                                                                                                                                                                                                                                                         | Customer Install Value |
|-----------------------------------------|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| JDBC Database User ID                   | DBUSER_WLS                 | The database user ID that has been configured for the JDBC connection.<br>Set this to the proper value if the Web JDBC DataSource Name is entered.<br><br>Generally this is set to be same as Application Server Database Login credentials, Username: xxxxxx                                                                                                 |                        |
| JDBC Database Password                  | DBPASS_WLS                 | The database user password that has been configured for the JDBC connection.<br>Set this to the proper value if the Web JDBC DataSource Name is entered.<br>This is a security value; it will be encrypted with the WebLogic Encryption Algorithm.<br><br>Generally this is set to be same as Application Server Database Login credentials, Password: xxxxxx |                        |
| Database Name                           | DBNAME                     | The name of the database instance that the application will be connecting to.                                                                                                                                                                                                                                                                                 |                        |
| Database Server                         | DBSERVER                   | Host name of the server where database resides.                                                                                                                                                                                                                                                                                                               |                        |
| Database Port                           | DBPORT                     | Database port number on the database server used for connecting to the database                                                                                                                                                                                                                                                                               |                        |
| ONS Server Configuration                | ONSCONFIG                  | ONS Server Configuration is required for Oracle RAC FCF.<br><br>See the Server Administration Guide for more information.<br><br>This is an optional value.                                                                                                                                                                                                   |                        |
| Database Override Connection String     | DB_OVERRIDE_CONNECTION     | This connection string can be used to override the database information entered above for RAC installation.<br><br>Set this string to override the standard database connection string, as entered above.<br><br>See the Server Administration Guide for more information.<br><br>This is an optional value.                                                  |                        |
| Character Based Database                | CHAR_BASED_DB              | Set to true if using a character based database.                                                                                                                                                                                                                                                                                                              |                        |
| Oracle Client Character Set<br>NLS_LANG | NLS_LANG                   | The Oracle Database Character Set.<br><br>Select the Language and Territory that are in use in your country.<br><br><b>Default value:</b> AMERICAN_AMERICA.AL32UTF8                                                                                                                                                                                           |                        |

## General Configuration Options

**Note:** See the *Server Administration Guide* for additional details on this configuration.

### 5. General Configuration Options

Batch RMI Port:

RMI Port number for JMX Business:

RMI Port number for JMX Web:  
 JMX Enablement System User ID:  
 JMX Enablement System Password:  
 Coherence Cluster Name:  
 Coherence Cluster Address:  
 Coherence Cluster Port:  
 Coherence Cluster Mode:

prod

| Menu Option                      | Name Used in Documentation   | Usage                                                                                                                                                                                                                                                     | Customer Install Value |
|----------------------------------|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| Batch RMI Port                   | BATCH_RMI_PORT               | Unique port used by the Batch RMI<br><br>Example value: 6540                                                                                                                                                                                              |                        |
| RMI Port number for JMX Business | BSN_JMX_RMI_PORT_PERFORMANCE | Example value: 6550<br>Note: This is an optional value.                                                                                                                                                                                                   |                        |
| RMI Port number for JMX Web      | WEB_JMX_RMI_PORT_PERFORMANCE | Example value: 6570<br>Note: This is an optional value.                                                                                                                                                                                                   |                        |
| JMX Enablement System User ID    | BSN_JMX_SYSUSER              | This is used to authenticate incoming JMX requests. Populate if RMI Port numbers are set.<br>Note: This is an optional value.                                                                                                                             |                        |
| JMX Enablement System Password   | BSN_JMX_SYSPASS              | This is used to authenticate incoming JMX requests. Populate if RMI Port numbers are set.<br><br>This is a security value; it will be encrypted with the Oracle Utilities Application Framework Encryption Algorithm.<br>Note: This is an optional value. |                        |
| Coherence Cluster Name           | COHERENCE_CLUSTER_NAME       | Unique name for the batch CLUSTER<br><br>Note: Value is required when batch mode is CLUSTERED.                                                                                                                                                            |                        |
| Coherence Cluster Address        | COHERENCE_CLUSTER_ADDRESS    | Unique multicast address.<br><br>Note: Value is required when batch mode is CLUSTERED.                                                                                                                                                                    |                        |
| Coherence Cluster Port           | COHERENCE_CLUSTER_PORT       | Unique port for the batch CLUSTER<br><br>Note: Value is required when batch mode is CLUSTERED.                                                                                                                                                            |                        |
| Coherence Cluster Mode           | COHERENCE_CLUSTER_MODE       | <b>Valid values:</b><br>dev (Development)<br>prod (Production)<br><br><b>Default value:</b> dev                                                                                                                                                           |                        |

## SSL Certificate Keystore (Weblogic Only)

**Note:** See the Oracle Utilities Meter Data Management *Security Guide* for additional details on this configuration. By default, SSL (Secure Sockets Layer) certificates are required for authentication.

The product provides demo certificates generated with 1024 byte keys. For production environments, please use your own custom certificates.

6. SSL Certificate Keystore

```

Certificate Keystore Type: CUSTOM
Identify Keystore File:
Identify Keystore File Type: jks
Identify Keystore Password:
Identity Private Key Alias: ouaf_demo_cert
Trust Keystore File:
Trust Keystore File Type: jks
Trust Keystore Password:
Trust Private Key Alias: ouaf_demo_cert

```

| Menu Option                 | Name Used in Documentation | Usage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Customer Install Value |
|-----------------------------|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| Certificate Keystore Type   | CERT_KS                    | <p>If you choose DEMO you need to execute the following script at least once<br/>perl [SPLEBASE]/bin/demo_gen_cert.plx</p> <p>If you change DEFAULT/CUSTOM to DEMO you need to have installed the demo_gen_cert.plx script, it is part of the demo source in the installation package.</p> <p><b>Default value:</b> CUSTOM<br/><b>Valid values:</b> DEFAULT,DEMO,CUSTOM</p> <p>The demo_gen_cert.plx script is available if you select the <b>'Install Demo Generation Cert Script'</b> option during installation. It automates the creation of the Weblogic provided demo certificate using 1024 byte keys.</p> |                        |
| Identify Keystore Type      | CERT_IDENT_KS_FILE         | <p>Mandatory if the type is CUSTOM.</p> <p>No need to populate if type is DEMO, it will use: [SPLEBASE]/splapp/certs/ouaf_demo_ident.jks</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                        |
| Identify Keystore File Type | CERT_IDENT_KS_TYPE         | <b>Default value:</b> jks                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                        |
| Identify Keystore Password  | CERT_IDENT_KS_PWD          | This is a security value; it will be encrypted with the WebLogic Encryption Algorithm.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                        |
| Identity Private Key Alias  | CERT_IDENT_KS_ALIAS        | <b>Default value:</b> ouaf_demo_cert                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                        |
| Trust Keystore File         | CERT_TRUST_KS_FILE         | <p>Mandatory if the type is CUSTOM.</p> <p>No need to populate if type is DEMO, it will use: [SPLEBASE]/splapp/certs/ouaf_demo_trust.jks</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                        |
| Trust Keystore File Type    | CERT_TRUST_KS_TYPE         | <b>Default value:</b> jks                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                        |
| Trust Keystore Password     | CERT_TRUST_KS_PWD          | This is a security value; it will be encrypted with the WebLogic Encryption Algorithm.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                        |
| Trust Private Key Alias     | CERT_TRUST_KS_ALIAS        | <b>Default value:</b> ouaf_demo_cert                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                        |

## OUAF TrustStore Options

Note: See the *Server Administration Guide* for additional details on this configuration.

