Oracle® Utilities Service Order Management Integration to Oracle Utilities Mobile Workforce Management

Installation Guide

Release v2.1.0 Service Pack 3

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Oracle Utilities Service Order Management Integration to Oracle Utilities Mobile Workforce Management Installation Guide

Chapter 1

Overview

This guide describes the installation steps that must be completed before Oracle Utilities Service Order Management (SOM) can be integrated with Oracle Utilities Mobile Workforce Management (MWM).

1.1 Additional Resources

For more information refer to the following documents:

Task	Description
Oracle Utilities Service Order Management Integration to Oracle Utilities Mobile Workforce Management Release 2.1.0 Service Pack 3 Implementation Guide	Same folder as this document, with the distribution for this product.
Oracle Utilities Smart Grid Gateway Release 2.1.0 Service Pack 3 Release Notes	Refer to Oracle Utilities Service Order Management documentation located on the Oracle Software Delivery Cloud (https://edelivery.oracle.com/) or on the Oracle Technology Network (http://www.oracle.com/technetwork/documentation).
Oracle Utilities Service Order Management v2.1.0.3 Documentation	Refer to Oracle Utilities Service Order Management Installation documentation located on the Oracle Software Delivery Cloud at: https://edelivery.oracle.com/
Oracle Utilities Mobile Workforce Management v2.2.0.2 Documentation	Refer to Oracle Utilities Mobile Workforce Installation documentation located on the Oracle Software Delivery Cloud at: https://edelivery.oracle.com/
Installing SOA Suite 11g with Enterprise Manager 11.1.1.6 on Weblogic Server 11g (10.3.6)	http://www.oracle.com/technetwork/middleware/soasuite/documentation/soa11gdoc-2212842.html#111160
Instructions on installing this integration on non-Windows/ Linux platforms	See Oracle Support Knowledge Article ID 1349320.1.

1.2 Abbreviations

Abbreviations used in this guide are listed below:

- AIA- Application Integration Architecture

- DVM- Domain Value Map

- EBF - Enterprise Business Flow

- MDS - Metadata Store

- MWM - Oracle Utilities Mobile Workforce Management

- OHS - Oracle HTTP Server

- SOA- Service-Oriented Architecture

- SOM - Oracle Utilities Service Order Management

Chapter 2

Installation

This chapter describes the settings and requirements for a successful installation of Oracle Utilities Service Order Management Integration to Oracle Utilities Mobile Workforce Management v2.1.0 Service Pack 3.

Complete these installation steps before configuring the applications for integrated functionality:

- Integration Pack Software Requirements

- Pre-Installation Tasks

- Installation Steps

- Installing the Integration

- Post-Installation Checklist

2.1 Integration Pack Software Requirements

The following software and applications must be installed and configured before installing the integration pack.

For complete details, refer to product-specific installation guides.

Participating Applications:

- Oracle Utilities Service Order Management- Application version 2.1.0.3 installed on an Oracle database with the latest supported service pack.

- Oracle Utilities Mobile Workforce Management - Application version 2.2.0.2 installed on an Oracle database with the latest supported service pack.

Oracle SOA/Weblogic Server:

- Oracle SOA Suite 11g with Enterprise Manager 11.1.1.6 on Weblogic Server 11g (10.3.6).

  Note: This integration does not require the AIA Foundation Pack to be installed.

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2.2 Pre-Installation Tasks

The following tasks should be completed before you install Oracle Utilities Service Order Management Integration to Oracle Utilities Mobile Workforce Management:

• Ensure that Oracle SOA Suite 11gR1 PS6 or higher with Enterprise Manager is installed and running. For more details, refer to the following link:
  http://www.oracle.com/technetwork/middleware/soasuite/documentation/soa11gdoc-2212842.html#111160

• Login to the WebLogic Server console to confirm there are no changes in the **Pending Activation** status.

• Start the Node Manager if not already running.

• Restart the Enterprise Manager and the WebLogic Admin server.

• Make sure that the WebLogic Admin server, SOA server, and Node Manager are up and running.

2.3 Installation Steps

Complete the following installation steps:

1. Download the **installation zip** file from Oracle Software Delivery Cloud (https://edelivery.oracle.com).

   Note: For specific instructions about installing this integration on non-Windows/ Linux platforms, see Oracle Support Knowledge Article ID 1349320.1.

