Oracle Utilities Digital Asset Management

Installation Guide

Release 2.0.0.1.3

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Oracle Utilities Digital Asset Management Release 2.0.0.1.3 Installation Guide

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Preface

Welcome to the Oracle Utilities Digital Asset Management Installation Guide. This guide provides information about installing Oracle Utilities Digital Asset Management V2.0.0.1.3 and is intended for anyone interested in the installation process.

- Audience
- Related Documents
- Updates to Documentation
- Conventions
- Acronyms
- Additional Resources

Audience

This guide is intended for anyone interested in the installation process.

To complete the installation you should have:

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

Related Documents

For more information, refer to these Oracle documents:

Installation Guides and Release Notes

- *Oracle Utilities Digital Asset Management Release Notes*
- *Oracle Utilities Digital Asset Management Quick Install Guide*
- *Oracle Utilities Digital Asset Management Installation Guide*
- *Oracle Utilities Digital Asset Management Database Administrator's Guide*
- *Oracle Utilities Digital Asset Management Licensing Information User Manual*

User Guide

- *Security Guide*
- *Server Administration Guide*

Updates to Documentation

The complete Oracle Utilities Digital Asset Management documentation set is available from Oracle Help Center at https://docs.oracle.com/en/industries/energy-water/index.html.

Visit My Oracle Support for additional and updated information about the product.

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.
italic	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:

Term	Description
C2M	Oracle Utilities Customer to Meter
OUAF	Oracle Utilities Application Framework
MDM	Oracle Utilities Meter Data Management
DAM	Oracle Utilities Digital Asset Management

Additional Resources

Additional and updated information about the product is available on My Oracle Support. For more information and support, visit the Oracle Support website.

Chapter 1

Overview

This chapter provides a high-level overview of the Oracle Utilities Digital Asset Management installation.

To install Oracle Utilities Digital Asset Management:

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

   Note: The installation and administration of the database server tier is described in detail in the *Oracle Utilities Digital Asset Management Database Administrator's Guide* included in this release.
3. Install the database as described in the *Oracle Utilities Digital Asset Management Database Administrator's Guide* included in this release.
4. Plan your installation as described in Planning the Installation.
5. Install all required third-party software as described in Installing Application Server Prerequisite Software. The required software is listed for each supported combination of operating system and application server.
6. Install the framework for the application as described in Installing Oracle Utilities Digital Asset Management.
7. Install Oracle Utilities Digital Asset Management as described in Installing the Application Server Component of Oracle Utilities Application Framework.
8. Follow the post-installation guidelines described in Additional Tasks.

Chapter 2

Application Architecture Overview

This chapter provides an overview of the Oracle Utilities Application Framework application architecture.

The Oracle Utilities Application Framework application is deployed on multiple tiers.

Refer to the *Server Administration Guide* included in this release 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 Digital Asset Management application. Note also that a desktop machine running Microsoft Windows and the Oracle client is required to perform some of the Oracle Utilities Digital Asset Management product installation steps.

Tier 2: Web Application/Business Application Server, or Business Logic 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 Application Framework 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 Digital Asset Management application. More specifically, the database tier contains the data server files and database executables that physically store the tables, indexes, and other database objects for your system.

Chapter 3

Supported Platforms and Hardware Requirements

This chapter provides an overview of the tiers on which the product is implemented and shows each of the operating system/server combinations that the product is supported on. It includes:

- Software and Hardware Considerations
- Requirements by Tier
- Supported Platforms
- Application Server Memory Requirements
- Support for Software Patches and Upgrades

Software and Hardware Considerations

Many factors can influence the 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 Digital Asset Management be deployed?
- Which web server product will Oracle Utilities Digital Asset Management deploy on?
- Which database product will Oracle Utilities Digital Asset Management deploy on?
- Do you plan to deploy multiple Oracle Utilities Digital Asset Management instances on the same physical server?
- How do you plan to deploy Oracle Utilities Digital Asset 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 the Oracle Utilities Digital Asset Management product, as described in the rest of this chapter.

Requirements by Tier

The application is deployed on multiple Tiers:

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

Tier 1, Desktop: Software and Hardware Requirements

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

Browser	Windows Operating System
Microsoft Edge for Business (Edge Chromium)	Microsoft Windows 10 and 11 Version x (64-bit)
Mozilla Firefox ESR 115.x	
Google Chrome Enterprise	
Apple Mobile Safari	Apple iPad iOS 17.x

Make sure that your system meets the following recommended hardware requirements.

Configuration	Processor	Memory (RAM)
Minimum	Pentium IV - 2.0 GHz	1024 MB
Recommended	Pentium IV - 3.0+ GHz or any Core 2 Duo or any Athlon X2	2048MB

Minimum monitor display size: 1920 X 1080

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

Refer to Supported Platforms to determine which web application servers can be used with the operating system that will be hosting this tier.

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

Tier 3, Database Server: Software and Hardware Requirements

Refer to Supported Platforms for information about the supported database servers.

Supported Platforms

The installation has been tested to operate on many operating system, application server, and database server combinations. For the software requirements for each of these combinations, refer to Installing Application Server Prerequisite Software.

Operating Systems and Application Servers

This section details the operating system and application server combinations on which this version of Oracle Utilities Digital Asset Management is supported.

Application Server Operating Systems

- Oracle Linux 8.x for x86_64
- Oracle Solaris 11.4+ for SPARC (64-bit)
- IBM AIX 7.2 TL5+ for POWER (64-bit)

Prerequisite Application Server Software

- Oracle Database Client 19c
- Oracle Java SE Development Kit 1.8.0_x (Solaris and Linux platforms)
- IBM 64-bit SDK for AIX 8.0.0.x (IBM platforms only)
- Oracle WebLogic Server 12c (Release 12.2.1.4) 64-bit

  Notes:

  Oracle Linux is 100% user space-compatible with Red Hat Enterprise Linux, therefore, Oracle Utilities Application Framework is also supported on Red Hat Enterprise Linux.

  Refer to the *Oracle Utilities Application Framework Database Administrator's Guide* for the Oracle database server requirements.

Refer to the *Certification Matrix for Oracle Utilities Products (Document ID 1454143.1)* document on My Oracle Support to determine if support for newer versions of the listed products have been added.

Please note the following:

- Version numbers marked with a "+" are the MINIMUM version supported. That version and all future 4th digit updates will be supported.

  Example: Oracle 12.1.0.2+ means that 12.1.0.2 and any higher 12.1.0.x versions of Oracle are supported.

- An "x" indicates that any version of the digit designed by the "x" is supported.

  Example: Linux 8.x indicates that any version of Linux 8 (8.0, 8.1, 8.2 etc) will be supported.

Windows Server

- 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**.

WebLogic Server

- Oracle WebLogic Server (Fusion Middleware Infrastructure) and any higher versions of Oracle are supported.
- Customers must download Oracle WebLogic Server from the Oracle Software Delivery Cloud.

Oracle Database Server

Prerequisite database server software (on any vendor supported platform where x is vendor supported version):

- Oracle 19c (64-bit) On Premise and Cloud

Oracle VM Support

This version of Oracle Utilities Digital Asset Management is supported on Oracle VM Server for x86 for supported releases of Oracle Linux and Microsoft Windows operating systems.

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

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. The approximate disk space requirements in a standard installation are as follows (the size represents the MINIMUM required):

Location	Size	Usage
Install Dir ("$SPLEBASE") Location	10 GB recommended 5 GB minimum	Location where the application and Framework get installed. Startup, shutdown and other online log files are stored here. The size and space that is used should be monitored because various debugging options can significantly affect the size of log files. **Note**: This does not include the size of the edge product.
Log Dir ("$SPLOUTPUT") Location	10 GB recommended 2 GB minimum	Used for storing batch log files and output from batch jobs. The size of this space should be influenced by which batches are run and how often, and the amount of debugging information that is collected.
Location of the application web work files on the web servers	5 GB recommended 2 GB minimum	Used by 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	10 GB minimum	The application gets installed from this location. You need enough space to un-compress the files and install the application.

Location	Size	Usage
Oracle Data Area	10 GB minimum	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.

Support for Software Patches and Upgrades

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

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

Note that Oracle 19c is an exception from this rule. Do not upgrade it.

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

Chapter 4

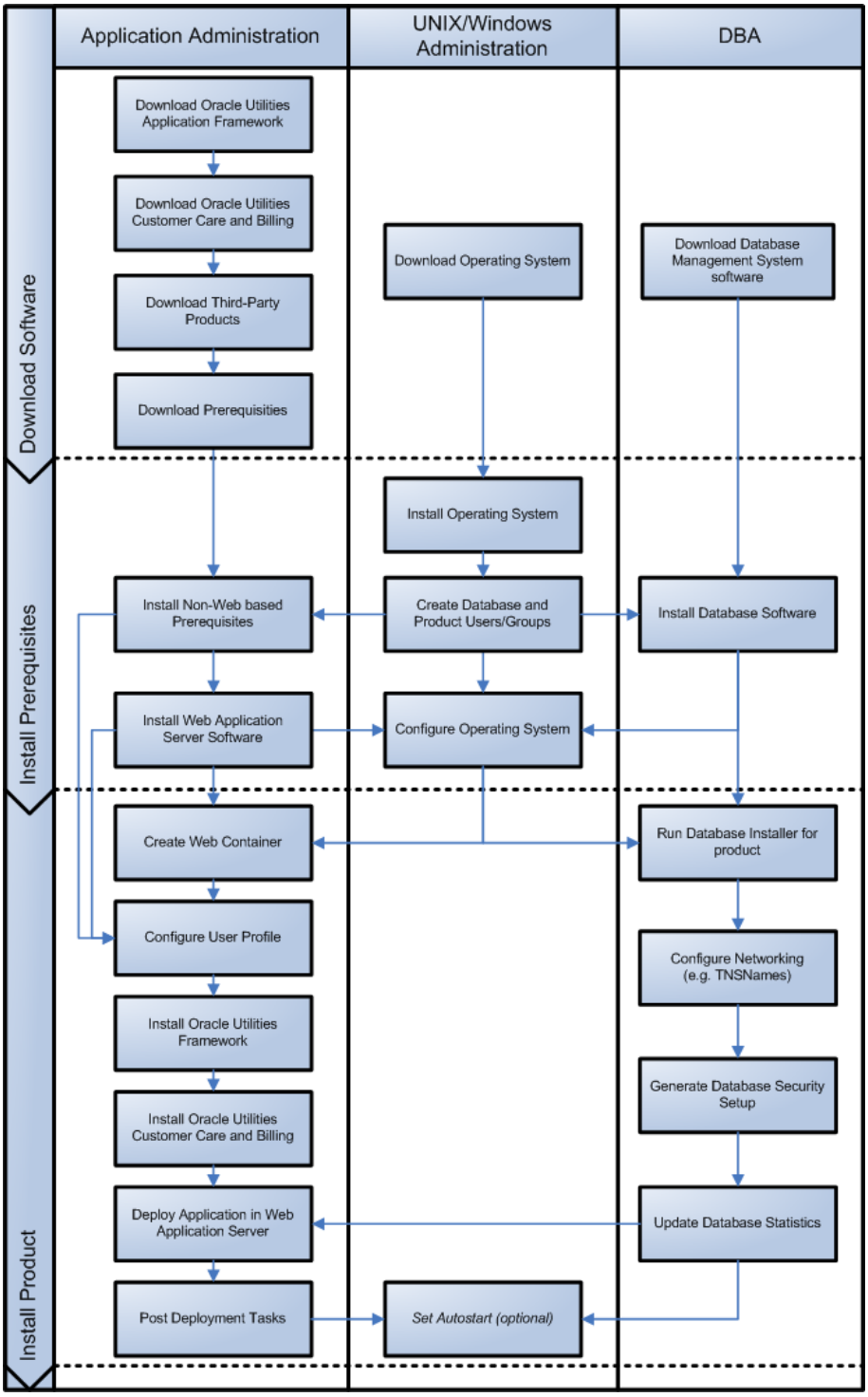
Planning the Installation

This chapter provides information for planning an Oracle Utilities Digital Asset Management installation, including:

- Installation and Configuration Overview
- Before You Install
- Installation Checklist
- Installation Menu Functionality Overview
- Installation and Configuration Worksheets

Installation and Configuration Overview

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



Before You Install

Refer to My Oracle Support for up-to-date additional information on installing.

WebLogic Native Installation

With Oracle Utilities Application Framework 4.5.0.1.3, a WebLogic native installation is required. Refer to the *Oracle WebLogic 12.2.1.x Configuration Guide for Oracle Utilities Framework (Doc ID 2413918.1)* document on My Oracle Support for more information.

Application Server Clustering

If you are considering application server clustering, refer to the *Oracle WebLogic 12.2.1.x Configuration Guide for Oracle Utilities Framework (Doc ID 2413918.1)* document on My Oracle Support.

Additional information about WebLogic clustering, refer to the Fusion Middleware Using Clusters for Oracle WebLogic Server documentation.

Directory Names

Directory cannot contain whitespace characters.

Installation Checklist

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

1. Install the database as described in the *Oracle Utilities Digital Asset Management Database Administrator's Guide* included in this release.
2. Create Group/User ID.
3. Install the prerequisite software (for complete details about installing and configuring the prerequisite third-party software for your specific platform, refer to Installing Application Server Prerequisite Software):
   - Oracle client 19c
   - Java 8
4. Install optional software.
5. Install web server Oracle WebLogic 12.2.1.4.

   Note: If you are upgrading and you are currently running Oracle Application Server please contact your Global Support Representative.
6. Verify that the software installed.
7. Set up the environment variables.
8. Install Oracle Utilities Application Framework.
9. Install Oracle Utilities Application Framework prerequisite single fixes (if there are any).

10. Install Oracle Utilities Customer Care and Billing.
11. Install Oracle Utilities Customer Care and Billing prerequisite single fixes (if there are any).
12. Install Oracle Utilities Meter Data Management.
13. Install Oracle Utilities Meter Data Management prerequisite single fixes (if there are any).
14. Install Oracle Utilities Operational Device Management.
15. Install Oracle Utilities Operational Device Management prerequisite single fixes (if there are any).
16. Install Oracle Utilities Digital Asset Management.
17. Install Oracle Utilities Digital Asset Management prerequisite single fixes (if there are any).
18. Deploy the Oracle Utilities Digital Asset Management application.
19. Complete the post-installation tasks.
20. Complete the optional third-party product integration (such as web self service or reporting tools).

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 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. The menu includes the following:

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

Please also note the following:

- 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 press '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. Refer to the *Oracle Utilities Application Framework Server Administration Guide* for details about configuring these values.

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

The following prompt appears 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

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.

Installation and Configuration Worksheets

During the installation and configuration of the application you will need to provide a variety of system values. These worksheets will assist you in providing that information. They should be completed before installing the application framework, as described in the Installing the Application Server Component of Oracle Utilities Application Framework.

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

Refer to the *Server Administration Guide* for additional details (default, valid values, usage, etc.), as applicable.

Menu Block 1: Environment ID, Roles, Third Party Software Configuration

The Environment ID, Roles, Third Party Software Configuration options include:

Menu Option	Name Used in Documentation	Customer Install Value
Environment ID	ENVIRONMENT_ID	
Server Roles	SERVER_ROLES	
Oracle Client Home Directory	ORACLE_CLIENT_HOME	
Web Java Home Directory	JAVA_HOME	
**ONS JAR Directory	ONS_JAR_DIR	
Web Application Server Home Directory	WEB_SERVER_HOME	
***Additional JAR Directory	WLTHINT3CLIENT_JAR_DIR	

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

** 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.

Menu Block 2: Keystore Options

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

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.

Starting Oracle Utilities Application Framework v4.4.0.0.0 the keystore and truststore options have been removed from the Menu and defaulted into the following template user exit that is loaded by all the properties files:

templates/FW_spl.properties.keystore.truststore.include

The user can still customize those options using the "Centralized Properties Customization".

Upgrades from Oracle Utilities Application Framework versions below 4.4.0.0.0 will still use the keystore and truststore options recorded in the existing etc/ENVIRON.INI file (Menu options file).

Note: Populate the "Import Keystore Directory" option to import an existing keystore.

Keystore options include:

Menu Option	Name Used in Documentation	Customer Install Value
Import Keystore Directory	KS_IMPORT_KEYSTORE_FOLDER	

Menu Block 50: Environment Installation Options

Environment installation options include:

Menu Option	Name Used in Documentation	Customer Install Value
Environment Mount Point	SPLDIR	
Log File Mount Point	SPLDIROUT	
Environment Name	SPLENVIRON	
Install Application Javadocs	WEB_ISJAVADOCS	
Install Sample CM Source Code	CM_INSTALL_SAMPLE	

Menu Block 1: Environment Description

The environment description menu option includes:

Menu Option	Name Used in Documentation	Customer Install Value
Environment Description	DESC	

Menu Block 2: [WebLogic] Business Application Server Configuration

WebLogic Business Application Server configuration options include:

Menu Option	Name Used in Documentation	Customer Install Value
Business Server Host	BSN_WLHOST	
Business Server Application Name	BSN_APP	

Menu Block 3: [WebLogic] Web Application Server Configuration

Refer to *Server Administration Guide* for additional details (default, valid values, usage, etc.)

WebLogic Web Application Server configuration options include:

Menu Option	Name Used in Documentation	Customer Install Value
Web Server Host	WEB_WLHOST	
Weblogic SSL Port Number	WEB_WLSSLPORT	
Weblogic Console Port Number	WLS_ADMIN_PORT	
Web Context Root	WEB_CONTEXT_ROOT	
WebLogic JNDI User ID	WEB_WLSYSUSER	
WebLogic JNDI Password	WEB_WLSYSPASS	
WebLogic Server Name	WEB_WLS_SVRNAME	
Web Server Application Name	WEB_APP	
Deploy Javadocs Module	WEB_DEPLOY_JAVADOCS	
Enable The Unsecured Health Check Service	WEB_ENABLE_HEALTHCHECK	
MDB RunAs User ID	WEB_IWS_MDB_RUNAS_USER	
Super User Ids	WEB_IWS_SUPER_USERS	

Menu Block 4 - Database Configuration

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.