The OUAF truststore configuration is required for IWS.

### 7. OUAF TrustStore Options

```

Import TrustStore Directory:
Store Type: JCEKS
Alias: ouaf.system
Alias Key Algorithm: AES
Alias Key Size: 128
HMAC Alias: ouaf.system.hmac
Padding: PKCS5Padding
Mode: CBC

```

| Menu Option                 | Name Used in Documentation | Usage                                                                                                                                                                                                                | Customer Install Value |
|-----------------------------|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| Import TrustStore Directory | TS_IMPORT_KEYSTORE_FOLDER  | Populate this option if you want to import the TrustStore files from an external location.<br>The import will happen only in case of initial install or initialSetup.sh cmd -S                                       |                        |
| Store Type                  | TS_STORETYPE               | Mandatory if setting the ouaf truststore.<br>Value used for keytool option -storetype when creating/using the truststore.                                                                                            |                        |
| Alias                       | TS_ALIAS                   | Mandatory if setting the ouaf truststore.<br>Value used for keytool option -alias when creating/using the truststore.                                                                                                |                        |
| Alias Key Algorithm         | TS_ALIAS_KEYALG            | Mandatory if setting the ouaf truststore.<br>Value used for keytool option -keyalg when creating/using the truststore.                                                                                               |                        |
| Alias Key Size              | TS_ALIAS_KEYSIZE           | Mandatory if setting the ouaf truststore.<br>Value used for keytool option -keysize when creating/using the truststore.                                                                                              |                        |
| HMAC Alias                  | TS_HMAC_ALIAS              | Mandatory if setting the ouaf truststore.<br>Value used for keytool option -alias<br><br>For the HMAC alias, the following values are fixed:<br>- HMAC Alias Key Algorithm: HmacSHA256<br>- HMAC Alias Key Size: 256 |                        |
| Padding                     | TS_PADDING                 | Mandatory if setting the ouaf truststore.<br>Value used for encryption/decryption                                                                                                                                    |                        |
| Mode                        | TS_MODE                    | Mandatory if setting the ouaf truststore.<br>Value used for encryption/decryption                                                                                                                                    |                        |

## Advanced Menu Options

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

### Unix:

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

---

## Windows

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

### WebLogic Advanced Environment Miscellaneous Configuration

```
50. Advanced Environment Miscellaneous Configuration
 Online JVM Batch Server Enabled: false
 Online JVM Batch Number of Threads:5
 Online JVM Batch Scheduler Daemon Enabled: false
 Enable Batch Edit Funtionality:false
 Batch Online Log Directory:
 Enable Web Services Functionality: false
 IWS deployment target:
 Web Admin Server Host:
 GIS Service Running on the same Web Server:true
 GIS Service URL:
 GIS WebLogic System User ID:
 GIS WebLogic System Password:
 Online Display Software Home:
 Max Queries To Hold In Cache Across All Threads:
 Seconds Timeout Flush Cache Completely:
```

| Menu Option                        | Name Used in Documentation | Usage                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Customer Value Install |
|------------------------------------|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| Online JVM Batch Server Enabled    | BATCHENABLED               | <p>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.</p> <p><b>Default value:</b> false</p> <p>Note: This functionality should only be used in low volume environments.</p>                                                                                                                                                                            |                        |
| Online JVM Batch Number of Threads | BATCHTHREADS               | <p>The maximum number of batch processing threads to be executed within a worker JVM when no explicit Distributed Thread Pool is specified. The “DEFAULT” distributed thread pool is used by the batch-scheduling daemon when it initiates processing on batch jobs (typically added via the online system) where no thread pool is specified).</p> <p><b>Default value:</b> 5</p> <p>Note: This will be only used and activated when BATCHENABLED is set to true.</p> |                        |

| Menu Option                                | Name Used in Documentation | Usage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Customer Value Install |
|--------------------------------------------|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| Online JVM Batch Scheduler Daemon Enabled  | BATCHDAEMON                | <p>In a distributed batch environment, this property can be set to “true” to allow a worker JVM to host the batch scheduling daemon. The daemon accepts online batch submissions requests and automatically submits the work for them.</p> <p><b>Valid values:</b> true, false</p> <p><b>Default value:</b> false</p> <p>Note: This will be only used and activated when BATCHENABLED is set to true.</p>                                                                                                             |                        |
| Enable Batch Edit Funtionality             | BATCHEDIT_ENABLED          | <p>Enable Batch Edit Functionality</p> <p>If enabled, use the bedit.sh   cmd script in order to configure the batch</p> <p><b>Valid values:</b> true, false</p> <p><b>Default value:</b> false</p>                                                                                                                                                                                                                                                                                                                    |                        |
| Batch Online Log Directory                 | BATCH_ONLINE_LOG_DIR       | This is required for the online batch retrieval feature.                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                        |
| Enable Web Services Functionality          | WEBSERVICES_ENABLED        | <p>If enabled, execute the following commands in oder to allow the application to re-deploy the Webservices without prompting for the user and password:</p> <ul style="list-style-type: none"> <li>- Add weblogic.jar to the CLASSPATH</li> <li>- Execute: java weblogic.Admin -username [USER NAME] -password [PASSWORD] STOREUSERCONFIG -userconfigfile [SPLEBASE]/etc/.wlsuserconfig-userkeyfile [SPLEBASE]/etc/.wlsuserkey</li> </ul> <p><b>Valid values:</b> true, false</p> <p><b>Default value:</b> false</p> |                        |
| IWS deployment target                      | WLS_CLUSTER_NAME           | This is needed for Web Services deployment and is typically the Weblogic Cluster name. It is mandatory only if Web Services is enabled and the application is running in Weblogic Native mode.                                                                                                                                                                                                                                                                                                                        |                        |
| Web Admin Server Host                      | WEB_ADMIN_SERVER           | It is used for the Web Services deployment. It is also used for importing the certificate from the Web Admin Server (initialSetup.sh   cmd -i). If populated, it will override the Web Server Host.                                                                                                                                                                                                                                                                                                                   |                        |
| GIS Service Running on the same Web Server | GIS                        | <p>Geographical information (GEOCODING) - GIS Service running on the same web application server</p> <p><b>Valid values:</b> true, false</p> <p>This value is optional. This value will only appear for WebLogic.</p>                                                                                                                                                                                                                                                                                                 |                        |