2. Extract the zip file to get the installation folder.
    This folder includes subfolders such as bin, config, Install, MDS-Artifacts, and services as shown in the screenshot below:
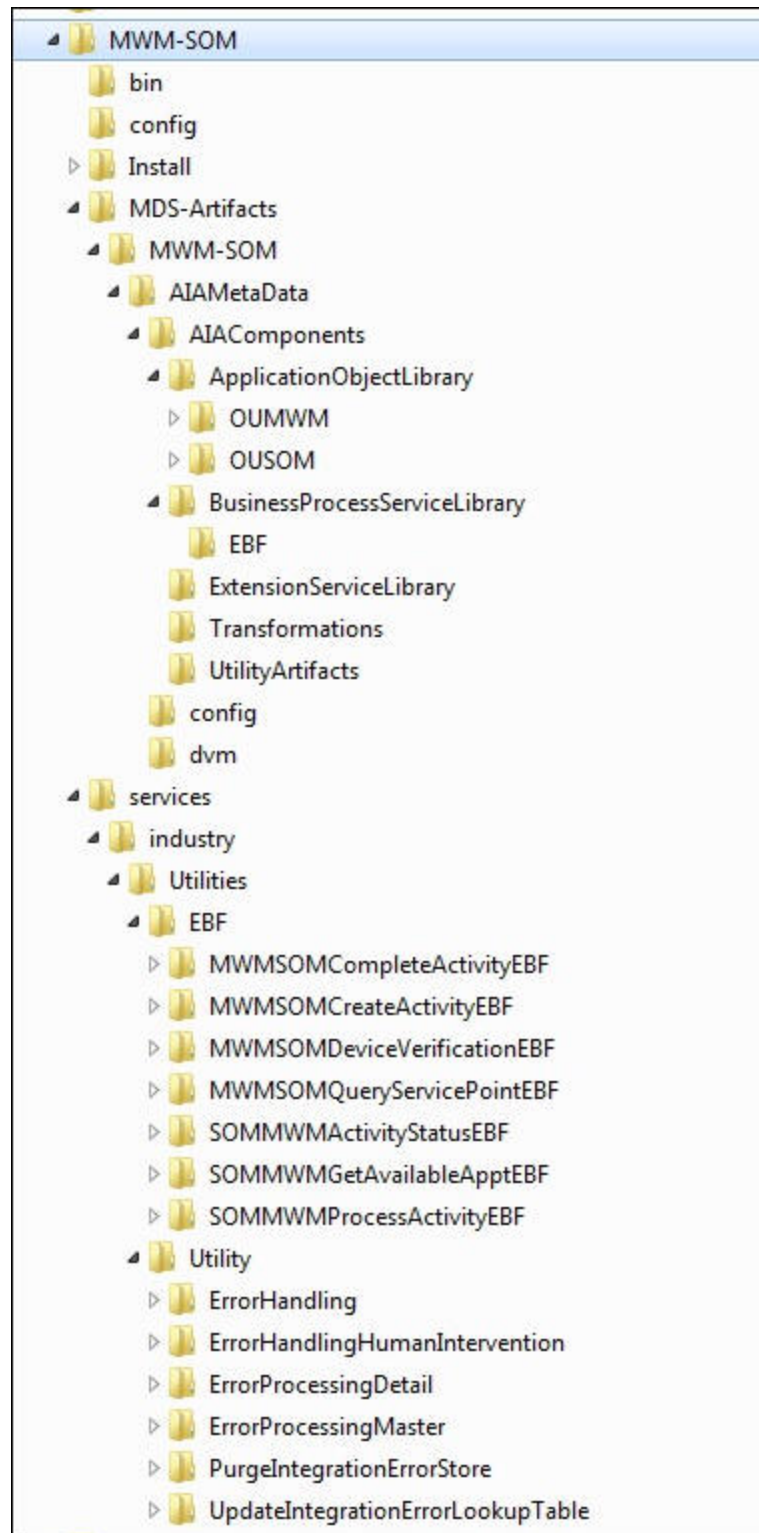
3. Set the following environment variables for Linux and Windows OS:

Variable	Example
SOA_HOME	XXX/Middleware/Oracle_SOA1
MW_HOME	XXX/Middleware
PRODUCT_HOME	Directory where MWM_SOM.zip is extracted. Example: Linux: PRODUCT_HOME=/slot/oracle/MWM-SOM Windows: PRODUCT_HOME=D:\Oracle\MWM-SOM

For example:

* **Linux:**

    export SOA_HOME=/slot/ems66xx/oracle/Middleware/Oracle_SOA1

    export MW_HOME=/slot/ems66xx/oracle/Middleware

    export PRODUCT_HOME=/slot/ems66xx/oracle/MWM-SOM

    source "${ MW_HOME }/wlserver_10.3/server/bin/setWLSEnv.sh"

    cd $PRODUCT_HOME/bin

* **Windows**:

    SET SOA_HOME=C:\Middleware\Oracle_SOA1

    SET MW_HOME=C:\Middleware

    SET PRODUCT_HOME=C:\MWM-SOM

    C:\Middleware\wlserver_10.3\server\bin\setWLSEnv.cmd

    cd %PRODUCT_HOME%\bin

    Note: The syntax for PRODUCT_HOME changes depending on whether you are installing on Linux or Windows. The following sections refer to this as $PRODUCT_HOME in Linux and it should be referred to as %PRODUCT_HOME% in Windows. If you are using Windows, replace $PRODUCT_HOME with %PRODUCT_HOME% throughout the document.