Menu Option	Name Used in Documentation	Customer Install Value
Application Server Database User ID	DBUSER	
Application Server Database Password	DBPASS	
Batch Database User ID	BATCH_DBUSER	
Batch Database Password	BATCH_DBPASS	
Web JDBC DataSource Name	JDBC_NAME	
Database Name	DBNAME	
Database Server	DBSERVER	
Database Port	DBPORT	
ONS Server Configuration	ONSCONFIG	
Database Override Connection String	DB_OVERRIDE_CONNECTION	

Menu Option	Name Used in Documentation	Customer Install Value
Character Based Database	CHAR_BASED_DB	
Oracle Client Character Set NLS_LANG	NLS_LANG	

Menu Block 5 - General Configuration Options

The general configuration options include:

Menu Option	Name Used in Documentation	Customer Install Value
Batch RMI Port	BATCH_RMI_PORT	
RMI Port number for JMX Business	BSN_JMX_RMI_PORT_PERFORMANCE	
RMI Port number for JMX Web	WEB_JMX_RMI_PORT_PERFORMANCE	
JMX Enablement System User ID	BSN_JMX_SYSUSER	
JMX Enablement System Password	BSN_JMX_SYSPASS	
Coherence Cluster Name	COHERENCE_CLUSTER_NAME	
Coherence Cluster Address	COHERENCE_CLUSTER_ADDRESS	
Coherence Cluster Port	COHERENCE_CLUSTER_PORT	
Coherence Cluster Mode	COHERENCE_CLUSTER_MODE	

Menu Block 6 - OUAF TrustStore Options

Refer to the *Oracle Utilities Application Framework Server Administration Guide* for additional details on this configuration.

Starting Oracle Utilities Application Framework V4.4.0.0.0, the keystore and truststore options have been removed from the Menu and defaulted into the following template user exit that is loaded by all the properties files:

templates/FW_spl.properties.keystore.truststore.include

You can still customize those options using the "Centralized Properties Customization" option. Upgrades from Oracle Utilities Application Framework versions below 4.4.0.0.0 will still use the keystore and truststore options recorded in the existing etc/ENVIRON.INI file (Menu options file).

The OUAF truststore configuration is required for IWS.

Menu Option	Name Used in Documentation	Customer Install Value
Import TrustStore Directory	TS_IMPORT_KEYSTORE_FOLDER	

Menu Block 8 - OSB Configuration

The OSB configuration includes:

Menu Option	Name Used in Documentation	Customer Install Value
OSB Home		
OSB Host Server		
OSB Port Number		
OSB SSL Port Number		
OSB Managed Server Port Number		
OSB Managed Server 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 Block 9 - SOA Configuration

The SOA configuration includes:

Menu Option	Name Used in Documentation	Customer Install Value
SOA Home		
SOA Host Server		
SOA Port Number		
SOA SSL Port Number		
SOA Internal URL		

Menu Option	Name Used in Documentation	Customer Install Value
SOA External URL		
JDBC URL for SOA Database		
SOA Service Table Schema Name		
SOA Service Table Schema Password		
SOA WebLogic User Name		
SOA WebLogic User Password		
Specify the Path for XAI/IWS Service	XAIApp/xaiservert	

Menu Block 10 - SOA Configuration Plan (MDM)

The SOA configuration plan (MDF) includes:

Menu Option	Name Used in Documentation	Customer Install Value
MDM Bulk Request Callback URL		
MDM Headend HTTP Connection Timeout	50000	
MDM Headend HTTP Read Timeout	500000	
MDM SOA Request Queue JNDI Name	queue/BulkRequestQueue	
MDM SOA Notify Queue JNDI Name	queue/BulkNotifyQueue	
MDM SOA Command Queue JNDI Name	queue/BulkCommandQueue	
SGG-NMS TestHarness Partition Name	SGG-NMS_Test	

Menu Block 11 - Configuration for DataRaker Integration

The DataRaker Integration configuration includes:

Menu Option	Name Used in Documentation	Customer Install Value
JNDI Name of Destination Queue to publish SGG payloads for DataRaker Integration Tool	DataRakerQueue	
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 seconds	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 Block 16 - SOA Configuration Plan (LG)

The SOA configuration plan (LG) includes:

Menu Option	Name Used in Documentation	Customer Install Value
LG SOA Partition Name	LG	
LG SOA TestHarness Partition Name	LG_Test	
AMI Event Subscriber Output Path	/spl/sploutput/osb/lg-cim-event	
MR_Server endpoint URI		
CD_Server endpoint URI		
CIM_Server endpoint URI		
MeteringServer endpoint URI		

Menu Option	Name Used in Documentation	Customer Install Value
Security policy attached to outbound web service calls to a CIM interface	sgg/d3_cfs_cim_header_client_policy	
Security policy attached to inbound web service calls from a CIM interface	sgg/d3_cim_token_service_policy	
The name of the OWSM policy to use when SOA calls a head end system	oracle/ http_basic_auth_over_ssl_client_policy	
The name of the OWSM policy to use when SOA is called by a head end system	oracle/ http_basic_auth_over_ssl_service_policy	

Menu Block 17 - SOA Configuration Plan (NES)

The SOA configuration plan (NES) includes:

Menu Option	Name Used in Documentation	Customer Install Value
NES endpoint URI		
SOA partition to which the application is installed	Echelon	
Path to the NES EventManager web service on the head end system	CoreServices/EventManager.asmx	
Path to the NES GatewayManager web service	CoreServices/GatewayManager.asmx	
Path to the NES DeviceManager web service on the head end system	CoreServices/DeviceManager.asmx	
Path to the NES SettingManager web service on the head end system	CoreServices/SettingManager.asmx	
Path to the NES UserManager web service on the head end system	CoreServices/UserManager.asmx	
Name of the OWSM policy to use when SOA calls a head end system	oracle/ http_basic_auth_over_ssl_client_policy	
Name of the OWSM policy to use when SOA is called by a head end system	oracle/ http_basic_auth_over_ssl_service_policy	

Menu Block 18 - SOA Configuration Plan (Sensus)

The SOA configuration plan (Sensus) includes:

Menu Option	Name Used in Documentation	Customer Install Value
Sensus SOA TestHarness Partition Name	Sensus_Test	
Sensus SOA Partition Name	Sensus	
MR Server Endpoint URI		
CD Server Endpoint URI		
OD Server Endpoint URI		
Headend Http Read Timeout	500000	
Headend Http Connection Timeout	50000	
The name of the OWSM policy to use when SOA calls a head end system	oracle/ http_basic_auth_over_ssl_client_policy	
The name of the OWSM policy to use when SOA is called by a head end system	oracle/ http_basic_auth_over_ssl_service_policy	

Menu Block 19 - SOA Configuration Plan (SSN)

The SOA configuration plan (Sensus) includes:

Menu Option	Name Used in Documentation	Customer Install Value
SSN SOA Partition Name	SSN	
SOA Weblogic User Name		
SSN SOA Queue JNDI Name	queue/SSNODRQ	
SSN Headend DataAggregation Endpoint URI		
The URL for the SSN 4.7 DataAggregation service (DataAggregation.asmx)	http://127.0.0.1/CoreServices/ DataAggregation.asmx	
The URL for the SSN 4.10 DataAggregation service	https://ssn.ssnsgs.net:3000/amm/ webservice/v2_1/DataAggregat...	
The URL for the SSN 4.14 DataAggregation service	https://ssn.ssnsgs.net:3000/amm/ webservice/v2_5_1/ DataAggregationPort	
The url for the SSN 5.1 DataAggregation service	https://ssn.ssnsgs.net:3000/amm/ webservice/v2_7/DataAggregationPort	

Menu Option	Name Used in Documentation	Customer Install Value
SSN Headend DeviceManager Endpoint URI		
The URL for the SSN 4.7 DeviceManager service (DeviceManager.asmx)	http://127.0.0.1/CoreServices/DeviceManager.asmx	
The URL for the SSN 4.10 DeviceManager service	https://ssn.ssnsgs.net:3000/amm/webservice/v2_1/DeviceManage...	
URL for the SSN 5.1/2.7 DeviceManager service	https://ssn.ssnsgs.net:3000/amm/webservice/v2_7/DeviceManagerPort	
URL for the SSN 5.1/2.8 DeviceManager service	https://ssn.ssnsgs.net:3000/amm/webservice/v2_8/DeviceManagerPort	
SSN Headend DeviceResults Endpoint URI	http://127.0.0.1/CoreServices/DeviceResults.asmx	
URL for the SSN 4.7 DeviceResults service (DeviceResults.asmx)	https://ssn.ssnsgs.net:3000/amm/webservice/v2_1/DeviceResult...	
The URL for the SSN 4.10 DeviceResults service	https://ssn.ssnsgs.net:3000/amm/webservice/v2_7/DeviceResults	
The URL for the SSN 5.1/2.7 DeviceResults service		
The URL for the SSN 5.1/2.8 DeviceResults service		
SSN Headend JobManager Endpoint URI	http://127.0.0.1/CoreServices/JobManager.asmx	
The URL for the SSN 4.7 JobManager service (JobManager.asmx)	https://ssn.ssnsgs.net:3000/amm/webservice/v2_7/JobManagerPort	
The URL for the SSN 4.10 JobManager service	https://ssn.ssnsgs.net:3000/amm/webservice/v2_7/JobManagerPort	
The URL for the SSN 5.1/2.7 JobManager service		
The URL for the SSN 5.1/2.8 JobManager service		
The name of the OWSM policy to use when SOA calls a head end system	oracle/http_basic_auth_over_ssl_client_policy	
The name of the OWSM policy to use when SOA is called by a head end system	oracle/http_basic_auth_over_ssl_service_policy	

Menu Block 20 - SSN JMS Source Destination Bridge Configuration

The SSN JMS Source Destination Bridge configuration includes:

Menu Option	Name Used in Documentation	Customer Install Value
SSN Bridge Destination Name	SSNTestHarnessBridgeDestination	
SSN Bridge Destination Additional Classpath		
SSN Bridge Destination Connection URL		
SSN Bridge Destination Initial Context Factory	weblogic.jndi.WLInitialContextFactory	
SSN Bridge Connection Factory JNDI Name	jms/SSNTestHarnessConnectionFactory	
SSN Bridge Destination Queue JNDI Name	queue/SSNTestSSNODRQ	
SSN Destination Bridge Username		

Menu Block 21 - DG Reference Implementation SOA Configuration

The DG Reference Implementation SOA configuration includes:

Menu Option	Name Used in Documentation	Customer Install Value
DG SOA Partition Name	DG	
MR Server Endpoint URI		
CD Server Endpoint URI		
OD Server Endpoint URI		
Headend Http Read Timeout	500000	
Headend Http Connection Timeout	50000	
DG SOA TestHarness Partition Name	DG_Test	

Menu Block 22 - SOA Configuration Plan (Itron Openway)

The SOA Configuration Plan (Itron Openway) configuration includes:

Menu Option	Name Used in Documentation	Customer Install Value
Itron SOA Partition Name	Itron	

Menu Option	Name Used in Documentation	Customer Install Value
Headend Http Read Timeout	500000	
Headend Http Connection Timeout	50000	
DataSubscriberService Output Path		
ExceptionSubscriberService Output Path		
Itron Headend DataService Endpoint URI		
Itron Headend DiagnosticService Endpoint URI		
Itron Headend UtilService Endpoint URI		
Itron Headend ControlService Endpoint URI		
Itron Headend ProvisioningService Endpoint URI		
Itron Headend ProvisioningService370 Endpoint URI		
Itron Headend ControlService370 Endpoint URI:		
Itron SOA TestHarness Partition Name	Itron_Test	
The name of the OWSM policy to use when SOA calls a head end system	oracle/ http_basic_auth_over_ssl_client_policy	
The name of the OWSM policy to use when SOA is called by a head end system	oracle/ http_basic_auth_over_ssl_service_policy	

Advanced Menu Options

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

Linux/UNIX:

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

Windows:

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

Menu Block 50 - WebLogic Advanced Environment Miscellaneous Configuration

WebLogic advanced environment miscellaneous configurations include:

Menu Option	Name Used in Documentation	Customer Value Install
OUAF DBMS Scheduler User	OUAF_DBMS_SCHEDULER_USER	
WebLogic ThreadPoolWorker Enabled	WLS_THEADPOOLWORKERENABLED	
Online JVM Batch Server Enabled	BATCHENABLED	
Online JVM Batch Number of Threads	BATCHTHREADS	
Online JVM Batch Scheduler Daemon Enabled	BATCHDAEMON	
Enable Batch Edit Functionality	BATCHEDIT_ENABLED	
Batch Online Log Directory	BATCH_ONLINE_LOG_DIR	
JDBC Read Timeout	JDBC_TIMEOUT	
Enable JMS Global Flush for Batch	ENABLE_JMS_GLOBAL_FLUSH	
Add UsernameToken.xml	ADD_USERNAMETOKEN_XML	
IWS deployment target	WLS_CLUSTER_NAME	
Web Admin Server Host	WEB_ADMIN_SERVER	
Split File Size in MB	TEMPSTORAGE_SPLITFILESIZE	
GIS Service Running on the same Web Server	GIS	
GIS Service URL	GIS_URL	
GIS WebLogic System User ID	GIS_WLSYSUSER	
GIS WebLogic System Password	GIS_WLSYSPASS	
Online Display Software Home	ONLINE_DISPLAY_HOME	
Max Queries To Hold In Cache Across All Threads	XQUERIES_TO_CACHE	
Seconds Timeout Flush Cache Completely	XQUERY_CACHE_FLUSH_TIMEOUT	
Malware Scan Host		

Menu Option	Name Used in Documentation	Customer Value Install
Malware Scan Port		
Malware Scan Timeout (Seconds)		

Menu Block 51 - WebLogic Advanced Environment Memory Configuration

WebLogic advanced environment memory configurations include:

Menu Option	Name Used in Documentation	Customer Install Value
Global JVM Arguments	GLOBAL_JVMARGS	
Ant Min Heap Size	ANT_OPT_MIN	
Ant Max Heap Size	ANT_OPT_MAX	
Ant Additional Options	ANT_ADDITIONAL_OPT	
Thread Pool Worker Java Min Heap Size	BATCH_MEMORY_OPT_MIN	
Thread Pool Worker Java Max Heap Size	BATCH_MEMORY_OPT_MAX	
Thread Pool Worker Additional Options	BATCH_MEMORY_ ADDITIONAL_OPT	

Menu Block 52 - Advanced Web Application Configuration

Advanced web application configurations include:

Menu Option	Name Used in Documentation	Customer Install Value
HTTP Allowed Methods	HTTP_ALLOWED_METHODS	
Web Application Cache Settings	WEB_L2_CACHE_MODE	
Web Server Port Number	WEB_WLPORT	
CSRF Protection For REST Services	CSRF_PROTECTION	
OWSM Protection For REST Services	OWSM_PROTECTION_FOR_RES T_SERVICES	
Domain Home Location	WLS_DOMAIN_HOME	
Batch Cluster URL	WEB_BATCH_CLUSTER_URL	
Strip HTML Comments	STRIP_HTML_COMMENTS	
Authentication Login Page Type	WEB_WLAUTHMETHOD	

Menu Option	Name Used in Documentation	Customer Install Value
Web Form Login Page	WEB_FORM_LOGIN_PAGE	
Web Form Login Error Page	WEB_FORM_LOGIN_ERROR_ PAGE	
Javadocs Login Page	WEB_JAVADOCS_FORM_LOGIN _PAGE	
Javadocs Form Login Error Page	WEB_JAVADOCS_FORM_LOGIN _ERROR_PAGE	
Help Form Login Page	WEB_HELP_FORM_LOGIN_ PAGE	
Help Form Login Error Page	WEB_HELP_FORM_LOGIN_ ERROR_PAGE	
Web Security Role	WEB_SECURITY_NAME	
Web Principal Name	WEB_PRINCIPAL_NAME	
Javadocs Security Role	WEB_JAVADOCS_ROLE_NAME	
Javadocs Principal Name	WEB_JAVADOCS_PRINCIPAL_N AME	
This is a development environment	WEB_ISDEVELOPMENT	
Preload All Pages on Startup	WEB_PRELOADALL	
Maximum Age of a Cache Entry for Text	WEB_MAXAGE	
Maximum Age of a Cache Entry for Images	WEB_MAXAGEI	
JSP Recompile Interval (s)	WEB_ WLPAGECHECKSECONDS	
Enable Strict Transport Security		
Strict Transport Security Max Age	HSTS_MAX_AGE	
Strict Transport Security Include Subdomains	HSTS_SUBDOMAINS	
Strict Transport Security Preload	HSTS_PRELOAD	
User Interface Style	USER_INTERFACE_STYLE	
Oracle Guided Learning Id	ORACLE_GUIDED_LEARNING _ID	

Menu Block 54 - WebLogic Diagnostics

WebLogic diagnostic options include:

Menu Option	Name Used in Documentation	Customer Install Value
Diagnostic Context Enabled	WLS_DIAGNOSTIC_CONTEXT_ENABLED	

Menu Block 55 - URI, File and URL Related Options

URI, File and URL Related Options include:

Menu Option	Name Used in Documentation	Customer Install Value
Enable CORS For Embedded UI	ENABLE_CORS	
Allowed Frame Ancestors Max Number	CORS_ALLOWED_FRAME_ANCESTORS_MAX_NUMBER	
URI For Variable CSP_FRAME_ANS_HOST1	CORS_CSP_FRAME_ANS_HOST1	
URI For Variable CSP_FRAME_ANS_HOST2	CORS_CSP_FRAME_ANS_HOST2	
Custom URL For CSP img-src	CSP_URL_IMG_SRC	
Custom URL For CSP script-src	CSP_URL_SCRIPT_SRC	
Custom URL For CSP style-src	CSP_STYLE_SRC	
Custom URL For CSP font-src	CSP_FONT_SRC	
Custom URL For CSP connect-src	CSP_CONNECT_SRC	
Custom URL For CSP frame-src	CSP_URL_FRAME_SRC	
URI For Variable FA_DOMAIN	CORS_FA_DOMAIN	
URI For Variable ALM_DOMAIN	CORS_ALM_DOMAIN	
Restriction URLs Enable	CLOUD_RESTRICTION_URLS_ENABLE	
Custom SQL Security	CUSTOM_SQL_SECURITY	
White List Full Path	CLOUD_WHITE_LIST_PATH	
Custom White List Full Path	CLOUD_CUSTOM_WHITE_LIST_PATH	
Substitution Variable List File Location	CLOUD_SUBSTITUTION_VARIABLE_LIST_FILE_LOCATION	
Directory For Variable F1_CMA_FILES	CLOUD_LOCATION_F1_MIGR_ASSISTANT_FILES	
URI For Variable F1_OAUTH2_URI	CLOUD_LOCATION_F1_OAUTH2_URI	

Menu Option	Name Used in Documentation	Customer Install Value
URI for Variable F1_BASE_REST_URL	CLOUD_LOCATION_F1_BASE_REST_URL	
URI for Variable F1_OPEN_API_BASE_URL	CLOUD_LOCATION_F1_OPEN_API_BASE_URL	
URI For Variable F1_BASE_WEB_URI	CLOUD_LOCATION_F1_BASE_WEB_URI	
URI For Variable F1_BASE_IWS_URI	CLOUD_LOCATION_F1_BASE_IWS_URI	
Consolidated Logfile Full Path	CONSOLIDATED_LOG_FILE_PATH	
Temporary File Location	TMP_FILE_LOCATION	

Menu Block 56 - Mobile Security Configuration

Note: The OUAF Mobile is not supported anymore, but the menu options still exist. They will be removed from the menu as well.