| Menu Option                                     | Name Used in Documentation | Usage                                                                                                                                                                                                                                                                     | Customer Value Install |
|-------------------------------------------------|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| GIS Service URL                                 | GIS_URL                    | This is the URL of the external web server.<br><br>Note: This value will be only be used when GIS is set to true.<br><br>This value is optional. This value will only appear for WebLogic.                                                                                |                        |
| GIS WebLogic System User ID                     | GIS_WLSYSUSER              | GIS WebLogic System User ID<br><br>Note: This value will be only be used when GIS is set to true.<br><br>This value is optional. This value will only appear for WebLogic.                                                                                                |                        |
| GIS WebLogic System Password                    | GIS_WLSYSPASS              | GIS WebLogic System Password.<br><br>Note: This value will be only be used when GIS is set to true.<br><br>This is a security value; it will be encrypted with the Oracle Utilities Application Framework Encryption Algorithm. This value will only appear for WebLogic. |                        |
| Online Display Software Home                    | ONLINE_DISPLAY_HOME        | The location of the Online Display Software installation directory.<br>This value is optional.                                                                                                                                                                            |                        |
| Max Queries To Hold In Cache Across All Threads | XQUERIES_TO_CACHE          | Max number of queries to hold in the cache across all threads<br>0 = no cache<br>-1 or [empty] = unlimited                                                                                                                                                                |                        |
| Seconds Timeout Flush Cache Completely          | XQUERY_CACHE_FLUSH_TIMEOUT | Number of seconds before cache is flushed Completely<br>0 or [empty] = never auto-flush                                                                                                                                                                                   |                        |

## WebLogic Advanced Environment Memory Configuration

```

51. Advanced Environment Memory Configuration
 Web Application Java Initial Heap Size: 2048
 Web Application Java Max Heap Size: 2048
 Web Application Java Max Perm Size: 1024
 Web Application Additional Options:
 Global JVM Arguments:
 Ant Min Heap Size: 200
 Ant Max Heap Size: 800
 Ant Additional Options:
 Thread Pool Worker Java Min Heap Size: 512
 Thread Pool Worker Java Max Heap Size: 1024
 Thread Pool Worker Java Max Perm Size: 512
 Thread Pool Worker Additional Options:
 Additional Runtime Classpath:

```



| <b>Menu Option</b>                     | <b>Name Used in Documentation</b> | <b>Usage</b>                                                                                                                                                                                                                                                                                                                                                     | <b>Customer Install Value</b> |
|----------------------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| Web Application Java Initial Heap Size | WEB_MEMORY_OPT_MIN                | Initial heap size for the application server.<br><br><b>Default value:</b> 1024<br><br>Note: For WebLogic installation only.                                                                                                                                                                                                                                     |                               |
| Web Application Java Max Heap Size     | WEB_MEMORY_OPT_MAX                | Maximum heap size for the application server.<br><br><b>Default value:</b> 1024<br><br>Note: For WebLogic installation only.                                                                                                                                                                                                                                     |                               |
| Web Application Java Max Perm Size     | WEB_MEMORY_OPT_MAXPERMSIZE        | Maximum Perm Size for the application server.<br><br><b>Default value:</b> 500MB (Linux, Solaris)<br>300MB (Windows )<br><br>Note: For WebLogic installation only.                                                                                                                                                                                               |                               |
| Web Application Additional Options     | WEB_ADDITIONAL_OPTION             | Additional options that will be passed in to the web application server JVM.<br><br>This is optional.                                                                                                                                                                                                                                                            |                               |
| Global JVM Arguments                   | GLOBAL_JVMARGS                    | JVM arguments that are passed to all Java server processes such as Weblogic Server, Threadpoolworkers and jobs.<br><br>Arguments added to all jvms<br><br>Defaults to -XX:+HeapDumpOnOutOfMemoryError -XX:HeapDumpPath=<TEMPDIR><br><br>For AIX environment, please add the following argument for SSL communication-<br>-Dcom.ibm.jsse2.overrideDefaultTLS=true |                               |
| Ant Min Heap Size                      | ANT_OPT_MIN                       | Minimum Heap Size passed to ANT JVM.<br><br><b>Default value:</b> 200                                                                                                                                                                                                                                                                                            |                               |
| Ant Max Heap Size                      | ANT_OPT_MAX                       | Maximum Heap Size passed to ANT JVM.<br><br><b>Default value:</b> 800                                                                                                                                                                                                                                                                                            |                               |
| Ant Additional Options                 | ANT_ADDITIONAL_OPTION             | Additional options that are passed into the ANT JVM.                                                                                                                                                                                                                                                                                                             |                               |
| Thread Pool Worker Java Min Heap Size  | BATCH_MEMORY_OPT_MIN              | Minimum heap size passed to the Thread Pool Worker.<br><br><b>Default value:</b> 512                                                                                                                                                                                                                                                                             |                               |

| Menu Option                           | Name Used in Documentation   | Usage                                                                                                                                         | Customer Install Value |
|---------------------------------------|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| Thread Pool Worker Java Max Heap Size | BATCH_MEMORY_OPT_MAX         | Maximum heap size passed to the Thread Pool Worker.<br><br><b>Default value:</b> 1024                                                         |                        |
| Thread Pool Worker Java Max Perm Size | BATCH_MEMORY_OPT_MAXPERMSIZE | Maximum perm size passed to the Thread Pool Worker<br><br><b>Default value:</b> 768                                                           |                        |
| Thread Pool Worker Additional Options | BATCH_MEMORY_ADDITIONAL_OPT  | Additional Memory Options passed into the Thread Pool Worker. For non-AIX only.                                                               |                        |
| Additional Runtime Classpath          | ADDITIONAL_RUNTIME_CLASSPATH | Additional Classpath Options passed in when starting the WebLogic JVM<br><br>Note: For WebLogic installation only. This is an optional value. |                        |

## Advanced Web Application Configuration

### 52. Advanced Web Application Configuration

```

Web Application Cache Settings: off
Web Server Port Number:
WebLogic Overload Protection: system-exit
Domain Home Location:
Batch Cluster URL:
Strip HTML Comments: false
Authentication Login Page Type: FORM
Web Form Login Page: /loginPage.jsp
Web Form Login Error Page: /formLoginError.jsp
Application Viewer Form Login Page: /loginPage.jsp
Application Viewer Form Login Error Page: /formLoginError.jsp
Help Form Login Page: /loginPage.jsp
Help Form Login Error Page: /formLoginError.jsp
Web Security Role: cisusers
Web Principal Name: cisusers
Application Viewer Security Role: cisusers
Application Viewer Principal Name: cisusers
This is a development environment: false
Preload All Pages on Startup: false
Maximum Age of a Cache Entry for Text: 28800
Maximum Age of a Cache Entry for Images: 28800
JSP Recompile Interval (s): 43200