The following commands (setWLSEnv.sh on Linux and setWLSEnv.bat on Windows) set the environment variables used for executing the installation scripts:

* **Linux**:
    source ${WL_HOME}/wlserver_10.3/server/bin/setWLSEnv.sh

* **Windows**:
    cd %WL_HOME%\wlsserver_10.3\server\bin\
    setWLSEnv.cmd

4. Modify the $PRODUCT_HOME/config/InstallProperties.xml file and ensure that the values entered are relevant to the server where the integration product has to be installed.
Use a text editor to update the InstallProperties.xml file. Login to the WebLogic Administration console to cross verify the values being entered for these properties, as the build may fail due to inappropriate values.

The table below lists the properties available in the InstallProperties.xml file along with their usage. The default values are specified wherever applicable.

> **Note**: If the installation fails due to incorrect values defined in the installProperties.xml file, run uninstall, populate the correct values, and then run install again.

Property	Description	Example
<MWM-SOM>		
MWM Application Information		
<MWM>		
<ApplicationUsername>	Application login username.	MWMUSER
<ApplicationPassword>	Application login password.	MWMPWD
Service Order Management Application Information		
<SOM>		
<ApplicationUsername>	Application login username.	SOMUSER
<ApplicationPassword>	Application login password.	SOMPWD
WorkFlow Notification Properties		
<WorkFlow.Notification>		
<from.emailid>	The valid email address.	Admin.user@yourdomain.com
<mode>	The type of mode such as email or sms.	EMAIL
SOA Information		
Admin Server Information		
<AdminServer>		
<hostname>	The host name of the server where admin server hosting SOA suite is installed.	SOA_Admin.yourdomain.com
<portnumber>	The port number the admin server (hosting SOA suite) is referring to.	
<servername>	The admin server name (hosting SOA suite).	AdminServer
<username>	The user name used to log in as an Admin server (hosting SOA suite) administrator.	webLogic
<password>	The password used to log in as an Admin server (hosting SOA suite) administrator.	

Property	Description	Example
<domainname>	The WebLogic domain name hosting SOA suite.	soa_domain
Managed Server Information		
<ManagedServer>		
<hostname>	The host name of the server where managed server (hosting SOA suite) is installed.	SOA_MS.yourdomain.com
<portnumber>	The port number, the managed server (hosting SOA suite) is referring to.	
<servername>	The managed server name (hosting SOA suite).	soa_server1
<username>	The user name used to login to managed server (hosting SOA suite) as an administrator.	webLogic
<password>	The password used to login to managed server (hosting SOA suite) as an administrator.	
OHS (Oracle HTTP Server Information)		
<OHS>		Cluster Support Properties: Oracle HTTP Server host, port & server name. In case of the non-cluster environment, these properties would be same as <ManagedServer> values.
<hostname>	The Oracle HTTP server host name.	
<portnumber>	The Oracle HTTP server port name.	
<servernames>	The server names on cluster.	In case of multiple managed servers, provide comma to separate values. For example, soa_server1, soa_server2
MDS DB information		
<mdsconfig>		
<mdsdbusername>	The user name used to login to the MDS schema.	SOA_MDS
<mdsdbuserpassword>	The password used to login to the MDS schema.	

Property	Description	Example
<mdsdbhostname>	The host name of the server hosting the database containing the MDS schema.	MDSDB_HOST.yourdomain.com
<mdsdbportnumber>	The port number of the database containing the MDS schema.	1521
<mdsdbsid>	The SID of the database containing the MDS schema.	MDSDBSID
Error Handling Schema Information		
<dba.dbusername>	The user name used to login as a Database Administrator (DBA). This database hosts the schema required for MWM-SOM integration.	System
<dba.dbuserpassword>	The password used to login as a Database Administrator (DBA). This database hosts the schema required for MWM-SOM integration.	
<dbusername>	The user name used to login to MWM-SOM schema for MWM-SOM integration. This user can be automatically created by the install (set dbuser.createflag to true) or manually outside the install process.	MWMSOMUSER
<dbuserpassword>	The password used to login to MWM-SOM schema for MWM-SOM integration.	
<dbuser.createflag>	The flag specifying whether to create a new schema or use the existing schema for MWM-SOM integration. If the schema is created manually outside of the installation process, then set this value to "false". Else, set the value to "true", if the installation script should automatically create the schema. Valid values: true or false (this is case sensitive)	true
<dbhostname>	The database host name used for MWM-SOM integration.	DB_HOST.yourdomain.com
<dbportnumber>	The database port number used for MWM-SOM integration.	1521