The Mobile Security configurations include:

Menu Option	Name Used in Documentation	Customer Install Value
Enable Mobile Application	MOBILE_ENABLED	
Deploy Only Mobile Web Application	MOBILE_APP_ONLY	
Mobile Application Directory	MOBILE_APPDIR	
Allow Self Signed SSL Certificates	ALLOW_SELFSIGNED_SSL	
Force Http Connection	FORCE_HTTP	
Web Mobile Form Login Page	WEB_MOBILE_FORM_LOGIN_PAGE	
Web Mobile Form Login Error Page	WEB_MOBILE_FORM_LOGIN_ERROR_PAGE	

Menu Block 57 - REST Settings for JMX

REST settings for JMX configurations include:

Menu Option	Name Used in Documentation	Customer Install Value
Enable/Disable REST Service For The JMX	JMX_REST_SERVICE_FLAG	

Menu Option	Name Used in Documentation	Customer Install Value
Hostname To Run The REST Server	JMX_REST_SERVICE_HOST	
Batch Port For REST Server	JMX_REST_PORT_BATCH	
Web Port For REST Server	JMX_REST_PORT_WEB	
Business Server Port For REST Server	JMX_REST_PORT_SERVICE	
Server Context	JMX_REST_CONTEXT	
SSL Flag	JMX_HTTPSSL_FLAG	
Keystore File Path	JMX_HTTPSSL_KEYSTORE_ FILE	
Keystore Type	JMX_HTTPSSL_KEYSTORE_ TYPE	
Keystore Passphrase	JMX_HTTPSSL_KEYSTORE_ PASSPHRASE	
Keypair Passphrase	JMX_HTTPSSL_KEYPAIR_ PASSPHRASE	
Trust Store File Path	JMX_HTTPSSL_TRUSTSTORE_ FILE	
Truststore Type	JMX_HTTPSSL_TRUSTSTORE_ TYPE	
Truststore Passphrase	JMX_HTTPSSL_TRUSTSTORE_ PASSPHRASE	

Menu Block 60 - Advanced Configurations for OSB

The advanced configurations for OSB include:

Menu Option	Name Used in Documentation	Customer Install Value
Enable OSB SSL Port	false	
OSB Trust Keystore Type	Demo	
OSB Trust Keystore File Type	JKS	
OSB Trust Keystore File		

Menu Block 61 - Advanced Memory Configurations for SOA

The advanced memory configurations for SOA include:

Menu Option	Name Used in Documentation	Customer Install Value
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/ wss_http_token_over_ssl_client_ policy	

Menu Block 62 - Advanced Memory Configurations for OSB

The advanced memory configurations for OSB include:

Menu Option	Name Used in Documentation	Customer Install Value
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 Block 63 - Data Migration

The data migration configurations include:

Menu Option	Name Used in Documentation	Customer Install Value
Enable Data Migration	FALSE	

Menu Option	Name Used in Documentation	Customer Install Value
Data Migration Database User		
Data Migration Database Password		

Menu Block 64 - Advanced Configurations for SOA

The advanced configurations for SOA include:

Menu Option	Name Used in Documentation	Customer Install Value
Enable SOA SSL Port	false	
SOA Trust Keystore Type	Demo	
SOA Trust Keystore File Type	JKS	
SOA Trust Keystore File		

Menu Block 70 - SSN SOA TestHarness Configurations

The SSN SOA TestHarness configurations include:

Menu Option	Name Used in Documentation	Customer Install Value
SSN TestHarness SOA Host Server	slc11cds.us.oracle.com	
SSN TestHarness SOA Port Number	8920	
SSN SOA TestHarness Partition Name	SSN_Test	
SSN SOA TestHarness Queue JNDI Name	queue/SSNTestSSNODRQ	

Chapter 5

Installing Application Server Prerequisite Software

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

- AIX Application Server
- Oracle Linux 8.x and Red Hat Linux 8.x Application Server
- Solaris 11.4+ Application Server
- Windows 2012 Application Server
- Additional Prerequisite Software Information

AIX Application Server

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

Supported Application Servers

Operating System	Chipsets	Application Server
AIX 7.2 TL5+(64-bit)	POWER 64-bit	WebLogic 12.2.1.4 (64-bit)

Web/Application Server Tier

AIX 7.2 TL5+ Operating System Running on Power5 and Power6 Architecture

UNIX Administrator Userid

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

Description	Default Value	Customer Defined Value
CCB Administrator User ID	cissys	
CCB 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, "cissys" is the only user ID that can be used to access the installed files.

1. Create the "cisusr" user group.
2. Create the "cissys" user. The primary group is "cisusr".
3. Set the primary shell for **cissys** user to **Korn Shell**.

The shell scripts use ">" to overwrite shell functionality. By default, your operating system may be configured to not allow this functionality in the Users shell.

To avoid file access permission problems while 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 077 to ensure files created during normal operation have the correct permissions.

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

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.

You must use the same user for starting and stopping a process. For example, if cissys is used to start the application server, the use cissys to stop it as well.

Oracle Database Client 19c - 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 V8.0 (64-bit)

Installation of Java as a prerequisite is only needed if you are using Oracle WebLogic as a Web application server.

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

https://www.ibm.com/support/pages/java-sdk-aix

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 user ID (cissys), ensure that the environment variable JAVA_HOME is set up, and that “java” can be found in cissys’ PATH variable.

Oracle WebLogic Server 12.2.1.4 (64-bit)

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

- Download and install 64-bit Java (as documented above) before installing WebLogic.
- Download and install WebLogic Server 12.2.1.4.

  Note: With Oracle Utilities Application Framework V4.5.0.1.3 a WebLogic native installation is required. Refer to the *Oracle WebLogic 12.2.1.x Configuration Guide for Oracle Utilities Application Framework (Doc ID 2413918.1)* document on My Oracle Support.

Oracle Linux 8.x and Red Hat Linux 8.x Application Server

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

Supported Application Servers

Operating System	Chipsets	Application Server
Oracle Linux 8.x (64-bit) Red Hat Enterprise Linux 8.x (64-bit)	x86_64	Oracle WebLogic 12.2.1.4 (64-bit)

Web/Application Server Tier

Oracle Enterprise Linux 8.x or Red Hat Enterprise Linux 8.x Operating System Running on x86_64 64-bit Architecture

UNIX Administrator UserID

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

Description	Default Value	Customer Defined Value
DAM Administrator User ID	cissys	
DAM 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 the 'cisusr' user group.
2. Create the 'cissys' user. Primary group cisusr. Set the primary shell for the cissys user to Korn Shell.

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

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

```
set +o noclobber
```

Security Configuration

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

The following users and group categories must be defined to implement this security. For demonstration purposes the following users and groups will be used. These users must be created according to industry standards (including password policies). All users should be created with a default umask of 077 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

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.

You must use the same user for starting and stopping a process. For example, if cissys is used to start the application server, the use cissys to stop it as well.

Oracle Database Client 19c - 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 1.8.x or Later (64-Bit)

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

http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.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 user ID 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.

Oracle WebLogic Server 12c Release 2 (12.2.1.4) 64-bit

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

- Download and install 64-bit Java (as documented above) before installing WebLogic.
- Download and install WebLogic Server 12.2.1.4.

  Note: If you plan on using the Oracle Utilities Application Framework in native mode within Oracle WebLogic (as opposed to embedded mode), refer to *Native Installation Oracle Utilities Application Framework* (Doc ID: 1544969.1) on My Oracle Support.

Solaris 11.4+ Application Server

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

Supported Application Servers

Operating System	Chipsets	Application Server
Solaris 11.4+ (64-bit)	SPARC	Oracle WebLogic 12.2.1.4 (64-bit) version

Web/Application Server Tier

Solaris 11.4+ Operating System Running on SPARC-based 64-bit Architecture

UNIX Administrator UserID

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

Description	Default Value	Customer Defined Value
CCB Administrator User ID	cissys	
CCB 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, "cissys" is the only user ID that can be used to access the installed files.

1. Create the "cisusr" user group.
2. Create the "cissys" user. The primary group is "cisusr".
3. Set the primary shell for **cissys** user to **Korn Shell**.

The shell scripts use ">" to overwrite shell functionality. By default, your operating system may be configured to not allow this functionality in the Users shell.

To avoid file access permission problems while 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 077 to ensure files created during normal operation have the correct permissions.

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

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.

You must use the same user for starting and stopping a process. For example, if cissys is used to start the application server, the use cissys to stop it as well.

Oracle Database Client 19c - 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.

Install the /usr/ucb/ps command

Installing the /usr/ucp/ps command is a prerequisite for Solaris platforms below version 11.4. It helps to execute the following command successfully.

```
spl.sh -b stop (stop the Threadpool Worker)
```

Oracle Java Development Kit V8.0 Update 131 or Later (64-Bit)

The Oracle Java packages can be obtained from:

https://www.oracle.com/java/technologies/javase/javase-jdk8-downloads.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 user ID 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.

Oracle WebLogic Server 12.2.1.4 (64-bit)

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

- Download and install 64-bit Java (as documented above) before installing WebLogic.
- Download and install WebLogic Server 12.2.1.4.

  Note: With Oracle Utilities Application Framework V4.5.0.1.3 a WebLogic native installation is required. Refer to the *Oracle WebLogic 12.2.1.x Configuration Guide for Oracle Utilities Application Framework (Doc ID 2413918.1)* document on My Oracle Support.

Windows 2012 Application Server

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

Note: 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.

Supported Application Servers

Operating System	Chipsets	Application Server
Window Server 2012	x86_64	Oracle WebLogic 12.2.1.4 (64-bit) version

Web/Application Server Tier

File and Directory Names Limitations

File and directory names cannot contain spaces. Due to the limitations in Windows, fully qualified filenames cannot exceed 2047 characters.

Oracle Database Client 19c - 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 V8.0 Update 131 or Later (64-Bit)

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

https://www.oracle.com/java/technologies/javase/javase-jdk8-downloads.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 cissys user ID, make sure that the environment variable JAVA_HOME is setup, and that java_home/bin and java_home/lib can be found in cissys' PATH variable.

Oracle WebLogic Server 12.2.1.4 (64-bit)

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

- Download and install 64-bit Java (as documented above) before installing WebLogic.
- Download and install WebLogic Server 12.2.1.4.

  Note: With Oracle Utilities Application Framework V4.5.0.1.3 a WebLogic native installation is required. Refer to the *Oracle WebLogic 12.2.1.x Configuration Guide for Oracle Utilities Application Framework (Doc ID 2413918.1)* document on My Oracle Support.

Additional Prerequisite Software Information

This section outlines additional information related to installing the prerequisite software, including:

- Setting Up and Using the Additional JAR Directory
- Special Note to Upgrade from a WebLogic 12.1.3.x Environment

Setting Up and Using the Additional JAR Directory

The additional JAR directory must be populated if the Web Application Server Home directory is not set.

For example: The environment is for batch only and the server has no WebLogic installed. In this scenario, the Additional JAR Directory must be created prior to the installation and the following list of WebLogic JARs should be copied to that directory (full path from the actual WebLogic location which must be installed in the web server).

```
<Web Application Server Home Directory>/server/lib/
wlthint3client.jar
<Web Application Server Home Directory>/../oracle_common/modules/
org.codehaus.woodstox.stax2-api.jar
<Web Application Server Home Directory>/../oracle_common/modules/
org.glassfish.jersey.core.jersey-client.jar
<Web Application Server Home Directory>/../oracle_common/modules/
org.glassfish.jersey.core.jersey-common.jar
<Web Application Server Home Directory>/../oracle_common/modules/
org.glassfish.jersey.bundles.repackaged.jersey-guava.jar
<Web Application Server Home Directory>/../oracle_common/modules/
org.glassfish.jersey.core.jersey-server.jar
<Web Application Server Home Directory>/../oracle_common/modules/
org.glassfish.jersey.media.jersey-media-jaxb.jar
```

```
<Web Application Server Home Directory>/../oracle_common/modules/
org.glassfish.jersey.media.jersey-media-multipart.jar
if WebLocic 12.2.1.[0-2].0:
<Web Application Server Home Directory>/../oracle_common/modules/
org.codehaus.woodstox.woodstox-core-asl.jar
if WebLocic is not 12.2.1.[0-2].0:
<Web Application Server Home Directory>/../oracle_common/modules/
com.fasterxml.woodstox.woodstox-core.jar
```

If the Additional JAR directory is configured, the initialSetup process will pull those JARs from that directory. If it is not configured, the initialSetup process will pull those JARs from the Web Application Server Home directory.

Special Note to Upgrade from a WebLogic 12.1.3.x Environment

If you are upgrading from an environment which is using WebLogic 12.1.3.x, make sure to follow the steps below prior to the installation:

1. Install Oracle WebLogic Server (Fusion Middleware Infrastructure) 12.2.1.4.
2. Install Oracle Java SE Development Kit 1.8.0_261 (if not installed yet).
3. Shutdown the application server environment.
4. Take a full backup of the application:

   ```
   $SPLEBASE
   ```

5. Set the environment as follows:

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

6. Reconfigure the environment to point to the new WebLogic and Java (if upgraded Java as well):

   Execute:

   ```
   configureEnv.sh -i
   ```

   Update:

   ```
   "Web Java Home Directory" and "Web Application Server Home
   Directory"
   Type <P> to process (no need to rerun initialSetup.sh).
   ```

7. Set the environment again.

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

8. Upgrade the Oracle Utilities Application Framework to V4.5.0.1.3.

   ```
   install.sh -u
   ```

Chapter 6

Installing the Application Server Component of Oracle Utilities Application Framework

Installing Oracle Utilities Application Framework ("the framework") is the prerequisite and foundation for installing a framework-based application such as Oracle Utilities Digital Asset Management. This chapter describes the process to install Oracle Utilities Application Framework, including:

- Installation Overview
- Pre-Installation Tasks
- Installing Oracle Utilities Application Framework

Installation Overview

The installation packages for your Oracle Utilities Application Framework-based application must be downloaded from the Oracle Software Delivery Cloud.

Application server installations are new, you cannot upgrade an existing application server. The database installation can be an initial install or an upgrade install.

Before you proceed with the installation process:

1. Complete the database installation/upgrade process. Refer to the *Oracle Utilities Digital Asset Management Database Administrator's Guide.*
2. Make sure that you have installed all the required third-party software as described in Installing Application Server Prerequisite Software.

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

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

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

Application server installation packages delivered for this version are multi-platform and are ready to install on any supported platform (as described in).

Pre-Installation Tasks

Hardware and Software Version Prerequisites

Supported Platforms and Hardware Requirements contains all of the available platforms that are required with this release of the product.

Database Installation

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

Installation Prerequisites

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

System Architecture Overview

Oracle Utilities Application Framework V4.5.0.1.3 is a decoupled system architecture involving a business service application tier and a web application tier. Typically both will run on the same server, but the design does allow each tier to be installed on separate servers.

The design implements a stateless session bean (EJB technology, under Java EE 7), to provide remote access to service invocations. The root web app and XAI web apps can be configured to access service processing locally (as in previous versions), or to make a remote EJB call to perform the service request. In the latter case, the served containers, effectively, run as very thin servlet wrappers around the remote call.

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

Copying and Decompressing Install Media

To copy and decompress the Oracle Utilities Digital Asset Management installation media:

1. Download Oracle Utilities Digital Asset Management V2.0.0.1.3 from Oracle Software Delivery Cloud (eDelivery) and extract the following:
    - Oracle Utilities Application Framework V4.5.0.1.3 Application Installation Media
    - Oracle Utilities Application Framework V4.5.0.1.3 Single Fix Prerequisite Rollup for Oracle Utilities Digital Asset Management V2.0.0.1.3 (if there is any)
    - Oracle Utilities Customer Care and Billing V2.9.0.1.3 for Multiplatform
    - Oracle Utilities Customer Care and Billing V2.9.0.1.3 Single Fix Prerequisite Rollup for Oracle Utilities Digital Asset Management V2.0.0.1.3 (if there is any)
    - Oracle Utilities Meter Data Management V2.5.0.1.3 Multiplatform
    - Oracle Utilities Meter Data Management V2.5.0.1.3 Single Fix Prerequisite Rollup for Oracle Utilities Digital Asset Management V2.0.0.1.3 (if there is any)
    - Oracle Utilities Work and Asset Management V2.4.0.1.3 Multiplatform
    - Oracle Utilities Work and Asset Management V2.4.0.1.3 Single Fix Prerequisite Rollup for Oracle Utilities Digital Asset Management V2.0.0.1.3 (if there is any)
    - Oracle Utilities Digital Asset Management V2.0.0.1.3 for Multiplatform
    - Oracle Utilities Digital Asset Management V2.0.0.1.3 Single Fix Prerequisite Rollup for Oracle Utilities Digital Asset Management V2.0.0.1.3 (if there is any)
2. Copy the following Oracle Utilities Digital Asset Management files to your local machine:
    - FW-V4.5.0.1.3-Multiplatform
    - C2M-V2.9.0.1.3-FW-PREREQ-MultiPlatform (if there is any)
    - CCB-V2.9.0.1.3-Multiplatform
    - CCB-V2.9.0.1.3-Rollup-MultiPlatform (if there is any)

- MDM-V2.5.0.1.3-Multiplatform
- MDM-V2.5.0.1.3-Rollup-Multiplatform (if there is any)
- Oracle Utilities Work and Asset Management V2.4.0.1.3 Multiplatform
- WAM-V2.4.0.1.3-Rollup-Multiplatform (if there is any)
- C2M-V2.9.0.1.3-Multiplatform
- C2M-V2.9.0.1.3-Rollup-MultiPlatform (if there is any)

The Oracle Utilities Application Framework V4.5.0.1.3 installation file is delivered in jar format for both UNIX and Windows platforms.