```

| Menu Option                    | Name Used in Documentation | Usage                                                                                                                                                                                                                                                                                                              | Customer Install Value |
|--------------------------------|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| Web Application Cache Settings | WEB_L2_CACHE_MODE          | <b>Default value:</b> off<br><b>Valid values:</b> off<br>read_write<br>read_only                                                                                                                                                                                                                                   |                        |
| Web Server Port Number         | WEB_WLPORT                 | The port number assigned to WebLogic connection. Set this port if the environment is not configured as SSL.<br>Note: For WebLogic installation only. This value is optional.<br><br>Example Value: 6500                                                                                                            |                        |
| WebLogic Overload Protection   | WLS_OVERRIDE_PROTECT       | The overload protection allows for a Weblogic server to be “stopped / exited” when there is an out of memory exception<br><br><b>Valid values:</b><br>system-exit (Exit the server process)<br>no-action (Ignore take no action)<br><br><b>Default value:</b> system-exit<br>Note: For WebLogic installation only. |                        |
| Domain Home Location           | WLS_DOMAIN_HOME            | The Weblogic Domain Home location, when this parameter is populated you will need to use the native Weblogic tools for maintenance (starting, stopping, deployment, and undeployment).<br><br>Note: For WebLogic installation only<br><br>This value is optional                                                   |                        |
| Batch Cluster URL              | WEB_BATCH_CLUSTER_URL      | Example: service:jmx:rmi:///jndi/rmi://[host]:[JMX port]/oracle/ouaf/batchConnector                                                                                                                                                                                                                                |                        |
| StripHTMLComments: false       | STRIP_HTML_COMMENTS        | Stripping HTML (and JavaScript) comments will increase the security of the system.<br><br><b>Default value:</b> false<br><br><b>Valid values:</b> true, false                                                                                                                                                      |                        |
| Authentication Login Page Type | WEB_WLAUTHMETHOD           | Specifies which authentication mode should be used. To switch off OUAF Login Page enter: BASIC<br><br><b>Valid values:</b> FORM, BASIC<br><br><b>Default value:</b> FORM                                                                                                                                           |                        |
| Web Form Login Page            | WEB_FORM_LOGIN_PAGE        | Specify the jsp file used to login into the application.<br><br><b>Default value:</b> /loginPage.jsp                                                                                                                                                                                                               |                        |
| Web Form Login Error Page      | WEB_FORM_LOGIN_ERROR_PAGE  | Specify the jsp file used when there is an error when logging into the application.<br><br><b>Default value:</b> /formLoginError.jsp                                                                                                                                                                               |                        |

| <b>Menu Option</b>                       | <b>Name Used in Documentation</b>   | <b>Usage</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>Customer Install Value</b> |
|------------------------------------------|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| Application Viewer Form Login Page       | WEB_APPVIEWER_FORM_LOGIN_PAGE       | Specify the jsp file used to login into the application viewer application.<br><br><b>Default value:</b> /loginPage.jsp                                                                                                                                                                                                                                                                                                                                                                                                                                |                               |
| Application Viewer Form Login Error Page | WEB_APPVIEWER_FORM_LOGIN_ERROR_PAGE | Specify the jsp file used when there is an error when logging into the application viewer application.                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                               |
| Help Form Login Page                     | WEB_HELP_FORM_LOGIN_PAGE            | Specify the jsp file used to login into the help application.<br><br><b>Default value:</b> /loginPage.jsp                                                                                                                                                                                                                                                                                                                                                                                                                                              |                               |
| Help Form Login Error Page               | WEB_HELP_FORM_LOGIN_ERROR_PAGE      | Specify the jsp file used when there is an error when logging into the help application.<br><br><b>Default value:</b> /formLoginError.jsp                                                                                                                                                                                                                                                                                                                                                                                                              |                               |
| Web Security Role                        | WEB_PRINCIPAL_NAME                  | Specify the name of the security role.<br><br><b>Default value:</b> cisusers                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                               |
| Web Principal Name                       | WEB_PRINCIPAL_NAME                  | Specify the name of a principal that is defined in the security realm.<br><br><b>Default value:</b> cisusers                                                                                                                                                                                                                                                                                                                                                                                                                                           |                               |
| Application Viewer Security Role         | WEB_APPVIEWER_ROLE_NAME             | Specify the name of the security role.<br><br><b>Default value:</b> cisusers                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                               |
| Application Viewer Principal Name        | WEB_APPVIEWER_PRINCIPAL_NAME        | Specify the name of a principal that is defined in the security realm.<br><br><b>Default value:</b> cisusers                                                                                                                                                                                                                                                                                                                                                                                                                                           |                               |
| This is a development environment        | WEB_ISDEVELOPMENT                   | If the value is “true”, the web application may be used for application development, which will trigger certain generation processes. If the value is “false” the environment will be used as a runtime environment.<br><br>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.<br><br><b>Valid values:</b> true, false<br><br><b>Default value:</b> false |                               |
| Preload All Pages on Startup             | WEB_PRELOADALL                      | This controls if the pages should be pre-loaded during the startup of the application or not.<br><br><b>Valid values:</b> true, false<br><br><b>Default value:</b> false                                                                                                                                                                                                                                                                                                                                                                               |                               |

| Menu Option                             | Name Used in Documentation | Usage                                                                    | Customer Install Value |
|-----------------------------------------|----------------------------|--------------------------------------------------------------------------|------------------------|
| Maximum Age of a Cache Entry for Text   | WEB_MAXAGE                 | <b>Default value:</b> 28800                                              |                        |
| Maximum Age of a Cache Entry for Images | WEB_MAXAGEI                | <b>Default value:</b> 28800                                              |                        |
| JSP Recompile Interval (s)              | WEB_wlpageCheckSeconds     | <b>Default value:</b> 43200<br><br>Note: For Weblogic Installation only. |                        |

## WebLogic Diagnostics

54. WebLogic Diagnostics  
Diagnostic Context Enabled: false  
Diagnostic Volume: Off  
Built-in Module: None

| Menu Option                | Name Used in Documentation     | Usage                                                                                                                                                             | Customer Install Value |
|----------------------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| Diagnostic Context Enabled | WLS_DIAGNOSTIC_CONTEXT_ENABLED | Enable or disable diagnostic context for the WebLogic Server (WLDF or the weblogic diagnostic framework)<br>Default value: false<br><br>Valid values: true, false |                        |
| Diagnostic Volume          | WLS_DIAGNOSTIC_VOLUME          | Specifies the volume of diagnostic data that is automatically produced by WebLogic Server at run time<br>Default value: Off<br>Valid values: Off,Low,Medium,High  |                        |
| Built-in Module            | WLS_DIAGNOSTIC_BUILT_IN_MODULE | Specifies the WLDF built-in system resource type to use. If not specified will use the weblogic default.                                                          |                        |