Property	Description	Example
<dbsid>	The database SID used for MWM-SOM integration.	DBSID

Note the following:

- If the dbuser.createflag is set to false, the schema needed for MWM-SOM integration error handling will not be automatically created by the install. The schema needs to be created manually before running the install. When creating the user manually, grant connect and resource to the user.

- $PRODUCT_HOME/Install/util/ant folder contains all the ant build scripts.

- $PRODUCT_HOME/bin/InstallBuild.xml is used to install MWM-SOM integration code.

- $PRODUCT_HOME/bin/UnInstallBuild.xml is used to uninstall MWM-SOM integration code.

- $PRODUCT_HOME/bin/DeployUndeployUtility.xml is used to deploy/ undeploy individual composite/ MDS folder, and then restart the managed server.

    Note: The installation and uninstallation process may take several minutes to complete. Stand by until the install and uninstall process are finished.

2.4 Installing the Integration

After setting the environment variables, open a Command prompt and execute the following three installation commands in Linux and Windows respectively:

Step1: Execute the **InstallDB** command at the Command prompt.

- **Linux:**

```
cd $PRODUCT_HOME/bin
ant -f InstallBuild.xml InstallDB -
DInstallProperties=$PRODUCT_HOME/config/InstallProperties.xml -l
InstallDB.log
```

- **Windows:**

```
cd %PRODUCT_HOME%\bin
ant -f InstallBuild.xml InstallDB -
DInstallProperties=%PRODUCT_HOME%/config/InstallProperties.xml -l
InstallDB.log
```

This command creates database objects required for the **Error Handling** module and the database artifacts required for this integration.

Step 2: Execute the **InstallWL** command at the Command prompt:

- **Linux**:

```
cd $PRODUCT_HOME/bin
ant -f InstallBuild.xml InstallWL -
DInstallProperties=$PRODUCT_HOME/config/InstallProperties.xml -l
InstallWL.log
```

- **Windows**:

```
cd %PRODUCT_HOME%\bin
ant -f InstallBuild.xml InstallWL -
DInstallProperties=%PRODUCT_HOME%/config/InstallProperties.xml -l
InstallWL.log
```

This command performs the following tasks:

- Creates JDBC DataSource for the Error Handling Module.

- Creates outbound connection pool instance for the database by updating the DBAdapter.rar file.

- Creates the csf key for Oracle Utilities Service Order Management and Oracle Utilities Mobile Workforce Management integration by creating MWM-SOM_SOM and MWM-SOM_MWM respectively.

After executing the commands mentioned above, bounce the managed server and admin server manually.

Step 3: Execute the `InstallSOA` commands at the command prompt:

- **Linux**

```
cd $PRODUCT_HOME/bin
ant -f InstallBuild.xml InstallSOA -
DInstallProperties=%PRODUCT_HOME%/config/InstallProperties.xml -l
InstallSOA.log
```

- **Windows**

```
cd %PRODUCT_HOME%\bin
ant -f InstallBuild.xml InstallSOA -
DInstallProperties=%PRODUCT_HOME%/config/InstallProperties.xml -l
InstallSOA.log
```

This command performs the following tasks:

- Updates MDS repository with all the artifacts.

- Creates the application partition where the composites are deployed.
  For example: MWM-SOM

- Compiles/ packages and then deploys all the composites to the Enterprise Manager.

After executing the commands mentioned above, bounce the managed server and admin server manually.

2.5 Post-Installation Checklist

Post-installation checklist includes the following:

1. Verify that all the JMS and JDBC resources were created. See Verifying the JDBC Configuration for the instructions.

2. Verify if all the composites in Enterprise Manager are deployed. See Verifying Composites in the Enterprise Manager for the steps.