If you are planning to install multiple Oracle Utilities Application Framework V4.5.0.1.3 environments operated by different Oracle Utilities administrator user IDs, you must complete each of the following installation steps for each administrator user ID.

To copy and decompress the install media:

1. Login to the application server host with the Oracle Utilities Application Framework administrator user ID.
2. Download the Oracle Utilities Application Framework V4.5.0.1.3 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 downloaded application zip file to the <TEMPDIR>.
5. Decompress the file:

```
cd <TEMPDIR>
unzip -q <INSTALL MEDIA ZIP FILE NAME>
```

A sub-directory with name "FW-V4.5.0.1.3" is created. It contains the installation software for the Oracle Utilities framework application server.

Set Permissions for the cistab File in UNIX

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

The install utility checks permissions and if it identifies a lack of the necessary permissions, it generates a script in the <TEMPDIR>/FW-V4.5.0.1.3 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 Application 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 Application 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.

Installing Oracle Utilities Application Framework

This section outlines the steps for installing the Application Framework. It includes the following:

- Installation Process (Brief Description)
- Installation Process (Detailed Description)
- Detailed Description for Configuring the OUAF Keystore

Installation Process (Brief Description)

1. Login as the Oracle Utilities Framework administrator (the default is cissys on UNIX) or as a user with Administrator privileges (on Windows).
2. Configure your application server and any third-party software required for your platform, as outlined in Installing Application Server Prerequisite Software.
3. Change directory to the <*TEMPDIR*>/FW-V4.5.0.1.3 directory.
4. Set the following path:

   ```
   export PATH=/<JAVA_HOME>/bin:/<JAVA_HOME>/lib:$PATH
   ```

   Note: The above command is only applicable on a Unix platform. <JAVA_HOME> is the location where the JDK has been installed.
5. Start the application installation utility by executing the appropriate script:

   UNIX:

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

   Windows:

   ```
   install.cmd
   ```
6. Follow the messages and instructions that are produced by the application installation utility. Use the completed worksheets in Planning the Installation to assist you.
7. Installation of Oracle Utilities Framework Application Server is complete if no errors occurred during installation.

Installation Process (Detailed Description)

1. Login to the host server as Oracle Utilities Application Framework administrator.

   Login as cissys (on UNIX) or as a user with Administrator privileges (on Windows).
2. Configure application server and third-party software.

   Complete all steps outlined in Installing Application Server Prerequisite Software. You will need to obtain specific information for the install.

3. Change directory to the *<TEMPDIR>*/FW-V4.5.0.1.3 directory and start the application installation utility by executing the appropriate script:

   Unix:

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

   Windows:

   ```
   install.cmd
   ```

4. On the Environment Installation Options menu, select item 1: Environment ID, Roles, Third Party Software Configuration.

   Use the completed Environment ID, Roles, Third Party Software Configuration worksheet in Installation Menu Functionality Overview to complete this step.

5. Select menu item 2: Keystore Options.

   Use the completed Keystore Options Worksheet to complete this step. See Installation Menu Functionality Overview.

6. Select menu item 50: Environment Installation Options.

   Use the completed Environment Installation Options Worksheet to complete this step. See Installation Menu Functionality Overview.

   Note: You must create the directory for output (the Log Mount Point). The installation process fails if this directory does not exist.

   - Specify the environment mount point, log files mount point, name and the environment directory names for a new installation on a menu screen.
   - Specify the web application server type your environment will run with (the default will be WebLogic).
   - Specify if you want to install the application viewer module.
   - Specify if you want to install the demo certificate generation scripts.
   - Specify if you want to install sample custom code.
   - Enter P to accept the selected options.
   - During this step, the specification of a new environment is checked for validity against /etc/cistab and the permissions on mount points and directories.

7. Configure the environment parameters.

   - During this step you will configure environment parameters such as web server hosts and ports, database name, and user ID.
   - The application installation utility shows default values for some configuration options.
   - Use the completed Environment Configuration Worksheet to assist you.

   Note: Some options require a value for a successful install. It is important to provide these values as described in the previous sections.

   - When you are done with the parameters setup, proceed with the option P.
   - All of the options will be written in the following File: $ SPLEBASE/etc/ENVIRON.INI.

- You will be warned if you did not edit a section. You may proceed if you want to keep the default settings.
- The application installation utility copies the installation media to a new environment.
- The application installation utility generates environment configuration parameters.

  The application installation utility automatically executes the script initialSetup.sh (on UNIX) or initialSetup.cmd (on Windows), located in $SPLEBASE/bin (%SPLEBASE%\bin on Windows) directory. This script populates different application template configuration files with the new environment variables values and completes the rest of the installation steps.

8. Set up environment variables.

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

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

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

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

UNIX:

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

Windows:

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

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

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

Refer to Planning the Installation for settings and configuration.

Detailed Description for Configuring the OUAF Keystore

The following section details the steps required to configure the OUAF keystore.

OUAF Keystore

The OUAF Keystore feature secures sensitive data such as passwords and prevents tampering of long login IDs via direct updates to the database. The application server uses an external keystore to store keys for system password and other sensitive system data including user "hashes" that are used to verify the validity of email long login IDs. In order to run the application correctly, the keystore used by the application server must match the data encrypted in the database. If they do not match, the application will not be able to decrypt passwords correct, nor will users be able to log on due to a mismatch of user security hashes.

To help manage the keystore and ensure that the keystore matches the database-encypted data, there is a system check at startup of the application that display warning messages when the system detects that the keystore in use does not match the encrypted data in the database. Thus after any keystore operation, fresh installation of the application, or reconfiguration to point to a different database, the keystore will need to be synchronized with the database. Synchronization of the keystore happens any time ChangeCryptographyKey or ResetCryptography key programs are run.

After running the cryptography programs, it is necessary to reset the database credentials used by the database patching utility with the nvokeDBUpdatePatch.sh|cmd script.

> **Note**: The database utility ORADBI does not require the keystore files. Refer to the database documentation for more details.

The following lists the common administrative activities related to the keystore.

Determining Keystore in Use

You can determine if an existing application server uses a keystore through the existence of the files in the following location. (Use the ls -a option in Unix systems to list all files):

```
<SPLEBASE>/ks/.ouaf_keystore
<SPLEBASE>/ks/.ouaf_storepass
```

If there are no files in this location, then the system is not using a keystore. Starting from V4.2.0.2.0, a keystore should be in use.

Configuring the Keystore Options

If you would like to customize the keystore options, the Install Menu includes a section for keystore options as shown below. You can access the Install Menu later through (execute configureEnv.sh|cmd -i):

```
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
```

Importing an Existing Keystore

This will import a keystore from an existing environment to the current one. Use this when upgrading from V4.2.0.2.0 or when reconfiguring environments using different keystores and you want them to point to the same database schema (example: you want to have more than one application server pointing to the same database schema).

Follow these steps:

1. Enter the keystore options from the the install menu or from the configureEnv.sh|cmd –i as above.
2. Run initialSetup.sh|cmd –s so that the keystore is imported and appropriate property files are updated.
3. Run configureEnv.sh|cmd and re-enter the passwords so they are encrypted with the imported keystore.
4. Run initialSetup.sh|cmd again to update property files with the encrypted data.
5. Run the following:

   ```
   perl $SPLEBASE/bin/run_java_standalone.plx
   com.splwg.shared.common.ChangeCryptographyKey -l -h
   ```

6. Run $SPLEBASE/bin/nvokeDBUpdatePatch.sh|cmd and follow the prompts.

   You can use the –h option to obtain help.

Upgrading from the Legacy Keystore

This process:

- Synchronizes the keystore to the database
- Regenerates the user hashes
- Re-encrypts any passwords (from the legacy-encrypted passwords) using the current keystore.
- Is used only when upgrading from a framework prior to V4.2.0.2.0.

Follow these steps:

1. Run the following command:

   ```
   perl $SPLEBASE/bin/run_java_standalone.plx
   com.splwg.shared.common.ChangeCryptographyKey -l -h
   ```

2. Run $SPLEBASE/bin/nvokeDBUpdatePatch.sh|cmd and follow the prompts. You can use the –h option to obtain help.

Forcing the Environment to Use the Current Keystore

This process will:

- Prompt for and encrypt application server-stored passwords
- Synchronize the keystore to the database
- Regenerate the user hashes
- Invalidate any database-stored passwords
- Use this option when, for example, a keystore has been lost, and thus, the system will not be able to decypt the passwords stored in the configuration files or database. All passwords will need to be reentered.

Follow these steps:

1. Using configureEnv.sh|cmd, re-enter the menu passwords to encrypt the data.
2. Run initialSetup.sh|cmd to update property files with the encrypted data.
3. Run the following commands:

```
perl $SPLEBASE/bin/run_java_standalone.plx
com.splwg.shared.common.ResetCryptographyKey
```

4. Run $SPLEBASE/bin/nvokeDBUpdatePatch.sh|cmd and follow the prompts. You can use the –h option to obtain help.
5. Re-enter stored password information using the application (example: passwords for reports).

Synchronizing the Keystore

This process will:

- Synchronize the keystore to the database
- Regenerate the user hashes
- Follow these instructions only when you are sure the data in the database is encrypted with the current keystore. This is used to synchronize the keystore to the database.

Follow these steps:

1. Run the following:

```
perl $SPLEBASE/bin/run_java_standalone.plx
com.splwg.shared.common.ResetCryptographyKey
```

2. Run $SPLEBASE/bin/nvokeDBUpdatePatch.sh|cmd and follow the prompts. You can use the –h option to obtain help.

Creating a New Keystore

This process will:

- Prompt for and encyrpt new application server-stored passwords
- Synchonize the keystore to the database
- Regenerate user hashes
- Decrypt the passwords using the old keystore and encrypt them using the new keystore.

Follow these steps:

1. Copy the old keystore to a temporary directory as a backup measure.
2. Run initialSetup.sh|cmd –k to generate the new keystore.
3. Using configureEnv.sh|cmd, re-enter the menu passwords to encrypt the data.
4. Run initialSetup.sh|cmd to update property files with the encrypted data.
5. Run the following:

```
perl $SPLEBASE/bin/run_ java_standalone.plx
-Dcom.oracle.ouaf.system.old.keystore.file={property-value}
-Dcom.oracle.ouaf.system.old.keystore.passwordFileName={property-
value}
```

```
-Dcom.oracle.ouaf.system.old.keystore.type={property-value}
-Dcom.oracle.ouaf.system.old.keystore.alias={property-value}
-Dcom.oracle.ouaf.system.old.keystore.padding={property-value}
-Dcom.oracle.ouaf.system.old.keystore.mode={property-value}
 com.splwg.shared.common.ChangeCryptographyKey
```

where {property-value}is related to the old keystore

6. Run $SPLEBASE/bin/nvokeDBUpdatePatch.sh|cmd and follow the prompts. You can use the –h option to obtain help.

Chapter 7

Installing Oracle Utilities Digital Asset Management

Important! Please note that Oracle Utilities Digital Asset Management is based on Oracle Utilities Customer to Meter and uses the Oracle Utilities Customer to Meter installation process. The installation procedures in this chapter use steps as that of Oracle Utilities Customer to Meter.

This chapter provides instructions to install Oracle Utilities Digital Asset Management.

- Prerequisites
- Installing Oracle Utilities Digital Asset Management Components
  - Installing Oracle Utilities Application Framework V4.5.0.1.3 Prerequisite Single Fixes
  - Installing Oracle Utilities Customer Care and Billing V2.9.0.1.3
  - Installing Oracle Utilities Customer Care and Billing V2.9.0.1.3 Post-release Patches
  - Installing Oracle Utilities Meter Data Management V2.5.0.1.3
  - Installing Oracle Utilities Meter Data Management V2.5.0.1.3 Post-release Patches
  - Installing Oracle Utilities Operational Device Management V2.4.0.1.3
  - Installing Oracle Utilities Work and Asset Management V2.4.0.1.3 Post-release Patches
  - Installing Oracle Utilities Digital Asset Management V2.0.0.1.3
  - Installing Oracle Utilities Digital Asset Management V2.0.0.1.3 Post-release Patches

Prerequisites

Before you can install the Oracle Utilities Digital Asset Management components, the following must be installed:

- Oracle Utilities Application Framework V4.5.0.1.3

Refer to Installing the Application Server Component of Oracle Utilities Application Framework for instructions.

Installing Oracle Utilities Digital Asset Management Components

The Oracle Utilities Digital Asset Management installation includes:

- Installing Oracle Utilities Application Framework V4.5.0.1.3 Prerequisite Single Fixes
- Installing Oracle Utilities Customer Care and Billing V2.9.0.1.3
- Installing Oracle Utilities Customer Care and Billing V2.9.0.1.3 Post-release Patches
- Installing Oracle Utilities Meter Data Management V2.5.0.1.3
- Installing Oracle Utilities Meter Data Management V2.5.0.1.3 Post-release Patches
- Installing Oracle Utilities Operational Device Management V2.4.0.1.3
- Installing Oracle Utilities Work and Asset Management V2.4.0.1.3 Post-release Patches
- Installing Oracle Utilities Digital Asset Management V2.0.0.1.3
- Installing Oracle Utilities Digital Asset Management V2.0.0.1.3 Post-release Patches

Installing Oracle Utilities Application Framework V4.5.0.1.3 Prerequisite Single Fixes

Note: This section is applicable only if there are any Oracle Utilities Application Framework prerequisites patches to install.

Oracle Utilities Application Framework patches must be installed prior to installing Oracle Utilities Digital Asset Management.

The patches are available as a convenience roll-up inside the C2M-V2.9.0.1.3-FWPREREQ-MultiPlatform.zip file which is part of the downloaded media pack.

For a list of the patches included in this roll-up, refer to Application Framework Prerequisite Patches.

To install the application and database patches on top of Oracle Utilities Application Framework V4.5.0.1.3:

1. Copy the C2M-V29013-FW-PREREQ-MultiPlatform.jar file in the delivered package to a <TEMPDIR>.

2. Unjar the file.

```
jar -xvf C2M-V29013-FW-PREREQ-MultiPlatform.jar
```

3. Initialize the Oracle Utilities Application Framework environment that you want to install the patch roll-up into:

UNIX

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

Windows

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

4. Install application patches.
   a. Navigate to the <temp location>/FW-V4.5.0.1.3-Rollup/Application folder.
   b. Execute the group installation script.

UNIX/Linux

```
chmod a+x installSFgroup.sh
chmod a+x FW*/*.sh
./installSFgroup.sh
```

Windows

```
installSFgroup.cmd
```

Installing Oracle Utilities Customer Care and Billing V2.9.0.1.3

This section describes the steps to install Oracle Utilities Customer Care and Billing, including:

- Copying and Decompressing Install Media
- Preparing for the Installation
- Installing the Oracle Utilities Customer Care and Billing Application Component

Copying and Decompressing Install Media

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

Oracle Utilities Digital Asset Management is delivered in a separate installation package for each supported Operating System. Refer to the Supported Platforms section in Supported Platforms and Hardware Requirements for version and installation details regarding the database and operating system versions. Also refer to Installing Application Server Prerequisite Software for the prerequisite third-party software installation instructions.

Download the installation package for your operating system and proceed with the following instructions.

1. Login to the host server as the Oracle Utilities Application Framework administrator user ID (default cissys). This is the same user ID that was used to install the Oracle Utilities Application Framework.
2. Create a <TEMPDIR> directory on the host server, which is independent of any current or other working Oracle Utilities Digital Asset Management application

environment. This can be the same <TEMPDIR> used during the installation of the Oracle Utilities Application Framework.

3. Copy the file CCB-V2.9.0.1.3-MultiPlatform.jar in the delivered package to a <TEMPDIR>. To use FTP to transfer this file, make sure to use the BINARY option.

4. Decompress the file:

```
cd <TEMPDIR>
jar -xvf CCB-V2.9.0.1.3-MultiPlatform.jar
```

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

For Windows installs, 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 CCB.V2.9.0.1.3 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. Login as an Oracle Utilities Digital Asset Management Administrator (default is "cissys").

2. Initialize the Framework environment that you want to install the product into.

   UNIX:

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

   Windows:

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

3. Stop the environment if running.

Installing the Oracle Utilities Customer Care and Billing Application Component

To install the Oracle Utilities Customer Care and Billing application:

1. Change to the <TEMPDIR>/CCB.V2.9.0.1.3 directory.

2. Set the following path:

   ```
   export PATH=<JAVA_HOME>/bin:$PATH
   ```

   > **Note:** The above command is only applicable on a Linux platform. <JAVA_HOME> is the location where the JDK has been installed.

3. Run the following script:

   UNIX

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

Windows

```
install.cmd
```

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

4. Follow the messages and instructions that are produced by the install utility. Please note that some of the steps may take some time to complete.
5. If the install utility execution was not stopped due to errors and you did not interrupt the execution, you have finished the installation of the Oracle Utilities Digital Asset Management Application product.
6. Run the following commands:

   UNIX

   ```
   splenviron.sh -e <ENV_NAME>
   configureEnv.sh
   Type P and <ENTER> (you don't need to change anything)
   splenviron.sh -e <ENV_NAME>
   initialSetup.sh
   ```

   Windows

   ```
   splenviron.cmd -e <ENV_NAME>
   configureEnv.cmd -e <ENV_NAME>
   Type P and <ENTER> (you don't need to change anything)
   splenviron.cmd -e <ENV_NAME>
   initialSetup.cmd
   ```

7. Start up the environment.

The final step of the installation process is the environment startup. The install utility executes the command spl.sh start (for UNIX) or spl.cmd start (for Windows) to start up the environment. You may start the environment by this command any time. Follow the messages on the screen and check the logs in $SPLSYSTEMLOGS (%SPLSYSTEMLOGS% on Windows) directory to ensure that the environment was started successfully. If the startup failed, identify the problem by reviewing the logs, and start up the environment manually while you are connected to the new environment in your online session.