## OIM Configuration Settings

53. OIM Configuration Settings  
SPML SOAP Trace Setting: false  
SPML IDM Schema Name: Fl-IDMUser  
SPML OIM Name Space: http://xmlns.oracle.com/OIM/provisioning  
SPML OIM Enclosing Element: sOAPeElement

| Menu Option             | Name Used in Documentation  | Usage                                                                                                                        | Customer Install Value |
|-------------------------|-----------------------------|------------------------------------------------------------------------------------------------------------------------------|------------------------|
| SPML SOAP Trace Setting | OIM_SPML_SOAP_DEBUG_SETTING | Name of Oracle Identity Manager library for debug<br><br><b>Default value:</b> false<br><br><b>Valid values:</b> true, false |                        |

| Menu Option                | Name Used in Documentation | Usage                                                                                                                           | Customer Install Value |
|----------------------------|----------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------|
| SPML IDM Schema Name       | OIM_SPML_UBER_SCHEMA_NAME  | Name of Oracle Identity Manager library for schema<br><br>Default value: F1-IDMUser                                             |                        |
| SPML OIM Name Space        | OIM_SPML_NAME_SPACE        | Default Namespace for Oracle Identity Manager integration<br><br><b>Default value:</b> http://xmlns.oracle.com/OIM/provisioning |                        |
| SPML OIM Enclosing Element | OIM_SPML_SOAP_ELEMENT      | Default top level SOAP Element name for Oracle Identity Manager integration<br><br><b>Default value:</b> sOAPElement            |                        |

## Cloud Related Options

### 55. Cloud Related Options

Restriction URLs Enable:  
 White List Full Path:  
 Custom White List Full Path:  
 File Parameter Validation:  
 Substitution Variable List File Location:  
 Directory For Variable F1\_MIGR\_ASSISTANT\_FILES:  
 Directory For Variable F1\_BI\_EXTRACT:  
 Directory For Variable F1\_PROD\_INTER\_FILES:  
 Directory For Variable F1\_CUST\_APP\_BASE:  
 Directory For Variable F1\_PROCESS\_DIR:  
 Directory For Variable F1\_SVC\_CATALOG\_WSDL\_DIR:

| Menu Option                                    | Name Used in Documentation                     | Usage                                                                                                                                                                                     | Customer Install Value |
|------------------------------------------------|------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| Restriction URLs Enable                        | CLOUD_RESTRICTION_URLS_ENABLE                  | Default value: false                                                                                                                                                                      |                        |
| White List Full Path                           | CLOUD_WHITE_LIST_PATH                          | Full path name of whiteList.xml                                                                                                                                                           |                        |
| Custom White List Full Path                    | CLOUD_CUSTOM_WHITE_LIST_PATH                   | Full path name of CM_whiteList.xml                                                                                                                                                        |                        |
| File Parameter Validation                      | CLOUD_FILE_PARAMETER_VALIDATION                | For cloud installations it must be set to true.<br><br>Default value: false                                                                                                               |                        |
| Substitution Variable List File Location       | CLOUD_SUBSTITUTION_VARIABLE_LIST_FILE_LOCATION | Full path to the xml file that contains the list of allowed directories and their corresponding substitution variables.<br><br>Default value: <SPLEBASE>/etc/substitutionVariableList.xml |                        |
| Directory For Variable F1_MIGR_ASSISTANT_FILES | CLOUD_LOCATION_F1_MIGR_ASSISTANT_FILES         | Default value: <SPLOUTPUT>/F1_MIGR_ASSISTANT_FILES                                                                                                                                        |                        |

| <b>Menu Option</b>                             | <b>Name Used in Documentation</b>          | <b>Usage</b>                                           | <b>Customer Install Value</b> |
|------------------------------------------------|--------------------------------------------|--------------------------------------------------------|-------------------------------|
| Directory For Variable F1_BI_EXTRACT           | CLOUD_LOCATION_<br>F1_BI_EXTRACT           | Default value: <SPLOUTPUT>/F1_BI_EXTRACT               |                               |
| Directory For Variable F1_PROD_INTER_FILES     | CLOUD_LOCATION_<br>F1_PROD_INTER_FILES     | Default value: <SPLOUTPUT>/<br>F1_PROD_INTER_FILES     |                               |
| Directory For Variable F1_CUST_APP_BASE        | CLOUD_LOCATION_<br>F1_CUST_APP_BASE        | Default value: <SPLOUTPUT>/F1_CUST_APP_BASE            |                               |
| Directory For Variable F1_PROCESS_DIR          | CLOUD_LOCATION_<br>F1_PROCESS_DIR          | Default value: <SPLOUTPUT>/F1_PROCESS_DIR              |                               |
| Directory For Variable F1_SVC_CATALOG_WSDL_DIR | CLOUD_LOCATION_<br>F1_SVC_CATALOG_WSDL_DIR | Default value: <SPLOUTPUT>/<br>F1_SVC_CATALOG_WSDL_DIR |                               |

# Service and Measurement Data Foundation 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. No Customer Install Value fields should be left blank.

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

## WebLogic OSB Configuration

### 8. OSB Configuration

```

OSB Home:
OSB Host Server: <machine name>
OSB Port Number:
OSB SSL Port Number:
JDBC URL for database:
OSB Service Table Schema Name:
OSB Service Table Schema Password:
OSB Weblogic User Name:
OSB Weblogic User Password:
Mount point for OSB files: /spl/sploutput/osb

```

| Menu Option      | Name Used In Documentation | Usage                                                                                                                                                       | Customer Install Value |
|------------------|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| OSB Home         | OSB_HOME                   | Location of the directory where OSB is installed.<br><br>For Example:<br>Unix: /middleware/Oracle_OSB1<br>Windows: C:\middleware\Oracle_OSB1                |                        |
| OSB Host Server  | OSB_HOST                   | Host name of the server where the OSB WebLogic server instance will run.<br><br>Default Value: <current server name>                                        |                        |
| OSB Port Number: | OSB_PORT_NUMBER            | Admin port number of the OSB WebLogic server instance.<br><br>This is the port number that is used as a part of the OSB URL request to connect to the host. |                        |