3. Review the logs. See Reviewing the Logs for instructions.

4. Check if the csf-keys are generated. See Verifying CSF-Key Generation for the instructions.

5. Configure the edge application. See Configuring Edge Applications for the steps.

2.5.1 Verifying the JDBC Configuration

To verify the JDBC configuration, follow these steps:

1. Login to Weblogic Administration console.

2. Navigate to **Home** > **Deployments**.

3. Verify that **DbAdapter_MWMSOM.rar** is deployed, and is in **Active** state.

4. Verify the **eis/DB/SOM-MWMErrorHandling** connection factory details to ensure the connection-factory location matches with that defined in the JCA files. Follow these steps:

   a. Click "DbAdapter_MWMSOM" on the **Deployments** table.

   b. On the **Configuration** tab, click **Outbound Connection Pools**.

   c. Expand javax.resource.cci.ConnectionFactory to check the eis/DB/MWM-SOMErrorHandling connection factory instance.

5. Ensure the database details are as required:

   a. On the left pane, navigate to **Services** > **Data Sources**.

   b. Click the **MWM-SOMEHDS** data source to check the JNDI Name. The JNDI name should be "jdbc/MWM-SOMEHDS".

6. Click **Connection Pool** to check the URL and properties.

7. Click **Monitoring**, click **Testing**, select the target server, and then click **Test Data Source**. Check if the data source has been configured successfully.

2.5.2 Verifying Composites in the Enterprise Manager

Verify that the MWM-SOM partition is created with all the composites deployed. Perform the following steps to verify the composites in the Enterprise Manager:

1. Login to the **Enterprise Manager**.

2. Expand **Farm_soa_domain soa /soa-infra /MWM-SOM partition**.

3. Verify that all the composites are deployed and are in an active state.
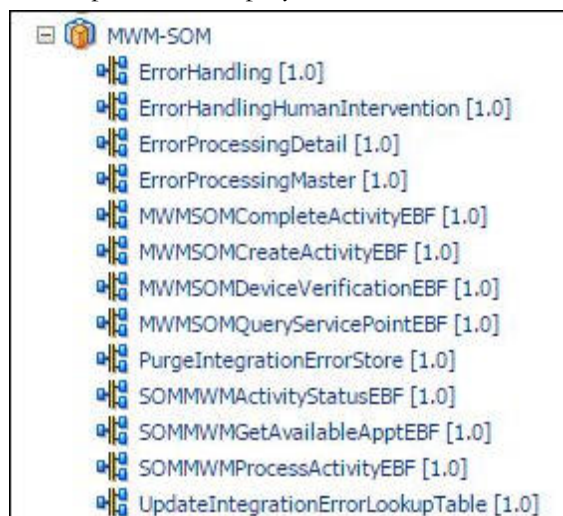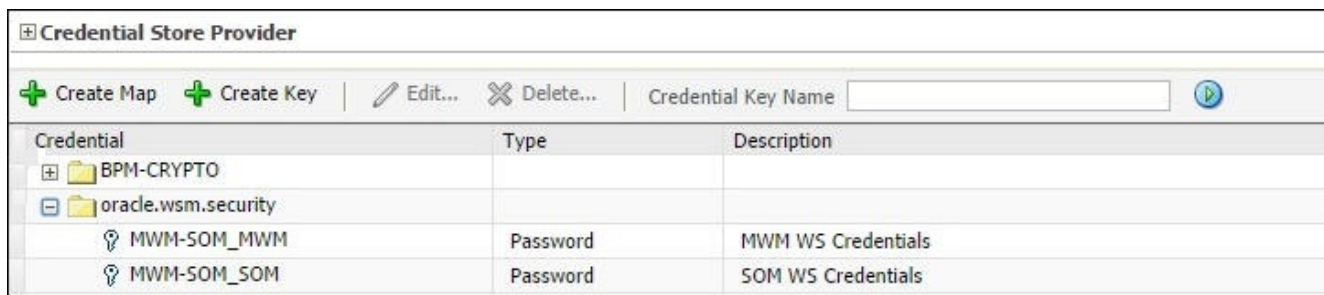
2.5.3 Reviewing the Logs

Review the logs under $MW_HOME/user_projects/domains/soa_domain/servers/
<managed_server>/logs to check for deployment errors.

