CCB-ERP Integration Using Oracle Utilities ICS Adapter and ERP ICS Adapter

Installation Guide

Release 12.1

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CCB-ERP Integration Using Oracle Utilities ICS Adapter and ERP ICS Adapter, Release 12.1 Installation Guide

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Preface

This document is intended for anyone implementing the CCB-ERP Integration Using Oracle Utilities ICS Adapter and ERP ICS Adapter.

Documentation and Resources

For more information regarding this integration, foundation technology and the edge applications, refer to the following documents:

Product Documentation

Topic	Description
Integration documentation:	
CCB-ERP Integration Using Oracle Utilities ICS Adapter and ERP ICS Adapter Installation Guide CCB-ERP Integration Using Oracle Utilities ICS Adapter and ERP ICS Adapter Implementation Guide	Refer to the Oracle Utilities applications documentation page: http://docs.oracle.com/cd/E72219_01/documentation.html
Oracle Utilities ICS Adapter documentation	Refer to the Oracle Utilities ICS Adapter documentation page: https://docs.oracle.com/cloud/latest/intcs_gs/ICSUT/toc.htm
Oracle Utilities Customer Care and Billing and Oracle Enterprise Resource Planning Cloud Financials documentation	Refer to the Oracle Utilities applications documentation page: http://docs.oracle.com/cd/E72219_01/documentation.html

Additional Documentation

Resource	Location
SOA Suite 12c documentation	Refer to the SOA documentation at: http://www.oracle.com/technetwork/middleware/soasuite/documentation/index.html
Oracle Support	Visit My Oracle Support at https://support.oracle.com regularly to stay informed about updates and patches. Access the support site for the Edge Application Certification Matrix for Oracle Utilities Products (Doc ID 1454143.1) or refer to the Oracle Utilities Integrations page at http://my.oracle.com/site/tugbu/productsindustry/productinfo/utilities/integration/index.htm
Oracle Technology Network (OTN) Latest versions of documents	http://www.oracle.com/technetwork/index.html
Oracle University for training opportunities	http://education.oracle.com/
Web Services Security	For more information about Web services security using Oracle Fusion Middleware 12c refer to https://docs.oracle.com/middleware/12211/cross/webservicestasks.htm.
Oracle Fusion Middleware 12c documentation	Refer to the Oracle applications documentation page: http://docs.oracle.com/en/middleware/
Oracle Fusion Middleware "What's New In Oracle WebLogic Server" Section: Standards Support, Supported Configurations and WebLogic Server Compatibility, Database Interoperability For additional information on the type of database to use.	http://docs.oracle.com/middleware/1221/wls/NOTES/whatsnew.htm#NOTES570
Instructions on installing this integration on non-Windows/ Linux platforms	Refer to Oracle Support Knowledge Article ID 1349320.1.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

Access to Oracle Support

Oracle customers have access to electronic support for the hearing impaired. Visit:
http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or http://
www.oracle.com/pls/topic/lookup?ctx=acc&id=trs

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.

Abbreviations

The following table lists the commonly used abbreviations in this guide.

Abbreviation	Definition
AIA	Application Integration Architecture
AP	Accounts Payable
AP Data	Accounts Payable Data
AP Request	Accounts Payable Request
BPEL	Business Process Execution Language
DVM	Domain Value Map
EBF	Enterprise Business Flow
EM	Enterprise Manager
ERP	Oracle ERP Cloud
FT	Financial Transactions
GL	General Ledger
ICS	Integration Cloud Service
MDS	Meta Data Store
OUCCB or CCB	Oracle Utilities Customer Care and Billing
SOA	Service Oriented Architecture

Chapter 1

Overview

This section provides information on prerequisites for installation of the CCB-ERP Integration Using Oracle Utilities ICS Adapter and ERP ICS Adapter.

Integration Pack Software Requirements

The following software and platforms must be installed and configured before the integration pack can be installed.

Participating Applications

- Oracle Utilities Customer Care and Billing v2.5.0.2 installed on an Oracle database with the latest patch set.

- Oracle Enterprise Resource Planning Cloud

- Oracle Integrated Cloud Service

- Oracle SOA Based Integrated Cloud Service Catalog Service

Oracle SOA/ Weblogic Server

- Oracle SOA suite 12c with Oracle Enterprise Manager 12.1.3.0.0 on WebLogic Server 12.1.3.0.0.