Installing Oracle Utilities Customer Care and Billing V2.9.0.1.3 Post-release Patches

> **Note**: This section is applicable only if there are any Oracle Utilities Customer Care and Billing prerequisites patches to install.

The Oracle Utilities Customer Care and Billing patches must be installed after installing Oracle Utilities Customer Care and Billing.

The patches are available as a convenience rollup inside the CCB-V2.9.0.1.3-Rollup-MultiPlatform.zip file, which is part of the downloaded media pack.

For a list of the patches included in this rollup, refer to Post-release Patches.

To install the application and database patches on top of Oracle Utilities Customer Care and Billing V2.9.0.1.3:

1. Copy the CCB-V29013-Rollup-MultiPlatform.jar file in the delivered package to a <TEMPDIR>.
2. Unjar the file.

   ```
   jar -xvf CCB-V29013-Rollup-MultiPlatform.jar
   ```

3. Initialize the Oracle Utilities Customer Care and Billing environment where the Oracle Utilities Customer Care and Billing patch rollup has to be installed.

   UNIX

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

   Windows

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

4. Install application patches.
   a. Navigate to the <temp location>/CCB-V2.9.0.1.3-Rollup/Application folder.
   b. Run the group installation script.

      UNIX/Linux

      ```
      chmod a+x installSFgroup.sh
      chmod a+x CCB*/*.sh
      ./installSFgroup.sh
      ```

      Windows

      ```
      installSFgroup.cmd
      ```

5. Start the environment.

Installing Oracle Utilities Meter Data Management V2.5.0.1.3

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

- Copying and Decompressing the Install Media
- Installing the Oracle Utilities Meter Data Management Application Component

To proceed with the Oracle Utilities Meter Data Management installation you need to be connected to the target Oracle Utilities Application Framework environment.

Copying and Decompressing the Install Media

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

To copy and decompress the install media:

1. Login to the application server host with the Oracle Utilities Application Framework administrator user ID.
2. Download the Oracle Utilities Meter Data Management V2.5.0.1.3 Multiplatform.zip 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. Unzip Oracle Utilities Meter Data Management V2.5.0.1.3 Multiplatform.zip to get the file MDM_V2.5.0.1.3.zip from the delivered package and copy to the <TEMPDIR>. To use FTP to transfer this file, use the BINARY option.

5. Decompress the file:

```
cd <TEMPDIR>
unzip MDM_V2.5.0.1.3.zip
cd App
```

For UNIX and Windows platforms, a sub-directory named MDM.V2.5.0.1.3 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 Oracle Utilities Meter Data Management Application Component

To install the Oracle Utilities Meter Data Management application component:

1. Login to the application server host as Oracle Utilities Application Framework Administrator (default cissys).

2. Change directory:

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

   where <install_dir> is the location where the Oracle Utilities Application Framework 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. Navigate to <TEMPDIR>/MDM.V2.5.0.1.3 directory.

5. Run the install script.

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

   UNIX

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

   Windows

```
install.cmd
```

6. Choose option P to proceed with the installation.

Note: The rest of the menu items can be ignored if you are installing only Oracle Utilities Meter Data Management.

The Oracle Utilities Meter Data Management installation is complete if no errors occurred during the installation.

Installing Oracle Utilities Meter Data Management V2.5.0.1.3 Post-release Patches

Note: This section is applicable only if there are any Oracle Utilities Meter Data Management prerequisites patches to install.

The Oracle Utilities Meter Data Management patches must be installed after installing Oracle Utilities Meter Data Management.

The patches are available as a convenience rollup inside the MDM-V2.5.0.1.3-Rollup-MultiPlatform.zip file, which is part of the downloaded media pack.

For a list of the patches included in this rollup, refer to Post-release Patches.

To install the application and database patches on top of Oracle Utilities Meter Data Management V2.5.0.1.3:

1. Copy the MDM-V25013-Rollup-MultiPlatform.jar file in the delivered package to a <TEMPDIR>.
2. Unjar the file.

   ```
   jar -xvf MDM-V25013-Rollup-MultiPlatform.jar
   ```

3. Initialize the Oracle Utilities Meter Data Management environment where the Oracle Utilities Meter Data Management patch rollup has to be installed.

   UNIX

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

   Windows

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

4. Install application patches.
   a. Navigate to the <temp location>/MDM-V2.5.0.1.3-Rollup/Application folder.
   b. Run the group installation script.

      UNIX/Linux

      ```
      chmod a+x installSFgroup.sh
      chmod a+x CCB*/*.sh
      ./installSFgroup.sh
      ```

      Windows

      ```
      installSFgroup.cmd
      ```

5. Start the environment.

Installing Oracle Utilities Operational Device Management V2.4.0.1.3

Important! Note that the Oracle Utilities Operational Device Management installation is not different from that of Oracle Utilities Work and Asset Management installation. Installing Oracle Utilities Work and Asset Management will install Oracle Utilities Operational Device Management also.

This section describes how to install the Oracle Utilities Work and Asset Management application component, including:

- Copying and Decompressing the Oracle Utilities Work and Asset Management Install Media
- Installing the Oracle Utilities Work and Asset Management Application Component

Copying and Decompressing the Oracle Utilities Work and Asset Management Install Media

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

To copy and decompress the install media:

1. Login to the application server host as the 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 Work and Asset Management V2.4.0.1.3 Multiplatform zip file 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 Work and Asset Management application environment.

   This can be the same <TEMPDIR> used during the installation of the Oracle Utilities Application Framework.
4. Copy the WAM-V2.4.0.1.3-Multiplatform.jar file 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 WAM-V2.4.0.1.3-Multiplatform.jar
   ```

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

A sub-directory W1.V2.4.0.1.3 is created for both UNIX and Windows platforms. The contents of the installation directory are identical for both platforms. The directory contains the install software for the application product.

Installing the Oracle Utilities Work and Asset Management Application Component

Follow these steps to install the Oracle Utilities Work and Asset Management application component:

1. Login to the application server host as the administrator user ID (default cissys).
2. Change the directory.

   ```
   cd <install_dir>
   ```

   where <install_dir> is the location where the Oracle Utilities Application Framework V4.5.0.1.3 base application component is installed.
3. Initialize the environment.

   UNIX

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

   Windows

   ```
   splenviron.cmd -e <ENV NAME>
   ```
4. Change to the <TEMPDIR>/W1.V2.4.0.1.3 directory where <install_dir> is the Oracle Utilities Work and Asset Management application component installation directory.

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

   UNIX

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

   Windows

   ```
   install.cmd
   ```
5. Initialize the environment.

   UNIX

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

   Windows

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

Installing Oracle Utilities Work and Asset Management V2.4.0.1.3 Post-release Patches

Note: This section is applicable only if there are any Oracle Utilities Work and Asset Management prerequisites patches to install.

The Oracle Utilities Work and Asset Management patches must be installed after installing Oracle Utilities Work and Asset Management.

The patches are available as a convenience rollup inside the WAM-V2.4.0.1.3-Rollup-MultiPlatform.zip file, which is part of the downloaded media pack.

For a list of the patches included in this rollup, refer to Post-release Patches.

To install the application and database patches on top of Oracle Utilities Work and Asset Management V2.4.0.1.3:

1. Copy the WAM-V24013-Rollup-MultiPlatform.jar file in the delivered package to a <TEMPDIR>.
2. Unjar the file.

   ```
   jar -xvf WAM-V24013-Rollup-MultiPlatform.jar
   ```

3. Initialize the Oracle Utilities Work and Asset Management environment where the Oracle Utilities Work and Asset Management patch rollup has to be installed.

   UNIX

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

   Windows

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

4. Install application patches.
   a. Navigate to the <temp location>/WAM-V2.4.0.1.3-Rollup/Application folder.
   b. Run the group installation script.

      UNIX/Linux

      ```
      chmod a+x installSFgroup.sh
      chmod a+x CCB*/*.sh
      ./installSFgroup.sh
      ```

      Windows

      ```
      installSFgroup.cmd
      ```

5. Start the environment.

Installing Oracle Utilities Digital Asset Management V2.0.0.1.3

This section describes how to install Oracle Utilities Digital Asset Management, including:

- Copying and Decompressing the Install Media
- Installing the Oracle Utilities Digital Asset Management Application Component

Copying and Decompressing the Install Media

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

Oracle Utilities Digital Asset Management is delivered as a separate installation package that can be downloaded along with Oracle Utilities Digital Asset Management V2.0.0.1.3.

Download the installation package and proceed as follows:

1. Login 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 Digital Asset Management application

environment. This can be the same <TEMPDIR> used during the installation of the Oracle Utilities Application Framework.

3. Copy the C2M.V2.9.0.1.3-MultiPlatform.jar file 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 C2M-V2.9.0.1.3-MultiPlatform.jar
```

For UNIX platform, a sub-directory named C2M.V2.9.0.1.3 is created. The contents of the installation directory are identical for both platforms. The directory contains the install software for the application.

Installing the Oracle Utilities Digital Asset Management Application Component

This section outlines the steps to install Oracle Utilities Digital Asset Management.

Preparing for the Installation

1. Login as an Oracle Utilities Digital Asset Management administrator (default cissys).
2. Initialize the Oracle Utilities Application Framework environment where the product should be installed.

   UNIX

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

   Windows

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

3. Stop the environment if running.

Installing the Application

1. Change to the <TEMPDIR>/C2M.V2.9.0.1.3 directory.
2. Run the following 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 Digital Asset Management application appears.
3. Choose option **P** to proceed with the installation (you need not modify anything).
4. Start up the environment.

   Follow the message on the screen and review the logs in the $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: while starting the first time, log into the WebLogic console and provide system access to the 'cisusers' role. The WebLogic console application can be accessed through the following URL: http://<hostname>:<portname>/console.

Installing Oracle Utilities Digital Asset Management V2.0.0.1.3 Post-release Patches

Note: This section is applicable only if there are any Oracle Utilities Digital Asset Management prerequisites patches to install.

Oracle Utilities Digital Asset Management patches must be installed after installing Oracle Utilities Digital Asset Management.

The patches are available as a convenience rollup inside the C2M-V2.9.0.1.3-Rollup-MultiPlatform.zip file, which is part of the downloaded media pack.

For a list of the patches included in this rollup, refer to Post-release Patches.

To install the application and database patches on top of Oracle Utilities Digital Asset Management 2.0.0.1.3:

1. Copy the C2M-V29013-Rollup-MultiPlatform.jar file in the delivered package to a <TEMPDIR>.
2. Unjar the file.

   ```
   jar -xvf C2M-V29013-Rollup-MultiPlatform.jar
   ```

3. Initialize the Oracle Utilities Digital Asset Management environment where the Oracle Utilities Digital Asset Management patch rollup has to be installed.

   UNIX

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

   Windows

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

4. Install application patches.
   a. Navigate to the <temp location>/C2M-V2.9.0.1.3-Rollup/Application folder.
   b. Run the group installation script.

      UNIX/Linux

      ```
      chmod a+x installSFgroup.sh
      chmod a+x C2M*/*.sh
      ./installSFgroup.sh
      ```

      Windows

      ```
      installSFgroup.cmd
      ```

5. Start the environment.

Chapter 8

Additional Tasks

This chapter describes tasks that should be completed after installing Oracle Utilities Digital Asset Management, including:

- Importing Self-Signed Certificates
- Customizing Configuration Files
- Integrating Existing Customer Modifications
- Building Javadocs Indexes
- Configuring the Environment for Batch Processing
- Customizing the Logo
- Implementing Cloud Database (ADB) Connection

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.

Make sure to perform these steps before deploying the IWS application.

To import the self-signed certificates into the OUAF truststore:

1. Start WebLogic.
2. Initialize a command shell and setup the environment.

   UNIX

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

   For example:

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

   Windows

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

   For example:

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

3. Generate all information.

   UNIX

   ```
   $SPLEBASE/bin/initialSetup.sh -i [<server>:<port>]
   ```

   Windows

   ```
   %SPLEBASE%\bin\initialSetup.cmd -i [<server>:<port>]
   ```

   If the [<server>:<port>] are not specified, they will be retrieved from ENVIRON.INI.

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

Customizing Configuration Files

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

Below is a sample procedure to customize Hibernate properties of the SPLWeb web application:

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

Unix:

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

Windows:

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

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

Centralized Properties Customization

This feature gives the ability to add, modify, and remove properties in one file. The properties are propagated to the specified property files. The template process, which is part of the initialSetup step, will look at the files etc/cm_properties.ini (this can be created as a Customer Customization), if the file exists the content will be processed for the relevant properties.

> **Note**: Product teams might use this file format: etc/<PROD>_properties.ini (where <PROD> could be one of the list of installed products included in etc/PRODUCT.txt). If it exits it will be processed as well.

cm_properties.ini examples

Type of entries that could be included into cm_properties.ini and relevant type of action:

<PROPERTIES_FILE>:<PROPERTY_NAME>=<VALUE>

- Override <PROPERTY_NAME> in <PROPERTIES_FILE> with <VALUE> if exists.
- Insert <PROPERTY_NAME> in <PROPERTIES_FILE> with <VALUE> it doesn't exists.

<PROPERTY_NAME>=<VALUE>

- Override <PROPERTY_NAME> in all property files with <VALUE>, if <PROPERTY_NAME> exists.

<PROPERTIES_FILE>:<PROPERTY_NAME>=[DELETE]

- Remove <PROPERTY_NAME> from <PROPERTIES_FILE> if exists.

<PROPERTY_NAME>=[DELETE]

- Remove <PROPERTY_NAME> from all property files, if <PROPERTY_NAME> exists.

Template example: hibernate.service.properties.template

```
hibernate.user = @DBUSER@
hibernate.pass = @DBPASS@
hibernate.ucp.validate_connection = true
```

ENVIRON.INI example

```
DBUSER=cisadm
```

cm_properties.ini example

```
hibernate.service.properties.template:hibernate.user=clouduser
hibernate.password=cloudpwd
hibernate.iws.properties.template:hibernate.user=clouduser
hibernate.service.properties.template:hibernate.ucp.validate_conne
ction=[DELETE]
hibernate.service.properties.template:new.property=test
```

hibernate.service.properties generated properties file result

```
### The following line was overridden because <PROD>_properties.ini
file setting:
hibernate.user=clouduser
### The following line was overridden because <PROD>_properties.ini
file setting:
hibernate.password=cloudpwd
### The following line was deleted because <PROD>_properties.ini
file setting:
# hibernate.ucp.validate_connection = true
### The following line was appended because <PROD>_properties.ini
file setting:
new.property = test
```

hibernate.iws.properties generated properties file result

```
### The following line was overridden because <PROD>_properties.ini
file setting:
hibernate.user=clouduser
### The following line was overridden because <PROD>_properties.ini
file setting:
hibernate.password=cloudpwd
```

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.

Building Javadocs Indexes

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

Refer to the *Server Administration Guide* for information about 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 $SPLEBASE/etc/conf/root/cm and create a new "External" Navigation Key called CM_logoImage.

To do that, run the Oracle Utilities application from the browser with the parameters: http://<hostname>:<port>/cis.jsp?utilities=true&tools=true. From the Admin menu, select Navigation Key. Add the above Navigation Key with its corresponding URL Override path. The syntax for the URL path is:

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.

Implementing Cloud Database (ADB) Connection

To implement the cloud database (ADB) connection in your application, make sure that the database is set up and ready. For instructions to set up the database, refere to the *Oracle Utilities Digital Asset Management Database Administrator's Guide* included in this release.

1. Set the "Database Override Connection String" in **Menu Option 4** as follows:
   a. Run configureEnv.sh/cmd and select **Menu 4**.
   b. Input the following value for "Database Override Connection String":
      jdbc:oracle:thin:@<TNSNAME>?TNS_ADMIN=<Wallet File location>
   c. Enter **<P>** to process.
2. Run initialSetup.sh/cmd.
3. Restart the application.

Chapter 9

Upgrading Oracle Utilities Digital Asset Management

This chapter provides the instructions to upgrade Oracle Utilities Digital Asset Management, including:

- Upgrade Paths
- Before You Upgrade
- Upgrade Procedure
- Post-Upgrade Verifications
- Installing Service Packs and Patches

For information about implementation scenarios, refer to the *Oracle Utilities Customer to Meter Solution Implementation Guidelines* document at https://www.oracle.com/partners/en/products/industries/utilities/customer-solution/secure/implementation-guidelines-4024252.pdf.

Upgrade Paths

The following upgrade paths are applicable to this release:

- From V2.0.0.1.0, V2.0.0.1.1, or V2.0.0.1.2 to V2.0.0.1.3

  Before you can upgrade you must have a prior version installed. If not, follow the procedures described in Installing the Application Server Component of Oracle Utilities Application Framework and Upgrading Oracle Utilities Digital Asset Management in this guide.

Before You Upgrade

Review the list of operating system, application server, and database server combinations supported for this version of Oracle Utilities Digital Asset Management in the Supported Platforms section in Supported Platforms and Hardware Requirements.

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

Copying and Decompressing Install Media for the Oracle Utilities Digital Asset Management Database and Application Components

Refer to the Copying and Decompressing Install Media section in Installing the Application Server Component of Oracle Utilities Application Framework for instructions on copying and decompressing install media.

Setting Permissions for the cistab file in UNIX for the Oracle Utilities Digital Asset Management Application Component

Refer to the Set Permissions for the cistab File in UNIX section in Installing the Application Server Component of Oracle Utilities Application Framework for instructions.

Upgrade Procedure

The upgrade installation procedure consists of:

- Upgrading the Database Component
- Upgrading the Application Component

Upgrading the Database Component

Upgrading the Oracle Utilities Digital Asset Management database component must be complete before you can upgrade the application component.

Refer to the **Upgrade Install** section in the *Oracle Utilities Digital Asset Management Database Administrator's Guide* included in this release for instructions to upgrade the database component.

Upgrading the Application Component

A successful upgrade consists of the following steps:

- Upgrading Oracle Utilities Customer Care and Billing to Oracle Utilities Digital Asset Management V2.0.0.1.3
- Upgrading Oracle Utilities Meter Data Management to Oracle Utilities Digital Asset Management V2.0.0.1.3
- Upgrading Oracle Utilities Operational Device Management to Oracle Utilities Digital Asset Management V2.0.0.1.3
- Upgrading Oracle Utilities Digital Asset Management to Oracle Utilities Digital Asset Management V2.0.0.1.3

Upgrading Oracle Utilities Customer Care and Billing to Oracle Utilities Digital Asset Management V2.0.0.1.3

This section assumes that only Oracle Utilities Customer Care and Billing exists on top of Oracle Utilities Application Framework. Make sure to perform the following for upgrade.