For example, $MW_HOME/user_projects/domains/soa_domain/servers/
soa_server1/logs

2.5.4 Verifying CSF-Key Generation

To check whether the csf-keys are generated, perform the following steps:

1. Login to the **Enterprise Manager**.

2. Navigate to **Farm_soa_domain** > **WebLogic_Domain** > **soa_domain**.

3. Right-click **soa_domain**, and then select **Security** > **Credentials**.

4. Expand the **oracle.wsm.security map**.

5. Check if the following keys are available:

    • MWM-SOM_SOM

    • MWM-SOM_MWM

Credential Store Provider		
➕ Create Map ➕ Create Key ✏ Edit... ✖ Delete... Credential Key Name ▶		
Credential	Type	Description
⊞ 📁 BPM-CRYPTO		
⊟ 📁 oracle.wsm.security		
🔑 MWM-SOM_MWM	Password	MWM WS Credentials
🔑 MWM-SOM_SOM	Password	SOM WS Credentials

2.6 Configuring Edge Applications

Configure Oracle Utilities Mobile Workforce Management and Oracle Utilities Service
Order Management installation according to the guidelines in the *Oracle Utilities Service
Order Management Integration to Oracle Utilities Mobile Workforce Management Implementation
Guide*.

Chapter 3

Individual Composites

This section describes how to deploy and undeploy individual composites for incremental builds or patches and includes the following:

-
-

3.1 Undeploying Composites

If the composites being deployed involves changes made to the MDS artifacts, you must first undeploy the composites.

Perform the following steps to undeploy the composites:

1. Open a Command prompt and execute the following commands for Linux and Windows respectively:

   - **Linux**:

   ```
   cd $PRODUCT_HOME/bin
   ant -f DeployUndeployUtility.xml DeployComposite -
   DInstallProperties=$PRODUCT_HOME/config/InstallProperties.xml
   ```

   - **Windows**:

   ```
   cd %PRODUCT_HOME%\bin
   ant -f DeployUndeployUtility.xml DeployComposite  -
   DInstallProperties=%PRODUCT_HOME%/config/InstallProperties.xml
   ```

2. Validate the following parameters when prompted with default values during deployment. Press **ENTER** to use the default prompted value.

   - **Composite Name**: The name of the composite to be undeployed to SOA server. This parameter does not have a default value. Enter the composite name to be undeployed.
   For example: MWMSOMCompleteActivityEBF

   - **Composite Folder Location**: The folder name should be an absolute path, beginning with <PRODUCT_HOME>/services/industry/Utilities/<EBF/utility>.
   For example: If you are planning to undeploy the composite from <PRODUCT_HOME>/services/industry/Utilities/EBF, then pass

   <PRODUCT_HOME>/services/industry/Utilities/EBF to this property.

The default value for this property is %PRODUCT_HOME%/services/
industry/Utilities/EBF, as most of the business-specific composites reside in
this folder.

- **Partition Name**: The SOA partition name from which the composite should be
  undeployed.

3.2 Deploying Individual Composites

Deploy individual composites by performing the following steps:

> **Note**: Refer to Verifying Composites in the Enterprise Manager section
> to see the composites for MWM-SOM.

1. Open a Command prompt and execute the following commands for Linux and
   Windows respectively:

   - **Linux**:

   ```
   cd $PRODUCT_HOME/bin
   ant -f DeployUndeployUtility.xml -
   DInstallProperties=$PRODUCT_HOME/config/InstallProperties.xml
   DeployComposite
   ```

   - **Windows**:

   ```
   cd %PRODUCT_HOME%\bin
   ant -f DeployUndeployUtility.xml -
   DInstallProperties=%PRODUCT_HOME%/config/InstallProperties.xml
   DeployComposite
   ```

2. Validate the following parameters when prompted with default values during
   deployment. Press **ENTER** to use the default prompted value.

   - **Composite Name**: The Name of the composite to be deployed to SOA server.
     This parameter does not have a default value. Enter the composite name to be
     deployed
     For example, MWMSOMCompleteActivityEBF

   - **Composite Folder Location**: The folder name should be an absolute path
     beginning with %PRODUCT_HOME%/services/industry/Utilities/<EBF/
     utility>.

     For example: If you are planning to deploy the composite from
     %PRODUCT_HOME%/services/industry/Utilities/EBF, then pass
     %PRODUCT_HOME%/services/industry/Utilities/EBF to this property.

     The default value for this property is %PRODUCT_HOME%/services/
     industry/Utilities/EBF, as most of the business-specific composites reside in
     this folder.

   - **Partition Name**: The SOA partition name to which the composite should be
     deployed.

Chapter 4

MDS Folders

This section describes how to deploy and undeploy individual MDS folders for incremental builds or patches. The following topics are discussed here:

- Undeploying the MDS Folder
- Deploying the MDS Folder

4.1 Undeploying the MDS Folder

To undeploy a particular folder from MDS, execute the following commands, and then pass the folder name to be undeployed:

1. Open a Command prompt and execute the following commands for Linux and Windows respectively. These commands undeploy a folder under $PRODUCT_HOME/MDS-Artifacts from the MDS repository.