Note: Refer to the Oracle Utilities product Certification Matrix (referenced in the Additional Documentation section) for the most up to date supported edge application versions.

Chapter 2

Installation

This section describes the settings and requirements for a successful installation of the CCB-ERP Integration Using Oracle Utilities ICS Adapter and ERP ICS Adapter including:

- Pre-Installation Tasks
- Installation Steps
- Post-Installation Checklist
- Installing ICS Flows

Pre-Installation Tasks

The following tasks should be completed before you install the integration package:

1. Verify that Oracle SOA Suite 12c is installed and running.
   For more information, refer to the documentation at http://www.oracle.com/technetwork/middleware/soasuite/documentation/index.html.

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

   Complete this step to verify that the WebLogic Server is in a healthy state. If any items are in **Pending Activation** status, then there is likely an issue on the server. All issues must be resolved before you can proceed with the installation.

3. Start **Node Manager**, if not already running.

4. Restart the **WebLogic Managed s**erver and the **WebLogic Admin** server.

5. Verify that the **Weblogic Admin Server**, **Managed Server**, and **Node Manager** are up and running.

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 as %PRODUCT_HOME%\ in Windows. In general, note that the forward slash (/) is used as the path separator on Linux and the back slash (\) is used on Windows.

Excusing any inadvertent syntax errors in this guide, these conventions should be followed for all commands depending on your operating system.

Also, as installation commands and arguments are lengthy, please copy the installation commands in a text file and verify that the command is formatted correctly without any syntax or formatting errors.

6. Install ICS Catalog Service.

Installation Steps

Complete the following to install:

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

2. Extract the zip file to get the installation folder. This folder includes subfolders such as bin, config, install, MDS-Artifacts, and services.
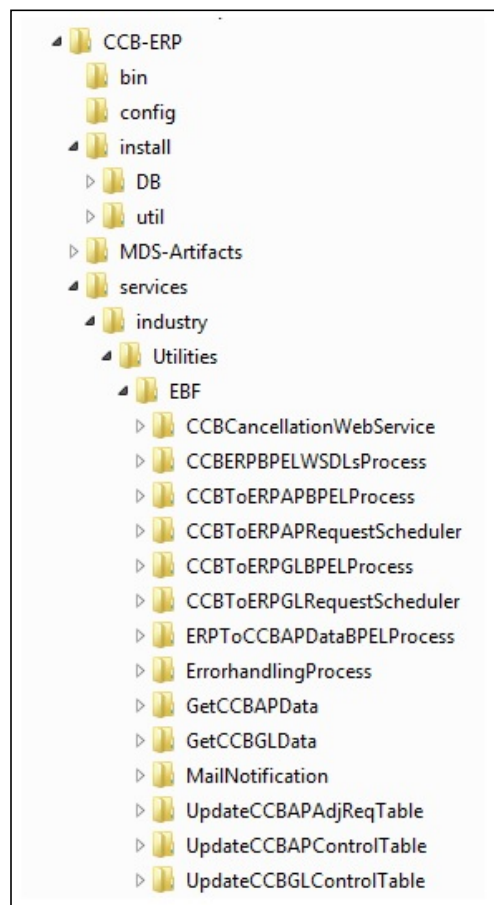
CCB-ERP Home Directory

3. Set the following environment variables for Linux and Windows OS:

Variable	Example
Linux and Windows OS	
MW_HOME	XXX/Middleware/Oracle_Home
SOA_HOME	XXX/Middleware/Oracle_Home/soa
PRODUCT_HOME	Directory where CCB-ERP.zip is extracted. Example: Unix/Linux: PRODUCT_HOME=/home/Product_Homes/ CCB-ERP Windows: PRODUCT_HOME=D:\Product_Homes\CCB-ERP

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

Linux

```
source $MW_HOME/wlserver/server/bin/setWLSEnv.sh
```

Windows

```
cd %MW_HOME%/wlserver/server/bin/
setWLSEnv.bat
```

Below is an example to set up environment variables in a typical installation:

Linux

```
export MW_HOME=/Oracle/Middleware/Oracle_Home
export SOA_HOME=$MW_HOME/soa
export PRODUCT_HOME=/Product_Homes/CCB-ERP
source $MW_HOME/wlserver/server/bin/setWLSEnv.sh
```

Windows

```
SET MW_HOME=C:\Oracle\Middleware\OracleHome12.1.3
SET SOA_HOME=% MW_HOME %\soa
SET PRODUCT_HOME=C:\Product_Homes\CCB-ERP
cd %MW_HOME%/wlserver/server/bin/
setWLSEnv.bat
```

Note: The installation process may take several minutes to complete.