Upgrading Oracle Utilities Application Framework

For instructions, refer to Installing Oracle Utilities Application Framework.

To upgrade, use the following command:

Unix:

```
ksh ./install.sh -u
```

Windows:

```
install.cmd -u
```

Installing Oracle Utilities Application Framework V4.5.0.1.3 Prerequisite Single Fixes

For instructions, refer to Installing Oracle Utilities Application Framework V4.5.0.1.3 Prerequisite Single Fixes.

Upgrading Oracle Utilities Customer Care and Billing V2.9.0.1.3

For instructions, refer to Installing Oracle Utilities Customer Care and Billing V2.9.0.1.3.

Installing Oracle Utilities Customer Care and Billing V2.9.0.1.3 Post-release Patches

For instructions, refer to Installing Oracle Utilities Customer Care and Billing V2.9.0.1.3 Post-release Patches.

Installing Oracle Utilities Meter Data Management V2.5.0.1.3

For instructions, refer to Installing Oracle Utilities Meter Data Management V2.5.0.1.3.

Installing Oracle Utilities Meter Data Management V2.5.0.1.3 Post release Patches

For instructions, refer to Installing Oracle Utilities Meter Data Management V2.5.0.1.3 Post-release Patches.

Installing Oracle Utilities Operational Device Management V2.4.0.1.3

For instructions, refer to Installing Oracle Utilities Operational Device Management V2.4.0.1.3.

Installing Oracle Utilities Operational Device Management V2.4.0.1.3 Post-release Patches

For instructions, refer to Installing Oracle Utilities Work and Asset Management V2.4.0.1.3 Post-release Patches.

Installing Oracle Utilities Digital Asset Management V2.0.0.1.3

For instructions, refer to Installing Oracle Utilities Digital Asset Management V2.0.0.1.3.

Installing Oracle Utilities Digital Asset Management V2.0.0.1.3 Post-release Patches

For instructions, refer to Installing Oracle Utilities Digital Asset Management V2.0.0.1.3 Post-release Patches.

Upgrading Oracle Utilities Meter Data Management to Oracle Utilities Digital Asset Management V2.0.0.1.3

This section assumes that only Oracle Utilities Meter Data Management exists on top of Oracle Utilities Application Framework.

Perform the following to upgrade Oracle Utilities Meter Data Management to Oracle Utilities Digital Asset Management.

Upgrading Oracle Utilities Application Framework

For instructions, refer to Installing Oracle Utilities Application Framework.

To upgrade, follow the command:

Unix:

```
ksh ./install.sh -u
```

Windows:

```
install.cmd -u
```

> **Note**: The upgrade install does not clean files of libraries that were removed from the latest version.

Installing Oracle Utilities Application Framework V4.5.0.1.3 Prerequisite Single Fixes

For instructions, refer to Installing Oracle Utilities Application Framework V4.5.0.1.3 Prerequisite Single Fixes.

Installing Oracle Utilities Customer Care and Billing V2.9.0.1.3

For instructions, refer to Installing Oracle Utilities Customer Care and Billing V2.9.0.1.3.

Installing Oracle Utilities Customer Care and Billing V2.9.0.1.3 Post-release Patches

For instructions, refer to Installing Oracle Utilities Customer Care and Billing V2.9.0.1.3 Post-release Patches.

Upgrading Oracle Utilities Meter Data Management V2.5.0.1.3
For instructions, refer to Installing Oracle Utilities Meter Data Management V2.5.0.1.3.

Installing Oracle Utilities Meter Data Management V2.5.0.1.3 Post release Patches
For instructions, refer to Installing Oracle Utilities Meter Data Management V2.5.0.1.3 Post-release Patches.

Installing Oracle Utilities Operational Device Management V2.4.0.1.3
For instructions, refer to Installing Oracle Utilities Operational Device Management V2.4.0.1.3.

Installing Oracle Utilities Operational Device Management V2.4.0.1.3 Post-release Patches
For instructions, refer to Installing Oracle Utilities Work and Asset Management V2.4.0.1.3 Post-release Patches.

Installing Oracle Utilities Digital Asset Management V2.0.0.1.3
For instructions, refer to Installing Oracle Utilities Digital Asset Management V2.0.0.1.3.

Installing Oracle Utilities Digital Asset Management V2.0.0.1.3 Post-release Patches
For instructions, refer to Installing Oracle Utilities Digital Asset Management V2.0.0.1.3 Post-release Patches.

Upgrading Oracle Utilities Operational Device Management to Oracle Utilities Digital Asset Management V2.0.0.1.3
This section assumes that only Oracle Utilities Operational Device Management exists on top of Oracle Utilities Application Framework.

Perform the following to upgrade Oracle Utilities Operational Device Management to Oracle Utilities Digital Asset Management.

Upgrading Oracle Utilities Application Framework
For instructions, refer to Installing Oracle Utilities Application Framework.

To upgrade, use the following command:

Unix:

```
ksh ./install.sh -u
```

Windows:

```
install.cmd -u
```

> **Note**: The upgrade install does not clean files of libraries that were removed from the latest version.

Installing Oracle Utilities Application Framework V4.5.0.1.3 Prerequisite Single Fixes
For instructions, refer to Installing Oracle Utilities Application Framework V4.5.0.1.3 Prerequisite Single Fixes.

Installing Oracle Utilities Customer Care and Billing V2.9.0.1.3

For instructions, refer to Installing Oracle Utilities Customer Care and Billing V2.9.0.1.3.

Installing Oracle Utilities Customer Care and Billing V2.9.0.1.3 Post-release Patches

For instructions, refer to Installing Oracle Utilities Customer Care and Billing V2.9.0.1.3 Post-release Patches.

Installing Oracle Utilities Meter Data Management V2.5.0.1.3

For instructions, refer to Installing Oracle Utilities Meter Data Management V2.5.0.1.3.

Installing Oracle Utilities Meter Data Management V2.5.0.1.3 Post release Patches

For instructions, refer to Installing Oracle Utilities Meter Data Management V2.5.0.1.3 Post-release Patches.

Upgrading Oracle Utilities Operational Device Management V2.4.0.1.3

For instructions, refer to Installing Oracle Utilities Operational Device Management V2.4.0.1.3.

Installing Oracle Utilities Operational Device Management V2.4.0.1.3 Post-release Patches

For instructions, refer to Installing Oracle Utilities Work and Asset Management V2.4.0.1.3 Post-release Patches.

Installing Oracle Utilities Digital Asset Management V2.0.0.1.3

For instructions, refer to Installing Oracle Utilities Digital Asset Management V2.0.0.1.3.

Installing Oracle Utilities Digital Asset Management V2.0.0.1.3 Post-release Patches

For instructions, refer to Installing Oracle Utilities Digital Asset Management V2.0.0.1.3 Post-release Patches.

Upgrading Oracle Utilities Digital Asset Management to Oracle Utilities Digital Asset Management V2.0.0.1.3

This section assumes that only Oracle Utilities Digital Asset Management exists on top of Oracle Utilities Application Framework.

Perform the following to upgrade Oracle Utilities Digital Asset Management to Oracle Utilities Digital Asset Management V2.0.0.1.3.

Upgrading Oracle Utilities Application Framework

For instructions, refer to Installing Oracle Utilities Application Framework.

To upgrade, use the following command:

Unix:

```
ksh ./install.sh -u
```

Windows:

```
install.cmd -u
```

Note: The upgrade install does not clean files of libraries that were removed from the latest version.

Installing Oracle Utilities Application Framework V4.5.0.1.3 Prerequisite Single Fixes

For instructions, refer to Installing Oracle Utilities Application Framework V4.5.0.1.3 Prerequisite Single Fixes.

Upgrading Oracle Utilities Customer Care and Billing V2.9.0.1.3

For instructions, refer to Installing Oracle Utilities Customer Care and Billing V2.9.0.1.3.

Installing Oracle Utilities Customer Care and Billing V2.9.0.1.3 Post-release Patches

For instructions, refer to Installing Oracle Utilities Customer Care and Billing V2.9.0.1.3 Post-release Patches.

Upgrading Oracle Utilities Meter Data Management V2.5.0.1.3

For instructions, refer to Installing Oracle Utilities Meter Data Management V2.5.0.1.3.

Installing Oracle Utilities Meter Data Management V2.5.0.1.3 Post release Patches

For instructions, refer to Installing Oracle Utilities Meter Data Management V2.5.0.1.3 Post-release Patches.

Upgrading Oracle Utilities Operational Device Management V2.4.0.1.3

For instructions, refer to Installing Oracle Utilities Operational Device Management V2.4.0.1.3.

Installing Oracle Utilities Operational Device Management V2.4.0.1.3 Post-release Patches

For instructions, refer to Installing Oracle Utilities Work and Asset Management V2.4.0.1.3 Post-release Patches.

Upgrading Oracle Utilities Digital Asset Management V2.0.0.1.3

For instructions, refer to Installing Oracle Utilities Digital Asset Management V2.0.0.1.3.

Installing Oracle Utilities Digital Asset Management V2.0.0.1.3 Post-release Patches

For instructions, refer to Installing Oracle Utilities Digital Asset Management V2.0.0.1.3 Post-release Patches.

Creating WebLogic Domain

With Oracle Utilities Application Framework V4.5.0.1.3 a WebLogic native installation is required. Refer to the *Oracle WebLogic 12.2.1.x Configuration Guide for Oracle Utilities Application Framework (Doc ID 2413918.1)* document on My Oracle Support for more information.

Post-Upgrade Verifications

After you complete the upgrade, verify the following:

1. Verify installation logs created under decompressed installer location for any errors.
2. Confirm that the installation logs do not contain any errors.
3. Confirm that all the configurations are correct.

   Refer to the Installation and Configuration Worksheets section in Planning the Installation for more details.
4. Confirm that the database is ready.
5. Generate the Application Viewer.
6. Start the application server.

At this point, the installation is complete.

Refer to the *Server Administration Guide* for more information on further configuring and operating the system.

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 about installing patches, refer to **Document ID 974985.1** on My Oracle Support.

Service packs and patches can be downloaded from on My Oracle Support.

Appendix A

Application Framework Prerequisite Patches

The following table lists the Oracle Utilities Application Framework prerequisite patches to be installed in this Oracle Utilities Digital Asset Management release:

Bug Number	Description
35889785	COPY OF 35653414 - 5.1 UPGRADE: ISSUE IN CONSTRUCT CREATION SCREEN
35891993	COPY OF 35799546 - CANNOT ADD ALGORITHM IN BO STATUS
35892313	COPY OF BUG 35892308 - COPY OF BUG 35797177 - UNABLE TO PRINT FROM CUSTOMER 360 PORTAL
35892629	COPY OF 35826726 - EMBEDDED HELP DOES NOT DISPLAY CORRECTLY AND CANNOT BE VIEWED
35902276	COPY OF 35878578 - ERROR THROWN WHILE CALLING CUSTOM WEBSERVICE WHICH INTERNALLY USES CUSTOM BUSINESS SERVICE AND CUSTOM ZONE.
35909933	COPY OF BUG 35916092 - BO OPTIONS EDIT ERROR WHEN "GET OPERATION" OPTION EXISTS
35920747	COPY OF BUG 35866087 - MASQUERADE IN CCS THROWS EXCEPTION (4.5.0.1.3 - 23C)
35950634	COPY FROM BUG 35885166 - UPDATE INSTALLSF.PLX IN ORDER TO RECREATE AUTOMATICALLY THE PRODUCT/APACHE-ANT DURING PATCH INSTALL
35957251	COPY OF BUG 35785306 - ERROR IN ADDING LOG MESSAGE WITH PARAMETER(S) IF THERE IS AN AUDIT ALGORITHM IN CUST CONTACT MO (4.5.0.1.3 (23C))
36008746	UNABLE TO USE FILE ADAPTER : CAUSED BY: ORG.APACHE.HC.CORE5.HTTP.STREAMCLOSEDEXCEPTION: STREAM ALREADY CLOSED

Appendix B

Oracle Utilities Digital Asset Management Fixes

The following table lists the Oracle Utilities Customer Care and Billing, Oracle Utilities Meter Data Management, Oracle Utilities Work and Asset Management, and Oracle Utilities Customer to Meter product fixes included in this release:

Bug Number	Description
Oracle Utilities Customer Care and Billing	
33186346	COPY OF 33040811 - ADJUSTMENT FK REFERENCE IS NOT BEING NAVIGATED CORRECTLY FROM CSR SERVICE LOCATION LOG PORTAL
35046530	HELP DELETE DUMMY BASE CONFIGURATION
35294466	START SERVICE CUSTOMER SERVICE REQUEST TYPE REQUIRES A START SERVICE ELIGIBILITY SCRIPT
35400738	DATA FROM "BUSINESSPERSONQUERIES" AND "SEARCHPERSONACCOUNTS" NOT MATCHING
35516048	COPY OF 35310586 - SST: OTHER PERSON IDENTIFIER TYPE IS REQUIRED ON CSR TYPE EVEN IF PERSON ID USAGE IN INSTALLATION OPTIONS IS SET TO 'OPTIONAL'
35520356	COPY OF 35317489 - ISSUE IN BILL SEGMENT CALCULATION LINE CHARACTERISTIC CREATION
35535553	COPY OF 34987083 - CUSTOMER CONTACT CREATION PAGE TURNING BLANK
35549196	COPY OF BUG 35549181 - STOP SERVICE PROCESS FLOW LIMITATION WITH ACCOUNT CHARACTERISTICS
35549470	COPY OF 34921623 - ISSUE WITH A USER BEING ASSIGNED TO MULTIPLE CIS DIVISIONS
35563627	COPY OF 33836396 - PATCH 32833984 DOESN'T WORK WHEN TESTING IEAND IN EDGE IN IE MODE
35567516	COPY OF 35542700 - "SYSTEM ERROR. PLEASE SEE LOGS FOR MORE DETAILS.¿ ON BILL SEGMENT CREATION.

Bug Number	Description
35592086	COPY OF 35073122 - DURING START FLOW NEW ACCOUNT WILL DEFAULT TO USING PREMISE AS A MAILING ADDRESS
35597212	COPY OF 35477671 - SYSTEM ERROR IN DASHBOARD ALERTS
35597433	COPY OF 35447055 - BILLABLE SERVICES STATISTICS SNAPSHOT - GIVING SYNTAX ERROR
35608429	COPY OF 35504116 - WRITE OFF PROCESSING NOT HAPPENING FOR NON-BILL SA IN 2.8
35612876	COPY OF 34906221 - ADDING A NEW CHAR TYPE TO SP TYPE CANNOT PROCESS ### ROWS IN LIST SP_TYPE_CHARTYPE WITH MAX SIZE 100
35625119	COPY OF 35594446 - "PERSON ID IS MISSING" IS ENCOUNTERED ON STOP SERVICE REQUEST USING CXPROCESSSTARTSTOPREQUEST
35636543	COPY OF 35071059 - START SERVICE REQUEST PROCESS FLOW ERRORS OUT DUE TO AN EXISTING PENDING START
35638100	COPY OF 34974682 - HIGH RESPONSE TIME ON START / STOP SERVICE FLOW
35639075	COPY OF 35601003 - CUSTOM BATCH (CMCOMBIL) DELIVERED FOR SR 3-33193208391/35436758 NOT PRODUCTION READY AND ISSUE NOT RESOLVED
35646029	COPY OF 34987442 - CONTROL CENTRAL - COLUMNS NOT ALIGNED WITH HEADERS
35656397	COPY OF 35470220 - GDE: TENDER CONTROL BALANCING SOMETIMES NOT TRACKED BY F1-GEEXO
35657410	COPY OF 35357939 - ISSUE IN ONETIME ACH PAYMENT
35658890	COPY OF 35121410 - SUB BSEG ERROR DUE TO MISSING MASTER BSEG
35667046	COPY OF BUG 35619235 - SOME C1 IWS REST SERVICES ARE INACTIVE IN CUSTOMER ENVIRONMENT (23C)
35673070	COPY OF 35464793 - MAXIMUM ESTIMATED BILL SEGMENTS FUNCTIONALITY IS WORKING BUT THERE IS ONLY A GENERIC MESSAGE ON BILL SEGMENT; NO VISIBILITY TO THE CLIENT
35673415	COPY OF 35369154 - C1-BILLPRINTRECORD DATA AREA: CONSUMPSUB MAPFIELD=" CONSUM_SUB_FLG"

Bug Number	Description
35674316	COPY OF 35348302 - SERVER ENCOUNTERED EXCEPTION OCCURRING WHEN GIVING INVALID BILL ID FOR BILL ID ORASEARCH
35683439	COPY OF 34514555 - DASHBOARD NOT UPDATED AND CANNOT CLEAR WHEN LOADING A NEW CUSTOMER USING 360 SEARCH
35688930	COPY OF 35134708 - GAS TROUBLE SLOWNESS IN OCI CCB DB
35695551	COPY OF 35533600 - CUSTOMER CONTACT QUERY DOES NOT INCLUDE THE "COMMENT" FIELD IN THE SUMMARY STATUS
35696925	COPY OF 35401970 - EMAIL ADDRESS NOT BEING PULLED WITH D1-RETCUSINF SCRIPT
35699269	COPY OF 35650110 - CSR START: NEW ACCOUNT'S COLLECTION CLASS DEFAULTED INCORRECTLY
35699826	COPY OF 35524445 - LINK TO CUSTOMER CONTACT NOT WORKING FROM COLLECTION PROCESS, EVENTS TAB
35715664	COPY OF 35064651 - BILL ROUTING NOTIFICATION INSIGHT ISSUE
35717391	CCS API FOR FINANCIAL DETAILS TAKING HIGHER RESPONSE TIME
35724837	COPY OF 35643565 - FOREIGN KEY VALUE CHAR VALUE IS NOT DISPLAYED IN THE CUSTOMER CONTACT
35740831	COPY OF BUG 35603115 - DSS IS REDIRECTING TO OVERVIEW PAGE WHEN WE NAVIGATE TO MANAGE ACCOUNTS PAGE
35743951	COPY OF 35743703 - ISSUE ON CANCEL OF PROCESS FLOW AFTER APPLYING BUG 34974682
35746029	COPY OF 33504895 - C1-BLAPY DOES NOT LEVERAGE AUTO PAY ROUTE TYPE OVERRIDE CONTROLS FROM CIS DIVISION
35746489	COPY OF 35454496 - CUSTOMER CONTACT LETTER EXTRACT ERROR: MAILING ADDRESS RECORD NOT FOUND
35751482	COPY OF 34247711 - NEXT BUTTON ON ACTIVE ACCOUNT SUMMARY ZONE (CONTROL CENTRAL - CUSTOMER INFORMATION) DOES NOT WORK
35757476	CHARITY SELF-SERVICE TASK IS NOT REFERRED FROM CIS DIVISION CONFIGURATION
35758653	COPY OF 35414637 - PAYMENT NOT CREATED WHEN PAY EVENT ADDED