    - **Linux**:

    ```
    cd $PRODUCT_HOME/bin
    ant -f DeployUndeployUtility.xml -
    DInstallProperties=$PRODUCT_HOME/config/InstallProperties.xml
    UnDeployMDS
    ```

    - **Windows**:

    ```
    cd %PRODUCT_HOME%\bin
    ant -f DeployUndeployUtility.xml -
    DInstallProperties=%PRODUCT_HOME%/config/InstallProperties.xml
    UnDeployMDS
    ```

2. Validate the following parameters when prompted with default values during undeployment. Press **ENTER** to use the default prompted value.

    The folder name should be a relative path inside %PRODUCT_HOME%/MDS-Artifacts beginning with MWM-SOM.

    For example: To undeploy %PRODUCT_HOME%/MDS-Artifacts/MWM-SOM/AIAMetaData/dvm, pass MWM-SOM/AIAMetaData/dvm as the MDS folder name.

    > **Note**: Use this command to perform only folder-level undeployment. The command does not support file-level undeployment.

MDS Folders 4-1

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4.2 Deploying the MDS Folder

To deploy the MDS folder, perform the following steps:

1. Open a Command prompt and execute the following commands in Linux and Windows respectively:

    *   **Linux**:

    ```
    cd $PRODUCT_HOME/bin
    ant -f DeployUndeployUtility.xml -
    DInstallProperties=$PRODUCT_HOME/config/InstallProperties.xml
    DeployMDS
    ```

    *   **Windows**:

    ```
    cd %PRODUCT_HOME%\bin
    ant -f DeployUndeployUtility.xml -
    DInstallProperties=%PRODUCT_HOME%/config/InstallProperties.xml
    DeployMDS
    ```

2. Validate the following parameters when prompted with the default values during deployment. Press ENTER to use the default prompted value.

    *   **MDS Folder Name**: The name of folder to be deployed from MDS repository.

        The folder name should be a relative path inside %PRODUCT_HOME%/ MDS-Artifacts, beginning with MWM-SOM.

        Examples of deploying MDS are shown below:

        The MWM-SOM folder has the MDS-Artifacts as its subfolder containing all the files that can be deployed to the MDS.
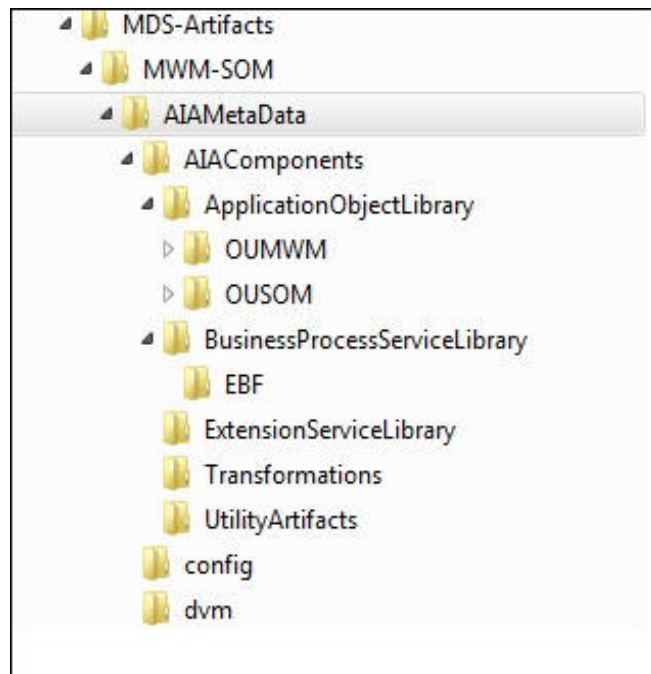
    *   **DVM Changes**: When the new DVM values are added to the DVM file(s), the DVM folder must be updated in the MDS. This command will not only deploy the file(s) that were changed, but the whole DVM folder. Pass MWM-SOM/ AIAMetaData/dvm as the MDS folder name and it will deploy the whole DVM folder to the MDS.

Note: In case if the DVMs are updated from the SOA composer, make sure that those values are updated in the <PRODUCT_HOME>/ MDS-Artifacts/ MWM-SOM/AIAMetaData/dvm folder. Otherwise, the changes made from the composer will be overridden by the PRODUCT_HOME values.

• **Custom Schema Changes**: If custom elements are added to the Oracle Utilities Mobile Workforce Management or Oracle Utilities Service Order Management schema or both schemas, the ApplicationObjectLibrary folder must be updated in the MDS. Pass MWM-SOM/AIAMetaData/ApplicationObjectLibrary to deploy the schema folders or pass MWM-SOM/AIAMetaData/ApplicationObjectLibrary/OUMWM to deploy only the Oracle Utilities Mobile Workforce Management schema folder or change OUMWM and put OUSOM to deploy only the Oracle Utilities Service Order Management schema folder.