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 console to cross verify the values being entered for these properties, as the build may fail due to inappropriate values.

Refer to the Installation Properties chapter for information about individual properties.

Also note the following:

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

- $PRODUCT_HOME/bin/InstallBuild.xml is used to install CCB-ERP integration code.

- $PRODUCT_HOME/bin/UnInstallBuild.xml is used to uninstall CCB-ERP integration code.

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

Installing the Integration

To install the integration, open a Command prompt and execute the following installation commands (in the same order as mentioned):

a. Install DB
   Creates CCB-ERP integration DB tables in SOA using schema specified in InstallProperties.xml

```
ant -f InstallBuild.xml installDB -
DInstallProperties=$PRODUCT_HOME/config/InstallProperties.xml |
tee CCB-ERPDB.log
```

b. Install WL

- Creates Datasource needed to access the CCB-ERP integration schema.

- Creates Datasource needed to access the CCB schema.

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

- Creates the csf keys for CCB-ERP.

```
ant -f InstallBuild.xml installWL -
DInstallProperties=$PRODUCT_HOME/config/InstallProperties.xml |
tee CCB-ERPWL.log
```

c. Install SOA

- Updates the MDS repository with all artifacts.

- Creates CCB-ERP SOA partition.

- Compiles and deploys all composites.

```
ant -f InstallBuild.xml installSOA -
DInstallProperties=$PRODUCT_HOME/config/InstallProperties.xml |
tee CCB-ERPSOA.log
```

Post-Installation Checklist

After running the installation scripts, complete the following tasks to finalize the installation:

1. Review the install logs to check for any install errors.

2. Restart the WebLogic Admin server and the SOA server.
   Restarting the servers activates the processes that require a restart after installation and ensures that the installation of all artifacts is successful.

3. Review the logs under $MW_HOME/user_projects/domains/soa_domain/ servers/soa_server1/logs to check for any deployment errors.

4. Verify that all JDBC resources were created.
   Refer to Verifying JDBC Configuration for the instructions.

5. Verify that all the composites in Enterprise Manager are deployed.
   Refer to Verifying Composites in Enterprise Manager for the steps.

6. Verify that the csf-keys are generated for Oracle Utilities Customer Care and Billing and ICS.
   Refer to Verifying the csf-key Generation for the instructions.

Verifying JDBC Configuration

To verify the JDBC configuration, follow these steps:

1. Open a WebLogic Admin console and navigate to **Data Sources**.

2. Verify that the following data sources are created on the server:
   - CCBERP-CCBDS - Used to establish connection with the CCB application database.
   - CCBERP-SOADS - Used to establish connection with the SOA database.

3. Verify whether the URL settings are correctly pointed to the database.
   a. On the **Main** page, select **Configuration**, and then select **Connection Pool** for the associated generic data source.
   b. Verify the URL and credentials (in the properties text area).

4. Test the database for correct configurations.
   a. On the **Main** page, select **Monitoring**, and then select **Testing**.
   b. Verify the database configuration details are as expected.

Verifying Database Outbound Connection Pool

To verify that the necessary data outbound connection pools have been created on the server, follow these steps:

1. Open a WebLogic Admin console and navigate to **Deployments**.

2. Select DBAdapter and then navigate to **Configuration** > **Outbound Connection Pools**.

3. Expand javax.resource.cci.ConnectionFactory and check the connection pools.

4. Ensure the following connection pools are created on the server:
   - eis/DB/CCBERP-CCBDS for CCB database connection pool
   - eis/DB/CCBERP-SOADS for SOA 12c database connection pool

Verifying Composites in Enterprise Manager

To verify that the CCB-ERP partition was created with all the composites deployed, follow these steps:

1. Login to the Enterprise Manager console.

2. Navigate to the **soa_domain > SOA > soa-infra** > **CCB-ERP** partition.

3. Verify that all composites are deployed and are in 'active' state.

- CCBCancellationWebService

- ERPToCCBAPDataBPELProcess

- CCBERPBPELWSDLsProcess

- ErrorhandlingProcess

- CCBToERPAPBPELProcess

- GetCCBAPData

- CCBToERPAPRequestScheduler

- GetCCBGLData

- CCBToERPGLBPELProcess

- MailNotification

- UpdateCCBAPAdjReqTable

- UpdateCCBAPControlTable

- UpdateCCBGLControlTable

- CCBToERPGLRequestScheduler

Verifying the csf-key Generation

To verify that the csf-key is created successfully, complete the following:

1. Login to the Enterprise Manager console.

2. Navigate to **soa_domain** > **Security** > **Credentials**.

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

4. Verify that the following keys are available:

   - CCBERP_CCB

   - CCBERP_ICS

Configuring Edge Applications

To configure Oracle Utilities Customer Care and Billing and Enterprise Resource Planning installation, refer to the CCB-ERP Integration Using Oracle Utilities ICS Adapter and ERP ICS Adapter *Implementation Guide*.

Installing ICS Flows

After installing the CCB-ERP flows in SOA middleware, install the ICS flows.

To install the ICS flows, follow these steps:

1. Login to the ICS environment.

2. Navigate to the **ICS Integrations** page and click **Import** to import the CCB-ERP flows into ICS.
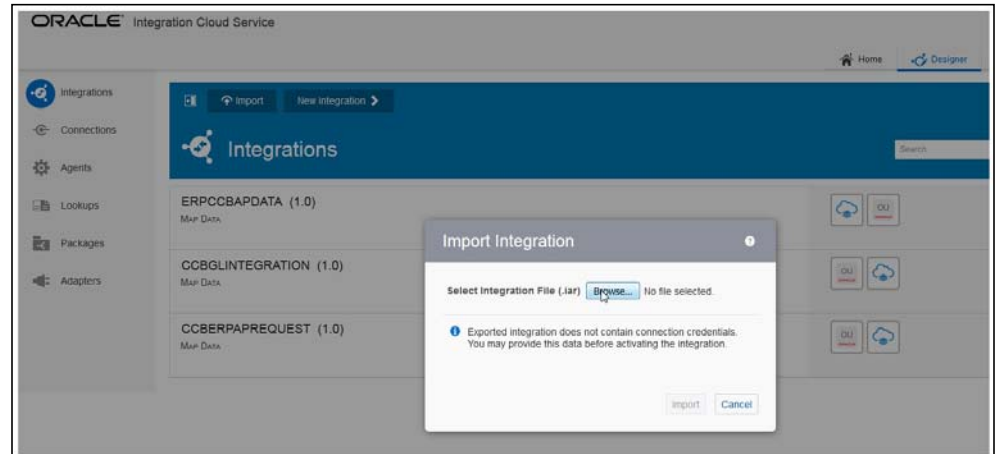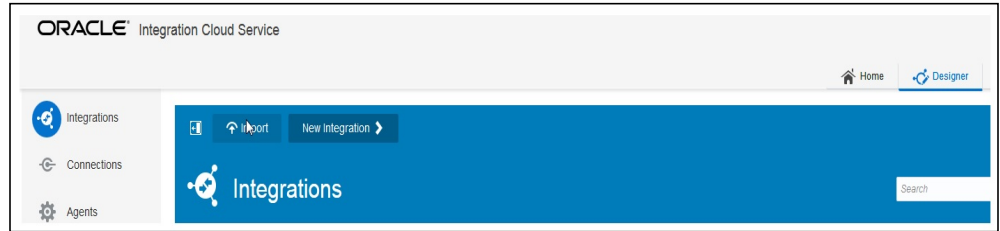
3. Select each of the *.iar files that are part of the CCB-ERP extracted zip files and import them into the ICS environment.
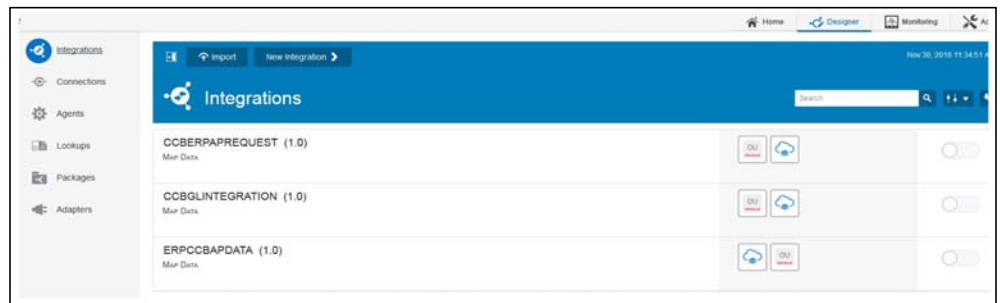
4. Once imported, you should be able to see the integrations in the ICS environment with all in the 'deactivated' state.