Bug Number	Description
35759934	COPY OF 32421384 - PROBLEM ADDING MORE THAN 10 SERVICE AGREEMENT CHARACTERISTICS AT ONCE
35760961	CCB MAIN(23C): MULTIPLE BSEG INSTANCE - REGEN BSEG FROM UT HAS ISSUE
35762021	COPY OF 35341810 - CASE PORTAL - THE TRANSITION TO THE CONTACT PERSON FROM THE CONTEXT MENU WORKS INCORRECTLY
35767994	COPY OF 35664393 - BCS ACCOUNT CHARACTERISTICS HAS MAX LIMIT OF 99
35772781	COPY OF 35689521 - UNABLE TO MIGRATE CI_PP TABLES
35772793	COPY OF 35381538 - ISSUE FOR UPDATING ACCOUNT, CANNOT PROCESS 11 ROWS IN LIST ACCT_APAY WITH MAX SIZE 10
35778475	COPY OF 35761595 - [PROD] CSR (CUSTOMER SERVICE REQUEST PERSON) ERRORS (TIME-OUT) OR SQL ERROR OR TIME-OUT
35793405	COPY OF 34938146 - COLLECTIONS- CHANGES NOT TRACKED BY GDE
35795302	COPY OF BUG 35790960 - NAME SEARCH IN CUSTOMER LIST IS NOT RETURNING EXPECTED RESULTS - POST 35377606
35805467	COPY OF 35783085 - REQUEST TO INCREASE CALCULATION PROCESSOR CALL COUNT UPPER LIMIT OF 100
35806345	COPY OF 35500305 - CANCELING PENDING START FROM START/STOP PAGE DOES NOT CANCEL PENDING STOP
35812012	COPY OF 33314601 - MULTI-QUERY ACCOUNT FINANCIAL HISTORY ZONE NOT DISPLAYING ARREARS DATE(S) CORRECTLY
35819283	COPY OF 35718455 - CMA - C1-CALCULATIONRULE MIGRATION PLAN NOT ABLE TO EXTRACT ALGORITHM.
35824512	COPY OF 35561954 - USE ORAOPENWINDOWWITHURL TO LAUNCH THE APPLICATION INSTEAD OF SUBMITTING A FORM
35830960	COPY OF BUG 34013701 - SELF-SERVICE TASK CONTEXT MENU "GO TO ACCOUNT" DOES NOT POPULATE ACCOUNT ON "ACCOUNT" PAGE
35833747	COPY OF 34289239 - AFTER FIX FOR BUG 30847523 - STILL PAYMENT EVENT QUICK ADD NO REDIRECTION TO PAYMENT EVENT

Bug Number	Description
35841948	COPY OF 35695153 - NOT ABLE ADD MORE THAN 50 CHARS ON SERVICE POINT
35849607	COPY OF BUG 35492447 - AUTOPAY ELIGIBILITY ISSUES
35853975	COPY OF 35553699 - BATCH PAYSPR NONZERORETURNCODEEXCEPTION
35855950	ILLEGAL ARGUMENT EXCEPTION ON HIBERNATE EVENT DEFAULT EVICT EVENT LISTENER ONEVICT
35858701	COPY OF 35798691 - ERROR ENCOUNTERED WHEN RUNNING TD-BSERR WHEN TO DO TYPE HAS CUSTOM TO DO TYPE - TO DO PRE-CREATION
35860639	COPY OF 35767350 - BCS BATCH CONTROL BCSBILL(REPLICATE OF BILLING) AND C1-BLACC RUNNING LONG
35869745	COPY OF 35696806 - DIFFERENCE IN INITIAL SQ CALCULATION IN RATE CHECK (CORRECT) COMPARED TO BILL SEGMENT (INCORRECT)
35870835	COPY OF 35779990 - NEW ISSUE WITH F1-MGOAB NOT ADDRESSED IN BUG 35489955 FOR THE C1-ACCOUNT MIGRATION PLAN
35877457	COPY OF 35851435 - BATCH ADM2 TAKES LONGER IN 22C COMPARED TO 22B
35878401	INCONSISTENT ORDERING IN THE BILL COMPARISON RESPONSE
35887471	COPY OF 34738893 - MULTI-CURRENCY MODE IN CCB 2.9
35902587	COPY OF 35849167 - UNABLE TO POPULATE CK_PP TABLE WITH PRODUCTION KEYS USING BATCH F1-CVASG
35904803	COPY OF 34039505 - ADDRESS FIELDS ON THE SST PROCESS FLOWS NOT GETTING DISPLAYED AS PER CONFIGURED LABEL
35911554	COPY OF 35685582 - BASE CCS PORTAL "C1_FA_PRTL" DOES NOT LOAD SERVICE ORDER MANAGEMENT INFORMATION SECTION.
35925040	ID NUMBER MISSING ERROR WHEN ID ADDED ON PANEL 4 IN PROCESS FLOW 35933694 COPY OF 35436054 - RATE CHECK IS ENCOUNTERING SYSTEM ERROR WHEN RATE SCHEDULE HAS CALCULATE FINAL READING VALUE RULE.

Bug Number	Description
35933709	COPY OF 35110877 - WEEKLY PROJECTED CHARGES AND HIGH BILL NOTIFICATION - ISSUE IN BASE C1-CALCPRCHG
35933899	COPY OF 35826487 - SYSTEM ERROR ENCOUNTERED NAVIGATING TO A SUB-SA (SA RELATIONSHIP/ADJUSTMENT)
Oracle Utilities Meter Data Management	
35131418	DST ISSUE WHEN DISTRIBUTING UFE IN SETTLEMENT TRANSACTION
35282884	COPY OF BUG 35282873 - COPY OF BUG 35282865 - COPY OF BUG 35282855 - COPY OF BUG 35224980 - INCORRECT START READ FOR SECOND PERIOD FOR A UT WITH A DATE BREAK
35430776	MTZ SUPPORT FOR SA/US SYNC (MDM)
35500634	COPY OF BUG 35500585 - COPY OF BUG 35393505 - SOM-MWM UOM HANDLING NOT ADEQUATE FOR CURRENT MWM AND SOM SCHEMAS
35507693	COPY OF 35507690 - PERIODIC ESTIMATION FAILS TO ESTIMATE A FINAL SCALAR READING
35523939	METER OPERATIONAL DASHBOARD: "UNDEFINED" LEGEND IN ALL TREND ZONES
35525501	COPY OF BUG 35525497 - COPY OF BUG 35524793 - COPY OF BUG 35450445 - CONTRACT OPTION EVENT STATUS IGNORED
35530579	COPY OF 35530574 - INTERVAL ESTIMATION IMD GENERATED BY CONSUMPTION SYNC ACTIVITY IS CREATED WITH ONE INTERVAL MISSING
35535946	COPY OF BUG 35535941 - COPY OF BUG 35535935 - COPY OF BUG 35535920 - SLOWNESS IN D2-UTCD JOB (BILLING JOB)
35548778	COPY OF BUG 35491754 - UPDATE SP COMPLETION EVENT VALIDATION PREVENTS DISCONNECTLOCATION UPDATE IF THAT'S ALL THAT CHANGED
35550581	COPY OF 35550577 - COPY OF 35548974 - COPY OF 35446215 - IMD FILTERING BY UOM IS NOT FILTERING -- TO DOS FOR UNKNOWN UOM ARE CREATED
35557011	COPY OF BUG 35309073 - FIELD ACTIVITY ENRICHMENT SERVICE FAILED WHEN RETRIEVING READING DETAILS
35563362	CONTRACT OPTION EVENT OVERRIDE MUST BE PRORATED ACCORDINGLY

Bug Number	Description
35567822	COPY OF BUG 35567820 - COPY OF BUG 35416942 - ESTIMATION FLAG NOT DISPLAYED IN MDM AND CCB
35571591	COPY OF 35571588 - COPY OF 35571581 - COPY OF 35571573 - COPY OF 35421425 - F1-ILMNC (ILM AUTOMATION-NONMEASUREMENTCOMPRESSION) BATCH GIVING ERROR CODE 959
35571655	COPY OF 35459146 - COPY OF 35459141 - COPY OF 35459124 - COPY OF 35454536 - D2-TRNUS ASSUMES THAT D1 SP MO ENTRY ALWAYS EXIST IN THE MASTER DATA AND SEEDER SYNC CONFIGURATION (INTERNAL)
35571882	THE EXTENDABLE LOOKUP - BUSINESS OBJECT MIGRATION IMPORT PROCESSING ORDER (F1-MIGRIMPORTPROCESSINGORDER) SHOULD BE UPDATED WITH THREE NEW VALUES.
35572166	COPY OF BUG 35549528 - COPY OF BUG 35549525 - COPY OF BUG 35549518 - COPY OF BUG 35219611 - MULTI-ITEM MAINTENANCE IS BROKEN WHEN MORE THAN MULTI ITEMS ARE STORED IN SP BO DATA AREA
35572923	COPY OF BUG 35231161 - COPY OF BUG 35154189 - COPY OF BUG 34709861 - COPY OF 34579506 - ONGOING IE/SP SYNC GOING TO UPDATE OR PRE-ADD ERROR CREATING PARTIAL IE/SP RECORDS IN THE UI
35575492	COPY OF BUG 35575489 - COPY OF BUG 35575480 - COPY OF BUG 35514857 - A NEW BEHAVIOR WITH IMD GENERATED ON REPROCESSING ACTIVITY GENERATED ON INSTALL DATE CHANGE.
35579460	COPY OF 35554513 - MDM - DATA CONNECT BATCH JOB PERFORMANCE VERY SLOW
35592022	COPY OF BUG 35592019 - COPY OF BUG 35592015 - COPY OF BUG 35592010 - COPY OF BUG 35548598 - D1-IMDV2 INCORRECT MC ORDERING
35596508	COPY OF 35592214 - FORTIFY SECURITY: PORTABILITY FLAW: LOCALE DEPENDENT COMPARISON: SPECIALIZEDAGGMEASUREMENTDATAEXTRACTHISTORICALBATCHPROCESS.JAVA:261 - TOUPPERCASE() : CASE CHANGED USING
35604650	COPY OF BUG 35398170 - FIELD ACTIVITY ENRICHMENT SERVICE FAILED WHEN RETRIEVING READING DETAILS

Bug Number	Description
35605551	COPY OF BUG 35590710 - COPY OF BUG 35585603 - COPY OF BUG 35506255 - TIMELINE ZONE ALGORITHM D2-DVCEVT FOR DEVICE EVENTS STILL EXPECTING DEVICE EVENT RELATED OBJECT
35616336	COPY OF 35616299 - COPY OF 35616276 - COPY OF 35601521 - DASHBOARD CURRENT CONTEXT MENU DEFAULTS TO KVARH RECEIVED- DOES NOT UPDATE WITH MC CHANGE
35616510	COPY OF 35616493 - COPY OF 35616485 - COPY OF 35616466 - COPY OF 35505840 - F1-ILMMC BATCH FAILURE IN TEST V22B
35621681	THE DESCRIPTION OF THE D1-PLPRM PATH-RELATED PARAMETERS NEEDS TO BE CHANGED TO IN SYNCH WITH F1 BASED BATCHES DESCRIPTION.
35624596	COPY OF 35624591 - MDM: SETTLEMENT MARKET ADMIN MENU MUST BE RENAMED
35632117	COPY OF 35632116 - COPY OF 35632114 - COPY OF 35467861 - DATACONNECT PREMISE EXTRACT NOT CREATING COLUMN HEADINGS
35637852	COPY OF BUG 35637732 - DEMAND VALUES MISMATCH WHILE CALCULATING INDIVIDUAL DEMANDS
35640864	COPY OF BUG 35640857 - COPY OF BUG 35585605 - UNABLE TO CREATE INTERVAL MEASUREMENT - THE DATE TIME 2023-03-12-02:00:00 IS NOT A VALID LEGAL/WALL TIME FOR TIME ZONE US/PACIFIC-IT IS WITHIN
35641558	COPY OF 35641549 - COPY OF 35641546 - COPY OF 35636258 - UGBUPD-14556 ILM - IMPROVE BATCH LOGGING FOR COMPRESSION JOBS
35650123	COPY OF 35650101 - COPY OF 35650065 - COPY OF 35595356 - TRANSACTION TIMED OUT - WHILE UPDATING SA/SP
35653929	COPY OF 35653924 - SCRIPT D2_ARRAYMATH DOES NOT FIND MARKET CONTRACTS
35659476	COPY OF 35659471 - D1_GTT7 AND D1_GTT8 PKS MAKE THEM UNUSABLE AND ADD SECONDARY INDEX
35660491	COPY OF BUG 35660489 - COPY OF BUG 35660488 - COPY OF BUG 35464720 - MDM SPECIALIZED DATA EXTRACTS DO NOT SUPPORT ENCRYPTION

Bug Number	Description
35663096	COPY OF BUG 35663082 - BILLING CUSTOMER WITH READS FROM ONE DAY AFER BILL DATE/ SA STOP DATE
35663639	COPY OF BUG 35549608 - COPY OF BUG 35549602 - COPY OF BUG 35549599 - COPY OF ENH 35348840 - CHANGE REQUIRED FOR THE OBSERVATION RAISED UNDER PATCH 35102984(SR 3-32002211601)
35664258	C2M - SA TO US DYNAMIC OPTION DTTMS DON'T REFLECT US/SP/DVC TZ
35665611	COPY OF BUG 35665596 - D1-FAREQUESTASYNCHRONOUS ERROR WHEN REQUESTERTRANSACTIONID FIELD IS MISSING
35666066	COPY OF BUG 35666058 - COPY OF BUG 35666054 - COPY OF BUG 35470233 - MDM SHOULD NOT OVERRIDE SCALAR FROM INTERVALS IF CONDITION CODE IS LESS THAN SYSTEM ESTIMATE
35666400	COPY OF BUG 35666397 - COPY OF BUG 35666392 - COPY OF BUG 34738159 - D1-IMDBE TO DO TYPE CONFIGURATED WITH D1-IMD AS CREATION METHOD THROWING EXCEPTION FOR FINALIZED IMD
35674040	COPY OF BUG 35674032 - COPY OF BUG 35669036 - CMA ERROR INSERTING MEASUREMENT THE DATE TIME 2023-03-12-02:00:00 IS NOT A VALID LEGAL/WALL TIME FOR TIME ZONE US/PACIFIC-IT IS WITHIN A "GAP"
35677857	COPY OF BUG 35668367 - PASS PARENT ACTIVITY ALGORITHM IS INCORRECTLY INACTIVATED IN D1-FIELDACTIVITY BO IN COMPLETED STATE
35683745	COPY OF 35664827 - MV90 PULSE MULTIPLIER FOR OSB ADAPTER
35685129	COPY OF BUG 35685123 - COPY OF BUG 35685118 - COPY OF BUG 35444279 - D1-IMD - NEW SQL "1PVW93FD6FGHF" HIGH GETS PER EXECUTION IS IMPACTING SPECINT AND PERFORMANCE OF BATCH
35702762	COPY OF 35702748 - D1-ACTVY BATCH CONTROL IS TRIGGERING NUMEROUS OB COMMUNICATIONS TO SSN/AMM HES
35714424	COPY OF 35714412 - SETTLEMENT TRANSACTION UI FAILS WHEN BATCH RUN IS ASSOCIATED TO CALCULATIONG GROUP DETAILS
35719979	PROVIDE CONFIGURATION SWITCH FOR SSN JMS RESPONSE

Bug Number	Description
35721429	COPY OF BUG 35707857 - MDM DEVICE 360 SCALAR READINGS ZONE INCORRECT PRECISION
35722303	COPY OF BUG 35722293 - COPY OF BUG 35722287 - COPY OF BUG 35710922 - 22C SYNC - DEVICE SYNC FROM MSCS TO CCB NOT SENDING POSITIVE ACK DUE TO BASE INACTIVE ALGORITHM D1-CRPOSACKM IN 22C
35723455	COPY OF 35723451 - COPY OF 35723446 - COPY OF 35261921 - NO HEADER IS BEING CREATED EVEN AFTER APPLYING PATCHES 35028265, 35131451 AND 35202499
35734527	COPY OF BUG 35244229 - SYSTEM ERROR IN OUTBOUND COMMUNICATION OF BACK TO BACK SERVICE ACTIVITY
35739114	COPY OF 35739110 - JAVA ERROR WHEN RUNNING BATCH PROCESS
35741088	COPY OF BUG 35617101 - CUSTOMER USES THROTTLE OPEN = ALLOWED ON THE REMOTEDISCONNECT ACTIVITY TYPE. D1-CRWTO NOT WORKING
35746897	COPY OF 35746888 - COPY OF 35553315 - CONSUMPTION EXTRACT - UNABLE TO EXTRACT MULTIPLE GEN PROC RECORD
35747304	ADD SUPPORT FOR L+G CC 8.4 TO SGG NATIVE COMPONENTS
35754129	COPY OF BUG 35754122 - INFO BUG - DUPLICATE BUTTON ON A VEE RULE ISN'T FUNCTIONING CORRECTLY
35757330	COPY OF BUG 35750232 - MDM ACTIVITY NOT CANCELLED WHEN SEVERANCE PROCESS IS CANCELLED
35757331	ADD SUPPORT FOR L+G CC 8.4 TO SGG SOA COMPONENTS
35758614	COPY OF 35758610 - COPY OF 35758604 - COPY OF 35756014 - DURING DST, EVERY NEW IMD ADJACENT TO THE PREVIOUS ONE GENERATES A HISTORICAL CORRECTION WHEN IT SHOULDN'T
35766210	COPY OF BUG 35752276 - FUTURE DATED DISABLE SERVICE CREATES REMOTE DISCONNECT WITH EFFECTIVE DATE AT END OF BUSINESS DAY INSTEAD OF START OF BUSINESS DAY
35797008	COPY OF 35796998 - COPY OF 35795723 - COPY OF 35795704 - COPY OF 35791805 - BATCH F1-ILMMC SHOULD DROP CTAS TABLES INSTEAD OF RENAMING THEM WITH _DROP

