

**Oracle® Utilities Customer Care and Billing
Integration to PeopleSoft Financials for
General Ledger and Accounts Payable**

Installation Guide

Oracle PeopleSoft Financials for General Ledger and
Accounts Payable v9.0

Oracle Utilities Customer Care and Billing v2.3.1

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Overview

This guide describes the installation steps that must be completed before Oracle PeopleSoft Financials for General Ledger and Accounts Payable can be integrated with Oracle Utilities Customer Care and Billing.

This installation is placed on top of an Oracle SOA Suite 11gR1 PS3. Oracle PeopleSoft Financials for General Ledger and Accounts Payable and Oracle Utilities Customer Care and Billing interact with the middleware to initiate the housed services.

Please review the entire guide before you begin installation.

Additional Resources

For more information read the following documents:

Resource	Location
Oracle Utilities Customer Care and Billing Integration to Oracle PeopleSoft Financials for General Ledger and Accounts Payable Implementation Guide	Same folder as this document with the distribution for this product.
Oracle PeopleSoft Financials for General Ledger and Accounts Payable Installation Guide for Release v9.0	http://edelivery.oracle.com/
Oracle Utilities Customer Care and Billing Installation Guide for Release v2.3.1	http://edelivery.oracle.com/

Abbreviations

CCB - Oracle Utilities Customer Care and Billing application

PS - Oracle PeopleSoft Financials for General Ledger and Accounts Payable application

DDL - Data Definition Language

MDS - Metadata Services

Installation

The following sections describe the settings and requirements for a successful installation. Complete these installation steps prior to configuring the applications for integrated functionality.

Software Requirements

Before installing the integration package, verify that the following software is properly installed and configured:

Please refer to your product specific installation instructions for complete details.

- Oracle Utilities Customer Care and Billing version v2.3.1 installed on an Oracle database.
- Oracle PeopleSoft Financials for General Ledger and Accounts Payable – version v9.0 installed on an Oracle database
- SOA11g / Oracle Enterprise Manager 11.1.1.4.0
- WebLogic Server 10.3.4.0
- This integration does not require AIA Foundation Pack to be installed

Pre-Installation Tasks

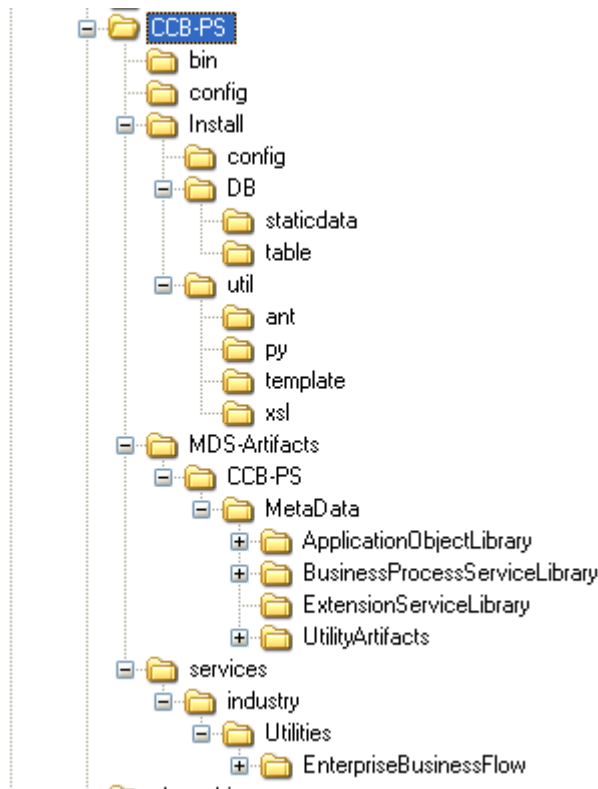
Before you begin installing the integration package, complete the following tasks:

- Ensure that Oracle SOA Suite 11gR1 PS4 (11.1.1.4.0) is installed and running. Refer to documentation at <http://www.oracle.com/technetwork/middleware/soasuite/documentation/index.html#111140>
- Login to the WebLogic console to confirm there are no changes in Pending Activation status.
- Restart the SOA Managed Server and the WebLogic Admin Server.

Installation Steps

Complete the following to install the integration package:

1. Download the Integration Product zip file from e-delivery (<http://edelivery.oracle.com/>).
2. Extract the zip downloaded from e-delivery to retrieve the CCB-PS.zip file containing everything required for the installation of CCB-PS Integration.
3. Extract CCB-PS.zip. This results in a CCB-PS folder with subfolders such as bin, config, Install, MDS-Artifacts and services as seen below.



4. Set the following environment variables for Unix and Windows OS:

Variable	Example
Unix/Linux and Windows OS	
SOA_HOME	XXX/Middleware/Oracle_SOA1
ORACLE_HOME	XXX/Middleware/Oracle_SOA1
MW_HOME	XXX/Middleware
WL_HOME	XXX/Middleware
PRODUCT_HOME	directory where CCB-PS.zip is extracted Examples: Unix/Linux: PRODUCT_HOME=/slot/oracle/CCB-PS Windows: PRODUCT_HOME=D:\Oracle\CCB-PS

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 the Linux syntax. However, if you are installing on Windows, it should be referred to as: %PRODUCT_HOME%. Wherever \$PRODUCT_HOME is mentioned in this document please replace with %PRODUCT_HOME% for Windows.