5. On the **Connections** page in ICS, you can now see the two connections created (but not configured) after the integrations were imported.
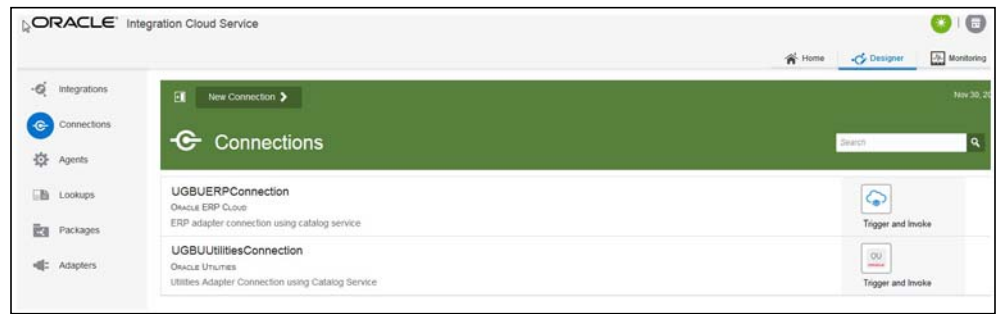
6. Click **UGBUUtilitiesConnection** to configure the Utilities Service Catalog end point and security credentials.

7. Click **Test** to test the connection and **Save** to save the connection.

    This completes the configuration the UGBUUtilitiesConnection connection.

    Important: While creating a Utilities Adapter connection, ensure you enter a username/password that allows you to access all OUAF applications and the SOA Service Catalog (if using a SOA based catalog).

8. Repeat steps 6 and 7 to configure **UGBUERPConnection**.

9. After configuring the connections, navigate to the **Integrations** page and activate each of the integrations.
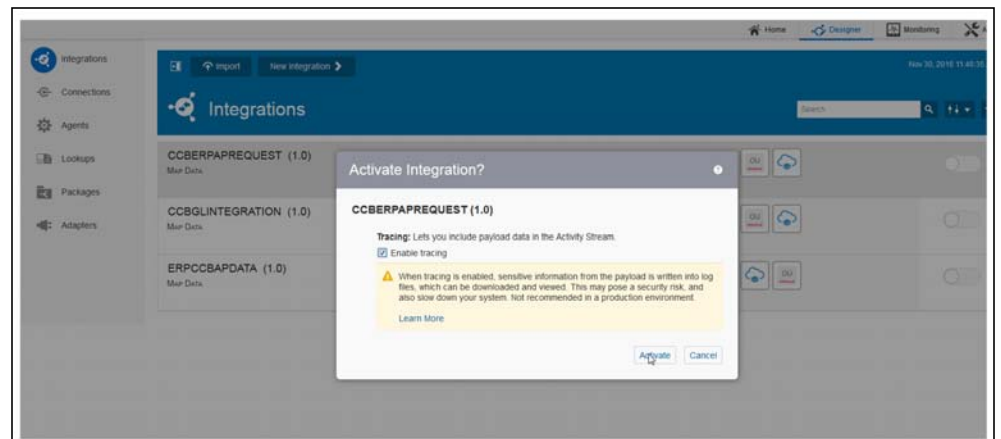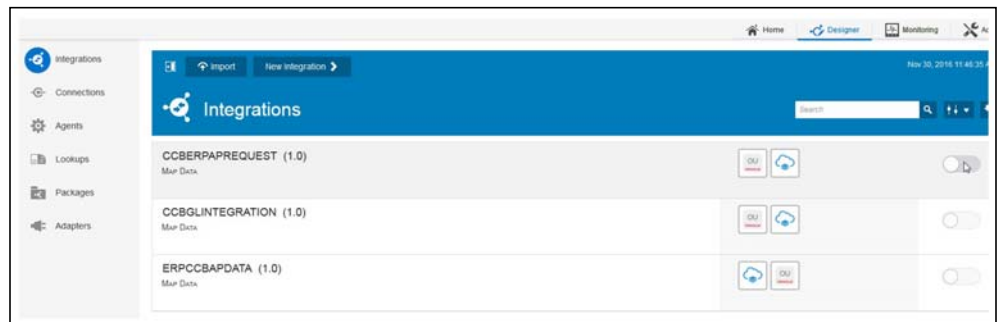
10. Once the integrations are activated, the ICS flows are ready for use.
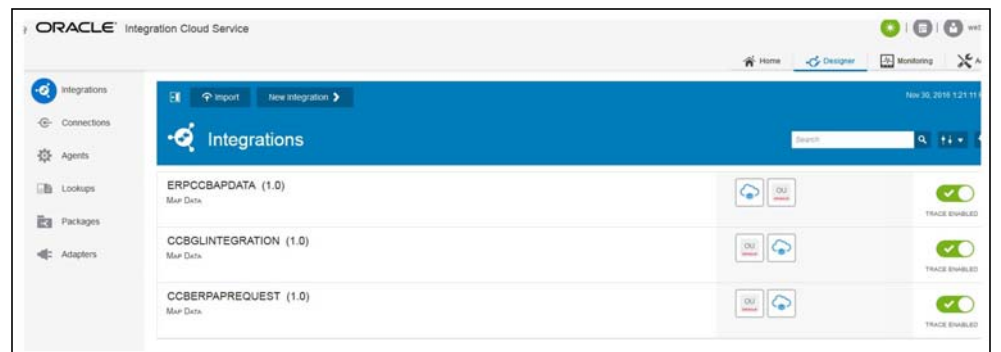
Chapter 3