Bug Number	Description
35802042	COPY OF BUG 35787110 - SEVERANCE WARNINGS CREATED WITHOUT SEVERANCE PROCESS ACTIVE
35818675	UGBUPD-14068 - ILM - CLEAR IMD AND USAGE TRANSACTION CONTROL
35822711	COPY OF 35822695 - COPY OF 35822070 - DEVICE TYPES OF ITEM WITH A SUB-CLASS ARE NOT DISPLAYED IN THE DEVICE LIST
35825215	COPY OF BUG 35825211 - COPY OF BUG 35825205 - COPY OF BUG 35429829 - SYSTEM ERROR FOR REQUEST TO LOAD SP CONSUMPTION HISTORY IN PROD ENV
35831373	COPY OF 35698257 - STORM MODE AGGREGATION DIFFERENTIATES ZIP AND ZIP+4
35833020	COPY OF 35833010 - COPY OF 35778279 - COPY OF 35832811 - ADD MISSING CLEAN-UP CODE IN JAVA TO THE COMPRESSION BATCH JOB SUCH AS MEASUREMENT TRIGGER
35852773	COPY OF BUG 35852771 - COPY OF BUG 35837296 - ORA-01882: TIMEZONE REGION NOT FOUND EVEN AFTER PATCH 35742372
35859661	COPY OF 35859634 -- ISSUE DETECTED USING USAGE RULE TO CALCULATE WITH VECTOR CONDITION
35867812	COPY OF BUG 35867802 - COPY OF BUG 35729214 - AGGREGATION TESTING
35871530	COPY OF BUG 35871527 - COPY OF BUG 35803310 - READ ONLY ACCESS USER IS ABLE TO DO TRANSACTIONS
35872483	USAGE TRANSACTION QUERY SPINS AND DOES NOT RETURN ANY RESULTS
35875313	COPY OF 35875288 - COPY OF 35768510 - MSCS DATA CONNECT- CONSUMPTION EXTRACT REQUEST RANDOMLY ERRORS OUT
35877986	COPY OF 35877978 - DIVISION UNDER USER MISCELLANEOUS INFORMATION IS NOT SHOWING CORRECTLY IN USER PORTAL
35880827	COPYOF BUG 35677867 - AFTER PATCH 35491754 D1-UPDATESP NOT UPDATING SP WITH DISCONNECT LOCATION
35896078	COPY OF BUG 35870761 - SPECIALIZED DATA EXTRACT ENCRYPTION PRIVATE KEY RING OPTIONAL

Bug Number	Description
35898143	COPY OF BUG 35898136 - COPY OF BUG 35738154 - USAGE PERIOD CREATED WITH SAME START AND END DATE/TIME CREATED CAUSING UT ERROR
35905820	COPY OF 35905814 - COPY OF 35901273 - TAKES 35 SECONDS TO BILL ACCOUNT WHEN INVOKING THE BO D2-USGTRANSEEDER
35912077	COPY OF BUG 35908831 - CANNOT SELECT DEVICE STATUS ON/OFF IN FIELD ACTIVITY MANUAL COMPLETION
35914690	COMPLETE THE ENTITY LIFECYCLE FOR THE DELETED/ARCHIVED TODO'S FOR UT/IMD/ DEVICE EVENT
35914722	COPY OF 35914716 - COPY OF 35914710 - COPY OF 35864653 - COMPLETE THE ACTIVITY FOR THE ARCHIVED TODOS TO CLEAN OUT ORPHAN TODO RECORDS
35925263	COPY OF BUG 35889193 - LENS MISSING IN MDM 2.5 SP1 INTERVAL - AUDIT VIEW ZONE
35944507	COPY OF 35944480 - COPY OF 35689986 - NON PROD (TEST) ERROR DURING THE COMPRESSION OF MEASUREMENTS (F1-ILMMC)
Oracle Utilities Work and Asset Management	
28919817	FIELDS DO NOT GET CLEARED VIA SYNCS FROM ODM TO MDM
29797609	INBOUND COMMUNICATION SHOULD'VE SKIPPED COMPLETION EVENT 'CREATE ANY SERVICE HISTORY - ONLINE ONLY'
32051169	DELETE BUTTON IS AVAILABLE IN REORDER REVIEW 'CREATED' STATUS BUT DELETE IS NOT ALLOWED.
32894290	MESSAGE DISPLAYED IS NOT CORRECT IN CONTEXT
34933764	AVERAGE UNIT OF PRICE NOT CALCULATING CORRECTLY ON INV DETAILS SIDEBAR IN THE STOCK ITEM DETAILS
35031780	PHYSICAL INVENTORY ASKS FOR ADJUSTMENT BEFORE RECOUNT
35118371	BATCH JOB W1-BSRR IS NOT PROCESSING ALL THE RECORDS AS EXPECTED, NEED BETTER ERROR HANDLING
35361846	UNABLE TO CLOSE CWA WHEN RECONCILIATION STOCK ITEM ON CU IS PRESENT MORE THAN ONCE UNDER CU RESOURCES

Bug Number	Description
35445443	ASSET CHANGE REQUEST: ERROR THAT BADGE AND SERIAL NUMBERS ARE REQUIRED FOR ASSET WHERE THOSE ARE NOT NORMALLY REQUIRED
35479846	OLDEST ASSET RETRIEVED FROM ASSET LOCATION IN GLOBAL CONTEXT INSTEAD OF CURRENT
35480252	THERE SHOULD BE NO ASSET IN GLOBAL CONTEXT FOR CONSTRUCTION WORK ACTIVITY
35491237	CANNOT SENT OUTBOUND MESSAGE FOR CWA WITH "REMOVE" CU FUNCTION
35509714	WACS-OFS INTEGRATION DOES NOT WORK FOR ACTIVITIES WITH DEPENDENCIES
35527682	QUICK VIEW BUTTON POPUP DISPLAYS THE WRONG ASSET INFORMATION IN THE POPUP WINDOW
35532103	CONTINUATION OF BUG 35077693 -WORK ACTIVITY : USER UNABLE TO CANCEL WORK ACTIVITY WHEN THERE IS CHANGE IN ASSET / ASSET LIST COMBINATION
35533795	OBSERVED PERFORMANCE ISSUE WHILE SYNCING 60000+ RECORDS FROM GIS TO WAM
35538465	COPY OF 35429431- UNABLE ADD ACTIVITY RESOURSE REQUIREMENT TO CREATE PURCH REQ FROM BLANKET CONTRACT, NO LINES, CATEGORY - CONTRACT PURCHASE AGREEMENT
35564510	COPY OF 35447022 - ERROR IN CONNECTED TO ZONE ON GENERAL COMPONENTS
35570043	REQUIRED BY DATE IS NOT SENT TO ERP IN ERP TASK OUTBOUND MESSAGE REQUEST
35575602	BATCH BSRR NOT GROUPING BLANKET CONTRACT ITEMS ON ONE PO
35585311	WORK ACTIVITY CANNED REPORT IS DISPLAYING WRONG DATA IN FIELD LABELED "ASSET"
35587567	USER IS NOT ABLE TO UPDATE PROJECT STATE FROM STARTED TO CLOSED FROM IWS
35617725	COPY OF 35613157 - REMOVE MIGRATION REQUESTS PREFIXED WITH EC
35628403	ASSET NUMBER NOT CLEARED WHEN DUPLICATING ASSET FROM CWA CONSTRUCTION LOCATION TAB
35646594	NEW RECORD CAN'T BE CREATED IN ASSET REPLICATION

Bug Number	Description
35649212	BLANKET CONTRACT MODULE ALLOWING MORE FUNDS TO BE ISSUED THAN BC LIMIT AMOUNT
35673529	POLINES IN POLINE ZONE NOT GETTING DISPLAYED WHEN A PO IS CREATED BY W1-BSRR
35681202	USER GETTING ERROR WHEN TRYING TO CLOSE CONSTRUCTION WORK ACTIVITY WITH CAPITAL AND NON CAPITAL COST CENTERS ARE ASSOCIATED WITH IT
35681931	COPY OF 35624465 - SUPPRESSION NOT FUNCTIONING IN PREVENTATIVE MAINTENANCE
35696851	USER IS GETTING ERROR WHEN TRYING TO START PROJECT WITH FUTURE DATE AS ACTUAL START DATE THROUGH IWS
35708354	COPY OF 35577010 - NOT ALLOW THE CREATION OF ACTIVITY RESOURCE REQUIREMENT WHEN THE VENDOR LOCATION IS NOT THE SAME ON THE BLANKET CONTRACT
35718904	ISSUE IN CLOSING CWA IF EMBEDDED COMPATIBLE UNIT IS ADDED IN MULTIPLE QUANTITIES.
35719962	PROJECT¿S SEARCH BY PROJECT NUMBER FAILS WHEN PROJECT NUMBER HAS A LETTER IN LOWERCASE
35719991	DEPRECATE UNUSED FIELD UPDATE_ACTUAL_LBL
35738917	WPTG_TSN:TUGBU:522299: STRING TEXT NEEDS TO BE IMPROVED
35755339	COPY OF 35629658 - CCS REJECTING OFSC COMPLETION
35764835	DACS_OFSC INTEGRATION - A GENERIC ERROR IS SHOWN IN THE UI_ BUT IN THE LOGS THE ERROR IS SPECIFIC
35777114	W1-BSRR BATCH GENERATES CONFUSING ERROR MESSAGES TO USERS WHEN REORDER REVIEW HAS 'REORDER SOURCE' VALUE DIFFERENT TO 'PURCHASE REQUESTION BO' IN ALGORITHM -W1-RRCMPL
35843636	FORTIFY NULL DEREFERENCE ISSUE (HIGH)
35885300	REMOVE DB TRIGGERS ON W1_NODE THAT POPULATE W1_GEOM
35886446	COPY OF 35506287 - ERROR WHILE SENDING ACTIVITY OUTBOUND MESSAGE OF DACS WORKACTIVITY TO OFS

Bug Number	Description
35890376	COPY OF 35888072 - VALIDATION CHECK TO VERIFY ASSET IS ISSUED TO ACTIVITY IS SKIPPED IN W1GASTDTLBNO IWS
35894693	COPY OF 35855568 - MISSING INSERT BATCH FOR W1_CU_USAGE
35896042	BC SEARCH RETURNS VENDOR LOCATION ID INSTEAD THE BC HEADER ID
35896329	UNABLE TO ACTIVATE A WORK ACTIVITY WITH A "PURCHASED" RESOURCE
35900884	DISABLE "SAVE" BUTTON IN PHYSICAL INVENTORY RECOUNT ZONE AFTER THE FIRST CLICK
35903566	SERIAL NUMBER IS NOT COMING IN RESPONSE FOR W1-MOBILESTOREROOMINVENTORY SERVICE
35909608	RECEIPT HEADER IS NOT MOVING TO "COMPLETED" STATUS WHEN ALL THE ITEMS ARE ACCEPTED(UGBUPD-11980)
Oracle Utilities Customer to Meter	
34543066	INSERTION OF NEW CHAR ROW EVEN WHEN THERE IS NO CHANGE TO THE CHAR ITSELF USING X1D-SERVICEPOINT BO
34767800	TO DOS ARE NOT GETTING CREATING WHEN ENROLL/UNENROLL SERVICE TASK MOVES TO VALIDATION/ELIGIBILITY ERROR
35231121	COPY OF BUG 34341665 - COPY OF BUG 34341649 - SERVICE POINT CHARACTERISTICS RECORD IS CREATED EVEN THOUGH THE VALUE WAS NOT UPDATED
35525478	DACS - SEARCH DOESN'T RETURN EST FOR PROGRAM SUBSCRIPTION OR METERED SP
35553576	DESIGN CHANGE - DIGITAL ASSET SERVICE TASK QUERY FILTER VALIDATION
35560330	DESIGN CHANGE - ENROLLMENT SERVICE TASK VALIDATION
35562291	CUSTOMER SETTLEMENT BO CHANGES
35571008	COPY OF BUG 35538854 - USAGETYPED2LOOKUP CLASS NOT FOUND ERROR IS FROM CUSTOMER SETTLEMENT CALCULATION
35586767	COPY OF 35543984 - CANCEL REASON SHOULD BE FREE FORM(TEXT): UGBUPD-13606- DACS-NMS EVENT STATUS CHANGE

Bug Number	Description
35593593	COPY OF BUG 35593585 - ISSUE -WHILE CONFIGURING ACTIVITY DATA AND ADDING 'ASSET SYSTEM DATA RETRIEVER'
35606734	CUSTOMER SETTLEMENT: INCORRECT NUMBER OF EVENT SETTLEMENT BASED ON DATE
35606746	CUSTOMER SETTLEMENT: REBILL WITH NO EVENT SETTLEMENT ERROR
35643218	COPY OF 35643215 - C2M: MARKET ADMIN MENU IS HIDDEN EVEN WHEN SETTLEMENT IS ACTIVE
35660814	DACS CUSTOMER SETTLEMENTS FR ITEMS FOR 23C - PART 1
35664094	COPY OF BUG 35664089 - COPY OF BUG 35341527 - THE BATCH JOB X1-MIGMR RUN COMPLETES BUT WILL NOT PROCESS ALL THE RECORDS DUE TO A JAVA ERROR
35670554	COPY OF 35480939 - CHANGE MO AUDIT SYNC ALGORITHMS TO EXIT AND NOT SYNC WHEN TRIGGERED BY CMA
35677681	COPY OF 35673184 - C2M - C1-BILLPRINTRECORD DATA AREA: CONSUMPSUB MAPFIELD=" CONSUM_SUB_FLG"
35697323	EVENT PARTICIPATION TABLE METADATA SHOULD HAVE DATE TIME FORMAT AS PHYSICAL STANDARD
35707866	EVENT SETTLEMENT CREATION GENERATES ERROR WHEN DATA CONTAINING DATES FROM STANDARD (PST) TIME TO LEGAL (DST) TIME
35720194	PT RE-CALCULATION GENERATES DIFFERENT RESULTS FROM THE FIRST TIME PT CALCULATION.
35721418	COPY OF BUG 35721411 - COPY OF BUG 35721408 - COPY OF BUG 35618528 - UNABLE TO CANCEL WEBSERVICE D1-FAREQUESTASYNCHRONOUS FIELD ACTIVITY IN APPLICATION
35751587	CST MISSING LINKS TO CHILD ESTS AND THE USER CANNOT NAVIGATE DIRECTLY TO ESTS.IF THE EST CALCULATION RULE IS NOT CONFIGURED WITH THE DESCRIPTION LINE
35760408	ERROR IS NOT THROWN FOR WRONG PAYLOAD IN EVENT OUTCOME FLOW
35761015	C2M MAIN(23C): MULTIPLE BSEG INSTANCE - REGEN BSEG FROM UT HAS ISSUE
35775377	COPY OF 35775375 - COPY OF 35755350 - X1CPSTSP JOB IS FAILING IN PROD

Bug Number	Description
35796896	UGBUPD-14503 - SETTLEMENTS DOWNLOAD
35797018	DACS EVENT PARTICIPATION ISSUE: AFTER POSTING OUTCOME (SUCCESS) THE STATUS REMAINS IN PRE-EVENT
35813177	COPY OF BUG 35813166 - COPY OF BUG 35813161 - COPY OF BUG 35806508 - ONE HOUR IS ADDED TO THE SP EQUIPMENT ATTACHMENT OR DETATCH DATE/TIME
35834122	FUTURE DATE FOR CUSTOMER OWNED CONTROLLABLE DEVICE
35835671	COPY OF 35756490 - DACS_OFSC INTEGRATION_ ASSET NOT FOUND ERROR WHEN COMPLETING AN ACTIVITY WITH SERVICE HISTORY IN DACS
35842492	COPY OF 35823406 - ADDING A NEW DISCONNECT LOCATION GIVES ERROR
35862172	COPY OF BUG 35842626 - MS UPLOAD JOB FAIL WHEN RATESCHEDULES FIELD IS EMPTY IN RECORD
35862177	COPY OF BUG 35843101 - CONTACT AND MSP UPLOAD INCORRECTLY CHECKING EXISTENCE OF LS/SL VALUES
35891674	UGBUPD-14131 -TROUBLE REPORT SERVICE TASK TYPE
35891896	UGBUPD-14131 -TROUBLE REPORT SERVICE TASK
35915906	COPY OF 35893215 - ATF1 BUNDLE IMPORT IWS CREATED WITH X1 OWNER
35916933	COPY OF 35893951 - ATW1 WEBSERVICES WERE ADDED WITH CM USER WHICH ARE NOT NEEDED

Appendix C

Post-release Patches

The following post-release patches are included in this Oracle Utilities Digital Asset Management release:

Bug Number	Description
Oracle Utilities Customer Care and Billing	
35949603	FIX EXT_SA_ID - NON-WORK FIELD
35988098	BACKPORT CCB-56160 - MTZ SUPPORT FOR SA ISSUES
Oracle Utilities Meter Data Management	
None	
Oracle Utilities Work and Asset Management	
35955215	COPY OF BUG 35921856 - (CONTINUED FROM BUG 35031780) PHYSICAL INVENTORY ADJUSTMENT BEFORE RECOUNT
35975114	COPY OF 35891759 - UNABLE TO STORE EXTERNAL SYSTEM IN ERP INTEGRATION MASTER CONFIGURATION
Oracle Utilities Customer to Meter	
35989635	BACKPORT OF 35989031 - UGBUPD-13444 - FINAL VECTOR DOES NOT EXIST ERROR ENCOUNTERED IN CALCULATE CHARGES IWS OPERATION
35989648	BACKPORT OF 35989061 - UGBUPD-13444 - ERROR ENCOUNTERED ADDING INTERVAL DATA TO A USAGE PERIOD SQ