| Menu Option                       | Name Used In Documentation | Usage                                                                                                                                                                                                                                                                          | Customer Install Value |
|-----------------------------------|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| OSB SSL Port Number               | OSB_SSL_PORT               | <p>SSL Admin port number of the OSB Weblogic server instance.</p> <p>This is the port number that is used as a part of the OSB URL request to connect to the host. This value is required for creation of example OSB Weblogic server instance.</p>                            |                        |
| JDBC URL for database             | DBURL_OSB                  | <p>The JDBC URL of the database where the OSB Schemas are located.</p> <p>For Example:<br/>jdbc:oracle:thin:@host:port:OSBDB</p> <p>This value is required for the example WebLogic server instance.</p>                                                                       |                        |
| OSB Service Table Schema Name     | RCUSTBSHEMA_OSB            | <p>OSB Schema name or prefix used when RCU is executed.<br/>Example: &lt;PREFIX&gt;_STB</p> <p>This value is required for the example WebLogic server instance.</p>                                                                                                            |                        |
| OSB Service Table Schema Password | RCUSTBSCHEMAPWD_OSB        | <p>Password of OSB Schema used.</p> <p>This value is required for the example WebLogic server instance.</p>                                                                                                                                                                    |                        |
| OSB WebLogic User Name            | WEBLOGIC_USERNAME_OSB      | <p>WebLogic user ID for the WebLogic instance where the OSB adapter will be deployed.</p> <p>This value is required for the example WebLogic server instance.</p>                                                                                                              |                        |
| OSB WebLogic User Password        | WEBLOGIC_PASSWORD_OSB      | <p>WebLogic user password for the WebLogic instance where the OSB adapter will be deployed.</p> <p>This value is required for the example WebLogic server instance.</p>                                                                                                        |                        |
| Mount point for OSB files         | OSB_LOG_DIR                | <p>Location of the network share or mount point where the OSB files will be dropped. This path should be accessible from the machine where OSB WebLogic instance is running.<br/>For example: /ouaf/osb/&lt;ENVIRONMENT NAME&gt;/</p> <p>Default Value: /spl/sploutput/osb</p> |                        |

## WebLogic SOA Configuration

### 9. SOA Configuration

SOA Home:

SOA Host Server:

<machine name>

SOA Port Number:

SOA SSL Port Number:

JDBC URL for database:

Database User Name (SOAINFRA):

Database Password (SOAINFRA):

Database User Name (MDS):

Database Password (MDS):

Database User Name (ORASDPM):

Database Password (ORASDPM):

Specify the path for XAI/IWS Service

| Menu Option           | Name Used in this Documentation | Usage                                                                                                                                                                                                                               | Customer Install Value |
|-----------------------|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| SOA Home              | SOA_HOME                        | Location of the directory where SOA is installed.<br><br>For Example:<br>Unix: /middleware/Oracle_SOA1<br>Windows: C:\middleware\Oracle_SOA1                                                                                        |                        |
| SOA Host Server       | SOA_HOST                        | Host name of the server where the SOA WebLogic server instance will run.<br><br>Default Value: <current server name>                                                                                                                |                        |
| SOA Port Number:      | SOA_PORT_NUMBER                 | Admin port number of the SOA WebLogic server instance.<br><br>This is the port number that is used as a part of the SOA URL request to connect to the host.                                                                         |                        |
| SOA SSL Port Number   | SOA_SSL_PORT_NUMBER             | Admin port number of the SOA WebLogic server instance.<br><br>This is the port number that is used as a part of the SOA URL request to connect to the host.<br><br>This value is required for the example WebLogic server instance. |                        |
| JDBC URL for database | DBURL_SOA                       | The JDBC URL of the database where the SOA schemas are located.<br><br>For Example:<br>jdbc:oracle:thin:@host:port:SOADB                                                                                                            |                        |

| <b>Menu Option</b>                   | <b>Name Used in this Documentation</b> | <b>Usage</b>                                                                                                                                                 | <b>Customer Install Value</b> |
|--------------------------------------|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| SOA Service table schema Name        | RCUSTBSHEMA_SOA                        | SOA Schema name or prefix used when RCU is executed.<br>Example: <PREFIX>_STB<br><br>This value is required for the example WebLogic server instance.        |                               |
| SOA Service table schema Password    | RCUSTBSCHEMAPWD_SOA                    | Password of SOA Schema<br><br>This value is required for the example WebLogic server instance.                                                               |                               |
| SOA Weblogic User Name               | WEBLOGIC_USERNAME_SOA                  | WebLogic user ID for the WebLogic instance where the SOA adapter will be deployed.<br>This value is required for the example WebLogic server instance.       |                               |
| SOA Weblogic User Password           | WEBLOGIC_PASSWORD_SOA                  | WebLogic user password for the WebLogic instance where the SOA adapter will be deployed.<br>This value is required for the example WebLogic server instance. |                               |
| Specify the path for XAI/IWS Service | WEB_SERVICE_PATH                       | Path for XAI/IWS Service.<br><br>This value is required to choose between XAI/IWS Services                                                                   |                               |

## WebLogic SOA Configuration Plan

### 10. SOA Configuration Plan (MDF)

MDF Bulk Request Callback URL:  
 MDF Headend http connection timeout: 50000  
 MDF Headend http read timeout: 500000  
 MDF SOA Request Queue JNDI Name: queue/BulkRequestQueue  
 MDF SOA Notify Queue JNDI Name: queue/BulkNotifyQueue  
 MDF SOA Command Queue JNDI Name: queue/BulkCommandQueue  
 SGG-NMS Test Harness Partition Name: SGG-NMS Test

| Menu Option                         | Name Used In Documentation   | Usage                                                                                                                                    | Customer Install Value |
|-------------------------------------|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| MDF Bulk Request Callback URL       | D1_BULK_REQUEST_CALLBACK_URL | This is the URL from the edge application that receives any fault responses in Bulk Command BPEL processing.<br><br>Default value: empty |                        |
| MDF Headend http connection timeout | D1_HEADEND_HTTP_CONN_TIMEOUT | MDF Headend http connection timeout value.<br><br>Default value: 50000                                                                   |                        |
| MDF Headend http read timeout       | D1_HEADEND_HTTP_READ_TIMEOUT | MDF Headend http read timeout value.<br><br>Default value: 500000                                                                        |                        |
| MDF SOA Request Queue JNDI Name     | SOA_REQUEST_QUEUE_D1         | MDF SOA Request Queue JNDI Name.<br><br>Default Value: queue/BulkRequestQueue                                                            |                        |
| MDF SOA Notify Queue JNDI Name      | SOA_NOTIFY_QUEUE_D1          | MDF SOA Notify Queue JNDI Name.<br><br>Default Value: queue/BulkNotifyQueue                                                              |                        |
| MDF SOA Command Queue JNDI Name     | SOA_COMMAND_QUEUE_D1         | MDF SOA Command Queue JNDI.<br><br>Default Value: queue/BulkCommandQueue                                                                 |                        |
| SGG-NMS TestHarness Partition Name  | SOA_PARTITION_D1             | SGG-NMS TestHarness Partition Name<br><br>Default Value: SGG-NMS_Test                                                                    |                        |

## Configuration for DataRaker Integration

### 11. Configuration for DataRaker Integration

Destination Queue to publish SGG payloads  
for DataRaker Integration Tool:

Number of records (SGG Payloads) to accumulate: 100

Max file size for the accumulated (SGG Payloads) file in Kilobytes: 524288

Specify a time which, when exceeded,  
causes a new outgoing file to be created in seconds: 600

Polling frequency of Staging directory  
for new files in second 60

Mount point/directory for the accumulated SGG payload file:  
spl/sploutput/staging

Mount Point/directory for the converted XML  
file to place for DataRaker: /spl/sploutput/int

| Menu Option                                                                              | Name Used In Documentation | Usage                                                                                                                       | Customer Install Value |
|------------------------------------------------------------------------------------------|----------------------------|-----------------------------------------------------------------------------------------------------------------------------|------------------------|
| Destination Queue to publish SGG payloads for DataRaker Integration Tool                 | SGG_DR_INT_QUEUE           | JNDI name of Destination Queue to publish SGG payloads for DataRaker Integration Tool.<br><br>Default value: DataRakerQueue |                        |
| Number of records (SGG Payloads) to accumulate                                           | SOA_DR_PUBLISH_SIZE        | Number of records (SGG Payloads) to accumulate.<br><br>Default value: 100                                                   |                        |
| Max file size for the accumulated (SGG Payloads) file in Kilobytes                       | SOA_DR_FILE_SIZE           | Max file size for the accumulated (SGG Payloads) file in Kilobytes.<br><br>Default value: 524288                            |                        |
| Specify a time which, when exceeded, causes a new outgoing file to be created in seconds | SOA_DR_ELAPSED_TIME        | Specify a time which, when exceeded, causes a new outgoing file to be created in seconds.<br><br>Default Value: 600         |                        |
| Polling frequency of Staging directory for new files in seconds                          | SOA_DR_POLLING_FREQ        | Polling frequency of Staging directory for new files in seconds.<br><br>Default Value: 60                                   |                        |
| Mount point/directory for the accumulated SGG payload file                               | SOA_DR_STAGING_DIR         | Mount point/directory for the accumulated SGG payload file.<br><br>Default Value: /spl/sploutput/staging                    |                        |

| <b>Menu Option</b>                                                      | <b>Name Used In Documentation</b> | <b>Usage</b>                                                                                                      | <b>Customer Install Value</b> |
|-------------------------------------------------------------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------|-------------------------------|
| Mount Point/directory for the converted XML file to place for DataRaker | SOA_DR_INTEGRATION_DIR            | Mount Point/directory for the converted XML file to place for DataRaker.<br><br>Default Value: /spl/sploutput/int |                               |

## Advanced Menu Options

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

### Unix:

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

### Windows

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

## Advanced Menu Option for OSB SSL Deployment

### 60. Advanced Configurations for OSB

```
Enable OSB SSL Port: true
OSB Trust Keystore Type: Demo
OSB Trust Keystore File Type : JKS
OSB Trust Keystore File:
```

| Menu Option                  | Name Used In Documentation | Usage                                                                                                                                              | Customer Install Value |
|------------------------------|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| Enable OSB SSL Port          | OSB_SSL                    | To enable SSL for OSB deployment set this as 'true' else set to 'false'.<br><br>Valid Values: true,false<br>Default value: true                    |                        |
| OSB Trust Keystore Type      | OSB_TRUST_KS               | Specify whether OSB server is using Demo or Custom trust.<br><br>Valid Values:Demo,Custom<br>Default value: Demo                                   |                        |
| OSB Trust Keystore File Type | OSB_TRUST_KS_TYPE          | Specify the Trust store Type for OSB.<br><br>Valid Values:JKS,JCEKS<br>Default Value:JKS<br>If OSB Trust Keystore Type is Demo, Please specify JKS |                        |
| OSB Trust Keystore File      | OSB_TRUST_KS_FILE          | The path and file name of the Trust Keystore.<br><br>No need to input this if OSB Trust Keystore Type is Demo                                      |                        |

## Advanced Environment Memory Configurations

### 61. Advanced Memory Configurations for SOA

```
SOA Initial Heap Size: 1024
SOA Maximum Heap Size: 2048
SOA Minimum Perm Size: 512
SOA Maximum Perm Size: 1024
SOA Application Additional Options:
```

The name of the OWSM policy to use when SOA calls another SOA service:  
 oracle/http\_basic\_auth\_over\_ssl\_client\_policy

The name of the OWSM policy to use when SOA is called by another SOA service:  
 oracle/http\_basic\_auth\_over\_ssl\_service\_policy

The name of the OWSM policy to use when SOA calls an OUAF service:  
 oracle/http\_basic\_auth\_over\_ssl\_client\_policy

| Menu Option                                                                  | Name Used In Documentation | Usage                                                                                                                                             | Customer Install Value |
|------------------------------------------------------------------------------|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| SOA Initial Heap Size                                                        | SOA_MEMORY_OPT_MIN         | Initial heap size for the SOA server.<br><br>Default value: 1024<br><br>Note: For WebLogic installation only.                                     |                        |
| SOA Maximum Heap Size                                                        | SOA_MEMORY_OPT_MAX         | Maximum heap size for the SOA server.<br><br>Default value: 2048<br><br>Note: For WebLogic installation only.                                     |                        |
| SOA Minimum Perm Size                                                        | SOA_MEMORY_OPT_MINPERMSIZE | Maximum Perm Size for the SOA server.<br><br>Default value: 512<br><br>Note: For WebLogic installation only.                                      |                        |
| SOA Maximum Perm Size                                                        | SOA_JVM_ADDITIONAL_OPT     | Additional options that will be passed in to the SOA server JVM.<br><br>Optional Entry.<br><br>Note: For WebLogic installation only.              |                        |
| The name of the OWSM policy to use when SOA calls another SOA service        | SOA_SOA_CLIENT_POLICY      | The name of the OWSM policy to use when SOA calls another SOA service<br><br>Default Value: oracle/http_basic_auth_over_ssl_client_policy         |                        |
| The name of the OWSM policy to use when SOA is called by another SOA service | SOA_SOA_SERVICE_POLICY     | The name of the OWSM policy to use when SOA is called by another SOA service<br><br>Default Value: oracle/http_basic_auth_over_ssl_service_policy |                        |
| The name of the OWSM policy to use when SOA calls an OUAF service            | SOA_SOA_SERVICE_POLICY     | The name of the OWSM policy to use when SOA calls an OUAF service.<br><br>Default Value: oracle/http_basic_auth_over_ssl_client_policy            |                        |