Individual Composites

This section describes how to deploy/ undeploy individual composites for incremental builds or patches, including:

- Undeploying Composites

- Deploying Individual Composites

Undeploying Composites

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

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 UnDeployComposite
    ```

    Windows

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

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

    - **Composite Name**: Name of the composite to be undeployed to SOA server. This parameter does not have a default value.

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

        For example: If you plan 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.

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

    Example: CCB-ERP

3. Press Enter to use the default value.

Deploying Individual Composites

Perform the following steps to deploy individual composites:

1. Execute the following commands in the command prompt 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 value.

    - **Composite Name**: Name of the composite to be deployed to SOA server. This parameter does not have a default value.

        For example: CCBToERPGLBPELProcess

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

        For example: 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.

        Example: CCB-ERP

3. Press Enter to use the default value.

Note: Refer to Verifying Composites in Enterprise Manager to see the composites for this integration.

Chapter 4

Metadata Store (MDS) Artifacts

This section describes how to deploy and undeploy individual Metadata Store (MDS) folders for incremental builds or patches:

- Undeploying the MDS Folder

- Deploying the MDS Folder

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 value.

   - **MDS Folder Name**: Name of the folder to be undeployed from MDS repository. The folder name should be a relative path inside **<PRODUCT_HOME>/MDS-Artifacts**, beginning with CCB-ERP.

     For example: To undeploy <PRODUCT_HOME>/MDS-Artifacts/CCB-ERP/MetaData/ApplicationObjectLibrary pass CCB-ERP/MetaData/ApplicationObjectLibrary as the MDS folder name.

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

Deploying the MDS Folder

Perform the following steps to deploy the MDS folder:

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 default values during deployment. Press ENTER to use the default value.

   • **MDS Folder Name**: Name of folder to be deployed from MDS repository. The folder name should be a relative path inside **<PRODUCT_HOME>/MDS-Artifacts**, beginning CCB-ERP.

Chapter 5

Installation Properties

This section includes a listing of applicable installation properties.

Make sure that you follow XML editing standards while editing the InstallProperties.xml file. All XML elements need to be closed properly. The XML element in the InstallProperties.xml file does not contain any attribute.

Login to the WebLogic console to cross verify the values being entered for these properties. Also ensure that the values are relevant to the server where the integration product is to be installed. The build may fail due to inappropriate values.

> **Note**: If the dbuser.createflag is set to false, the schema needed for integration error handling will not be automatically created by the install and will need to be created manually prior to running the installation. When creating the user manually, grant connect and resource to the user.