• **Concrete WSDL Changes for Extensions:** If extension service needs to be called by a process and the concrete WSDL is updated, the ExtensionServiceLibrary folder must be updated in MDS. Pass MWM-SOM/AIAMetaData/ExtensionServiceLibrary to deploy the whole extension service library folder.

Note: Use this command to perform only folder-level deployment. The command does not support file-level deployment.

Chapter 5

Uninstalling the Integration

To uninstall the integration, perform the following steps:

1. Restart the WebLogic Admin server and the SOA server.

2. Set the environment variables as mentioned in the section Installation Steps.

3. Open a Command prompt window and execute the following three commands in Linux and Windows respectively:

Step1: Execute the **UnInstallSOA** commands at the Command prompt:

- **Linux**:

```
cd $PRODUCT_HOME/bin
ant -f UnInstallBuild.xml UnInstallSOA -
DInstallProperties=$PRODUCT_HOME/config/InstallProperties.xml -l
UnInstallSOA.log
```

- **Windows**:

```
cd %PRODUCT_HOME%\bin
ant -f UnInstallBuild.xml UnInstallSOA -
DInstallProperties=%PRODUCT_HOME%/config/InstallProperties.xml -l
UnInstallSOA.log
```

This command performs the following tasks.

- Undeploys all composites from the Enterprise Manager partition.

- Deletes the partition.

- Undeploys the MDS artifacts.

Step 2: Execute the **UnInstallWL** command at the Command prompt:

- **Linux**:

```
cd $PRODUCT_HOME/bin
ant -f UnInstallBuild.xml UnInstallWL -
DInstallProperties=$PRODUCT_HOME/config/InstallProperties.xml -l
UnInstallWL.log
```

- **Windows**:

```
cd %PRODUCT_HOME%\bin
ant -f UnInstallBuild.xml UnInstallWL -
DInstallProperties=%PRODUCT_HOME%/config/InstallProperties.xml -l
UnInstallWL.log
```

This command performs the following tasks.

- Deletes the JMS resources (JMS module/ JMS persistent store/ JMS server).

- Undeploys the JMS outbound connection pool.

- Undeploys the database outbound connection pool.

- Deletes the JDBC data source for the Error Handling module.

- Removes the workflow notification.

- Deletes the csf-keys generated.

After executing the commands mentioned above, bounce the managed server and admin server manually.

Step 3: Execute the **UnInstallDB** command at the Command prompt:

- **Linux**:

```
cd $PRODUCT_HOME/bin
ant -f UnInstallBuild.xml UnInstallDB -
DInstallProperties=$PRODUCT_HOME/config/InstallProperties.xml -l
UnInstallDB.log
```

- **Windows**:

```
cd %PRODUCT_HOME%\bin
ant -f UnInstallBuild.xml UnInstallDB -
DInstallProperties=%PRODUCT_HOME%/config/InstallProperties.xml -l
UnInstallDB.log
```

This command drops the database objects created for the Error Handling module and the artifacts created for the integration

> **Note**: After a successful uninstall, all the JDBC resources and MWM-SOM partition created during installation are deleted.

Chapter 6

Troubleshooting

This chapter provides discusses how to troubleshoot if application runs into issues, including:

- [Password Expiry for Database](#)
- [Security Policies](#)

6.1 Password Expiry for Database

If a password is expired or changed, then credential issues will arise with Meta Data Store (MDS) or Error Handling (EH) Data Store or integration specific database. To fix this issue, perform the following steps:

1. Reset or unlock the password for the corresponding database (MDS, EH database or integration specific database).

2. Change the password for the data source for which the password is changed/or locked from the Weblogic Administration Console.

3. Change the password in the InstallationProperties.xml for the database instance (this helps only while reinstalling).

4. Perform the steps mention below to find out the adf-config.xml file that is generated during installation. It is generally located at $PRODUCT_HOME/Install/config/.adf/META-INF.

   a. Identify the correct "metadata-store-usage" from the "meta-data-namespaces" element by the path mentioned above.

   b. Find out the element property with the attribute value as "jdbc-password" for the "name" attribute in the "metadata-store-usage" element.

   b. Change the password for the value attribute in the property element.

6.2 Security Policies

Except for policies which are used for executing edge application services (eg: oracle/wss_http_token_client_policy), ensure that all the composites have appropriate policies or no policies at all.