62. Advanced Memory Configurations for OSB

OSB Initial Heap Size: 512  
 OSB Maximum Heap Size: 1024  
 OSB Minimum Perm Size: 512  
 OSB Maximum Perm Size: 1024  
 OSB Application Additional Options:

| Menu Option                        | Name Used In Documentation | Usage                                                                                                                                | Customer Install Value |
|------------------------------------|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| OSB Initial Heap Size              | OSB_MEMORY_OPT_MIN         | Initial heap size for the OSB server.<br>Default value: 512<br><br>Note: For WebLogic installation only                              |                        |
| OSB Maximum Heap Size              | OSB_MEMORY_OPT_MAX         | Maximum heap size for the OSB server.<br>Default value: 1024<br><br>Note: For WebLogic installation only.                            |                        |
| OSB Minimum Perm Size              | OSB_MEMORY_OPT_MINPERMSIZE | Maximum Perm Size for the OSB server.<br>Default value: 512<br><br>Note: For WebLogic installation only.                             |                        |
| OSB Maximum Perm Size              | OSB_MEMORY_OPT_MAXPERMSIZE | Maximum Perm Size for the OSB server.<br>Default value: 1024<br><br>Note: For WebLogic installation only.                            |                        |
| OSB Application Additional Options | OSB_JVM_ADDITIONAL_OPT     | Additional options that will be passed in to the OSB server JVM.<br><br>Optional Entry.<br><br>Note: For WebLogic installation only. |                        |

63. Data Migration

Enable Data Migration: FALSE  
 Data Migration Database User:  
 Data Migration Database Password:

| Menu Option           | Name Used In Documentation | Usage                                                                                                       | Customer Install Value |
|-----------------------|----------------------------|-------------------------------------------------------------------------------------------------------------|------------------------|
| Enable Data Migration | DATA_MIGRATION             | Specify to enable Data Migration Functionality.<br><br>Valid Values: TRUE,FALSE<br><br>Default value: FALSE |                        |

| Menu Option                      | Name Used In Documentation | Usage                                     | Customer Install Value |
|----------------------------------|----------------------------|-------------------------------------------|------------------------|
| Data Migration Database User     | DATA_MIGRATION_DB_USER     | User name of the Data Migration Database. |                        |
| Data Migration Database Password | DATA_MIGRATION_DB_PASS     | Password of the Data Migration Database.  |                        |

## 64. Advanced Configurations for SOA

```

Enable SOA SSL Port:true
SOA Trust Keystore Type: Demo
SOA Trust Keystore File Type :JKS
SOA Trust Keystore File:

```

| Menu Option                  | Name Used In Documentation | Usage                                                                                                                                                      | Customer Install Value |
|------------------------------|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| Enable SOA SSL Port          | SOA_SSL                    | To enable SSL for SOA deployment set this as 'true' else set to 'false'.<br><br>Valid Values: true, false<br>Default value: true                           |                        |
| SOA Trust Keystore Type      | SOA_TRUST_KS               | Specify whether SOA server is using Demo or Custom trust<br><br>Valid Values: Demo, Custom<br>Default value: Demo                                          |                        |
| SOA Trust Keystore File Type | SOA_TRUST_KS_TYPE          | Specify the Trust store Type for SOA.<br><br>Valid Values: JKS, JCEKS<br>Default Value: JKS<br><br>If SOA Trust Keystore Type is Demo, Please specify JKS. |                        |
| SOA Trust Keystore File      | SOA_TRUST_KS_FILE          | The path and file name of the Trust Keystore.<br><br>No need to input this if SOA Trust Keystore Type is Demo                                              |                        |

# Appendix C

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## Common Maintenance Activities

This appendix lists frequently-used commands that you use to perform common maintenance activities, such as starting and stopping the environment and thread pool worker, modifying the configuration items.

Run the following commands to perform these common tasks:

### To Initialize the Environment

1. Go the directory <install\_dir>/bin.
2. Run the following command:

#### UNIX:

```
./splenviron.sh -e <Env_Name>
```

#### Windows:

```
splenviron.cmd -e <Env_Name>
```

### To Start the WebLogic Server

1. Initialize the environment.
2. Run the following command:

#### UNIX:

```
./spl.sh start
```

#### Windows:

```
spl.cmd start
```

### To Stop the WebLogic Server

1. Initialize the environment.
2. Run the following command:

#### UNIX:

```
./spl.sh stop
```

#### Windows:

```
spl.cmd stop
```

### To Start the Thread Pool Worker

1. Initialize the environment.

- 
2. Run the following command:

**UNIX:**

```
./spl.sh -b start
```

**Windows:**

```
spl.cmd -b start
```

**To Stop the Thread Pool Worker**

1. Initialize the environment.
2. Run the following command:

**UNIX:**

```
./spl.sh -b stop
```

**Windows:**

```
spl.cmd -b stop
```

**To Modify the Configuration Values**

1. Initialize the environment.
2. Run the following command:

**UNIX:**

```
configureEnv.sh
```

**Windows:**

```
configureEnv.cmd
```

The configuration utility launches menu items. Select any Menu option.

3. Change the menu values.
4. After you change the menu values, press P to write the changes to the configuration file.
5. To apply the changes to the environment, run the initial setup script:

```
initialSetup.sh
```

**To Modify the Advanced Menu Option Values**

1. Initialize the environment.  
The configuration utility launches menu items.

2. Run the following command:

**UNIX:**

```
configureEnv.sh -a
```

**Windows:**

```
configureEnv.cmd -a
```

3. Select any menu option.
4. Change the menu values.
5. To apply the changes to the environment, run initial setup script:

```
initialSetup.sh
```

# Appendix D

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## Installing User Documentation as a Standalone Application

### 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 Service and Measurement Data Foundation User Guide
- D2: Oracle Utilities Meter Data Management User Guide
- F1: Oracle Utilities Application Framework Administration and Business Process Guides

### Installing Stand-Alone Online Help

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

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

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

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

---

## Customizing Help for Stand-Alone Operation

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

## Installing Stand-Alone Help Under Web Server

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

For example,

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

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.

# Appendix E

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## Oracle Utilities Application Framework 4.3.0 Service Pack 3 (4.3.0.3.0) Fixes

The following table lists the Oracle Utilities Application Framework 4.3.0 Service Pack 3 (4.3.0.3.0) fixes included in this release.

|          |          |          |          |          |
|----------|----------|----------|----------|----------|
| 20047505 | 23216042 | 23276550 | 23548181 | 23554644 |
| 23742466 | 24423299 | 24426428 | 24434233 | 24443052 |
| 24486698 | 24491314 | 24495181 | 24497119 | 24497488 |
| 24504391 | 24533527 | 24567658 | 24569619 | 24571546 |
| 24575579 | 24579463 | 24579626 | 24583489 | 24595051 |
| 24596250 | 24602018 | 24602050 | 24606581 | 24614829 |
| 24617789 | 24619418 | 24661171 | 24674535 | 24675667 |
| 24697776 | 24697954 | 24708747 | 24738462 | 24749849 |
| 24751988 | 24755682 | 24755933 | 24755988 | 24788275 |
| 24789791 | 24790225 | 24791110 | 24798424 | 24798813 |
| 24799856 | 24802693 | 24806652 | 24811617 | 24826903 |
| 24830813 | 24846094 | 24920562 | 24932605 | 24942127 |