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

Installation Properties

Property (XPath Representation)	Description	Example
<config>		
<modulename>	Name of the integration module.	Default: CCB-ERP Do not change this value.
<CCB-ERP>		
CCB Application Information		
<CCB>		
<dbhostname>	DB Host name of the server where CCB is installed	example.oracle.com
<dbport>	Port where CCB DB is running	1521
<dbsid>	SID of the CCB DB	CCB_DB_NAME
<dbuser>	Username to login to CCB DB	CCB_DB_USERNAME

Property (XPath Representation)	Description	Example
\<dbpwd\>	Password where CCB is running	CCB_DB_PASSWORD
\<ApplicationUsername\>	Username to login to CCB application for web service call	CCB_USERNAME
\<ApplicationPassword\>	Password to login to CCB application for web service call	CCB_PASSWORD
\<ApplicationHost\>	CCB application Host Name	CCB_HOSTNAME
\<ApplicationPort\>	Port number of the CCB application	CCB_PORT
\<contextRoot\>	Context root to access the web services in CCB	ouaf/xla/webservices
\<protocol\>	Protocol of the CCB	http or https
\<policy\>	Security policy to be attached to access CCB	oracle/ wss_http_token_over_ssl_client _policy
ICS Application Information		
\<ICS\>		
\<ApplicationUsername\>	Username to login to ICS application	ICS_USERNAME
\<ApplicationPassword\>	Password to login to ICS application	ICS_PASSWORD
\<ApplicationHost\>	ICS application Host Name	ICS_HOSTNAME
\<ApplicationPort\>	Port number of the ICS application	ICS_PORT
\<contextRoot\>	Context root to access the web services in ICS	integration/flowsvc/ oracleutilities
\<protocol\>	Protocol of ICS	http or https
\<policy\>	Security policy to be attached to access ICS	oracle/ wss_username_token_over_ssl_ client_policy
SOA Information		
\<SOA\>		
Admin Server Information		
\<AdminServer\>		
\<hostname\>	Host name of the server where admin server hosting SOA suite is installed.	adminserver.example.oracle.com
\<portnumber\>	Port number the admin server (hosting SOA suite) is listening to.	7001
\<servername\>	Admin server name (hosting SOA suite)	AdminServer

Property (XPath Representation)	Description	Example
<username>	User name used to log in as an Admin server (hosting SOA suite) administrator.	WebLogic
<password>	Password used to log in as an Admin server (hosting SOA suite) administrator.	
<domainname>	WebLogic domain name hosting SOA suite.	soa_domain
Managed Server Information		
<ManagedServer>		
<hostname>	Host name of the server where managed server (hosting SOA suite) is installed.	managedserver.example.oracle.com
<portnumber>	Port number the managed server (hosting SOA suite) is listening to.	8001
<servername>	Managed server name (hosting SOA suite)	Managedserver1
<username>	User name used to log in to managed server (hosting SOA suite) as an administrator.	WebLogic
<password>	Password used to log in to managed server (hosting SOA suite) as an administrator.	
Oracle HTTP Server Information		
<OHS>		
<hostname>	Host name of the OHS server	ohsserver.example.oracle.com
<portnumber>	Port number of the OHS server	7777
<servernames>	The list of server names that are defined as Managed Servers/Clusters.	In multiple managed servers, provide comma separated values: Example: soa_server1, soa_server2
MDS DB Information		
<mdsconfig>		
<mdsdbusername>	User name used to log in to MDS schema.	MDS_USERNAME
<mdsdbuserpassword>	Password used to log in to MDS schema.	MDS_PASSWORD
<mdsdbhostname>	Host name of the server hosting the database containing MDS schema.	Db.hostname.oracle.com

Property (XPath Representation)	Description	Example
<mdsdbportnumber>	Port number of the database containing MDS schema.	1521
<mdsdbsid>	SID of the database containing MDS schema.	SID
SOA DB Information		
<db>		
<adminusername>	User name used to log in to DB schema.	SYS_USERNAME
<adminpassword>	Password used to log in to db schema.	SYS_PASSWORD
<username>	CCB-ERP username integration schema to be created in SOA server schema	CCBERPUSER1
<password>	CCB- ERP integration password to be use when creating the schema	CCBERPPASSORD
<user.createflag>	CCB- ERP integration schema create flag	Default: true
<hostname>	Host name of the db server where CCB-ERP integration schema is created	Db.hostname.oracle.com
<portnumber>	Port number of the database	1521
<sid>	SID of the database containing CCB-ERP integration schema.	SID
Email Information		
<EMAIL>		
<MailAccessProtocol>	The protocol of the Mail Access	IMAP
<OutgoingDefaultFromAddr>	The email address from which the outgoing mails are sent.	mail.id@yourdomain.com
<OutgoingMailServer>	The mail server name from where the mails are sent.	host.yourdomain.com
<OutgoingMailServerPort>	The port number of the outgoing mail server.	465
<OutgoingMailServerSecurity>	The security for the outgoing mail server.	SSL
<OutgoingUsername>	The user name of the outgoing email	mail.id@yourdomain.com
<Outgoingpassword>	The password of the outgoing email	yourmailpassword
<Capability>	Sets the driver's capability to send or receive messages.	SEND, RECEIVE, BOTH
<incomingMailServer>	The mail server name where mail is received.	host.yourdomain.com

Property (XPath Representation)	Description	Example
<IncomingUserIDs>	Incoming user IDs.	mail.id@yourdomain.com
<IncomingUserPasswords>	Incoming passwords	youremailpassword
<applicationName>	The application for which the UMS configuration is considered.	usermessaging driver-email

Chapter 6

Troubleshooting

This section provides information regarding issues that may arise during installation.

Password Expiry for Database

If a password expires or is changed, credential issues may arise with the Meta Data Store (MDS) or with an integration specific database. To fix this issue, perform the following steps:

1. Reset or unlock the password for the corresponding database (MDS 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 following steps to find the **adf-config.xml** file that is generated during installation.
   The file is generally located at $PRODUCT_HOME/install/util/template/.

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

   b. In the "metadata-store-usage" element, find the element property with the attribute value as "jdbc-password" for the "name" attribute.

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

Chapter 7

Uninstalling the Integration

This chapter provides information about uninstalling the CCB-ERP integration, and also the details about validating the uninstallation.

- Uninstallation
- Validating the Uninstallation

Uninstallation

To uninstall the integration, complete the following steps:

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

2. Ensure the following environment variables are set.

   - MW_HOME
   - SOA_HOME
   - ORACLE_HOME
   - PRODUCT_HOME

   Below is an example to set up environment variables in a typical installation:

   Linux

   ```
   export MW_HOME=/xxx/Middleware/Oracle_Home
   export SOA_HOME=/xxx/Middleware/Oracle_Home/soa
   export ORACLE_HOME=/xxx/Middleware/Oracle_Home/soa
   export PRODUCT_HOME=/xxx/Middleware/PRODUCT_HOME/CCB-ERP
   source "${MW_HOME}/wlserver/server/bin/setWLSEnv.sh"
   ```

   Windows

   ```
   SET MW_HOME=C:\Oracle\Middleware\soa
   SET SOA_HOME=%MW_HOME%\soa
   SET ORACLE_HOME=%MW_HOME%\soa
   SET PRODUCT_HOME=C:\Product_Homes\CCB-ERP
   cd %MW_HOME%/wlserver/server/bin/
   setWLSEnv.cmd
   ```

   Note: The uninstallation process may take several minutes to complete.

3. At the Command prompt, execute the following installation commands (in the order as they are listed):

a. **uninstallSOA**: Performs the following tasks:

- Removes the MDS repository with all artifacts.

- Undeploys all composites.

- Deletes the CCB-ERP partition.

```
ant -f UnInstallBuild.xml uninstallSOA -
DInstallProperties=$PRODUCT_HOME/config/InstallProperties.xml
```

a. **uninstallWL**: Performs the following tasks:

- Removes outbound connection pool instance for the database by undeploying the DbAdapter_CCBERP.rar file.

- Removes the csf keys for CCB-ERP.

```
ant -f UnInstallBuild.xml uninstallWL -
DInstallProperties=$PRODUCT_HOME/config/InstallProperties.xml
```

a. **uninstallDB**: Performs the following tasks:

- Removes CCB-ERP integration tables and schema in SOA using schema specified in InstallProperties.xml

```
ant -f UnInstallBuild.xml uninstallDB -
DInstallProperties=$PRODUCT_HOME/config/InstallProperties.xml
```

Validating the Uninstallation

After the uninstallation is successfully completed, all composites in the CCB-ERP partition, as well as the CCB-ERP partition should be removed from the Enterprise Manager console.

Ensure the following tasks are complete:

- Delete the credential map "oracle.wsm.security map", as well as the CCBERP_CCB and CCBERP_ICS keys created during installation.

- Delete the data sources related to the integration.

- Drop the user from SOA DB.