Please note that on Linux only / works as path separator. If you are installing on Linux environment then please ensure that the command mentioned here have appropriate path separator.

The following values set environment variables used for executing installation scripts:

Unix / Linux:

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

Windows:

```
cd %WL_HOME%\wlserver_10.3\server\bin\
execute setWLSEnv.bat
```

The setWLSEnv.sh on Linux and setWLSEnv.bat on Windows is used to set the environment variables used for executing the installation scripts.

5. Modify the \$PRODUCT_HOME\config\deploy.properties file and ensure that the values are relevant to the server where the integration product is to be installed. Login to the WebLogic console to cross verify the values being entered for these properties, as the build fails due to inappropriate values. The following table lists the properties available in the deploy.properties file along with their usage. The default values are specified wherever applicable.

Do not delete the CCB-PS directory. This directory will be used as the download location for patches as they are released.

For a Windows installation, when updating any of the properties below, please add the "/" to the path. For example: C:/CCB-PS

Note: MultiDatasource names should be "CCBPS-SOADS", "CCBPS-CCBDS" and "CCBPS-PSDS" as these DS names are referred in respective composites.

Property	Description	Example
Server Installation Information		
SOA.AdminServer.hostname	Host name of the server where Admin Server is installed	adcxxx.abc.oracle.com
SOA.AdminServer.portnumber	Port Number Admin Server is listening to	7043
SOA.ManagedServer.servername	SOA Managed Server Name	soa_server1
SOA.AdminServer.servername	Admin Server name	AdminServer
SOA.AdminServer.domainname	SOA Domain name	soa_domain
SOA.ManagedServer.hostname	Host name of the server where SOA server is installed.	adcxxx.abc.oracle.com
SOA.ManagedServer.portnumber	Port Number SOA server is listening to	8043
SOA.AdminServer.username	User name used to log in to the WebLogic console	
SOA.AdminServer.password	Password used to log in to the WebLogic console	
SOA.ManagedServer.username	User name used to log in to the EM console	
SOA.ManagedServer.password	Password used to log in to the EM console	
middleware_home	Path on the server where middleware is installed	/slot/emsXXX/Middleware

Property	Description	Example
middleware_wls_home	Path on the server where WebLogic is installed.	/slot/emsXXX/ Middleware/wlserver_10.3
middleware_soa_home	Path on the server where SOA is installed.	/slot/emsXXX/oracle/Middleware/ Oracle_SOA1
JDBC Properties Section For SOA Database		
soa.db.hostname	Database hostname	adcXXXX.abc.oracle.com
soa.db.port	Database port number	1521
soa.db.sid	Database SID	xxxdev2
soa.db.adminuser	Database admin user name.	System
soa.db.adminpwd	Database admin password.	Manager
soa.db.user	user name used by CCB-PS application to access SOA database for CCB-PS Lookup tables etc	ccbpsuser
soa.db.pwd	ErrorHandling schema password	ccbpspwd
soa.db.multids	JDBC multi data source name for SOA data source	CCBPS-SOADS
soa.db.dsnamestlist	Data sources list for SOADS multi data source	CCBPS-SOADS1
multids.algorithmtype	The algorithm determines the connection request processing for the multi data source	Load-Balancing / Failover
ps.db.multids	JDBC multi data source name for PS data source	CCBPS-PSDS
ps.db.dsnamestlist	Data sources list for PSDS multi data source	CCBPS-PSDS1
ccb.db.multids	JDBC multi data source name for CCB data source	CCBPS-CCBDS
ccb.db.dsnamestlist	Data sources list for CCBDS multi data source	CCBPS-CCBDS1
SOA.mdsconfig.mdsdbh ostname	MDS repository host name	adcXXXX.abc.oracle.com
SOA.mdsconfig.mdsdbp ortnumber	MDS repository port number	1521
SOA.mdsconfig.mdsdbsi d	MDS repository's database SID	xxxdev2
SOA.mdsconfig.mdsdbu sername	MDS repository user name	DEV_MDS
SOA.mdsconfig.mdsdbu serpassword	MDS repository password	XXX_MDS
Client CCB Instance URL WITH PORT		
ccb.client.stag.instance	Points to the client CCB instance being used for integration in stage environment	xyz.us.oracle.com:9900
ccb.client.prod.instance	Points to the client CCB instance being used for integration in Production	abc.us.oracle.com:9900

Also note the following:

- \$PRODUCT_HOME/Install/util/ant folder contains all the ant build scripts
- \$PRODUCT_HOME/bin/InstallBuild.xml is used for installing CCB-PS integration code
- \$PRODUCT_HOME/bin/UnInstallBuild.xml is used for uninstalling CCB-PS integration code

- \$PRODUCT_HOME/bin/DeployUndeployUtility.xml is used for deploying/undeploying individual composite/MDS folder and restarting managed server
- Installation/uninstallation process may take considerable amount of time. Please be patient during installation/uninstallation.

Installing the Integration

Run the Installation Script

After setting the environment variables:

1. Open a command prompt and execute the command:
cd **CCB-PS/bin**
2. Execute: **ant -f InstallBuild.xml – DInstallProperties=\$PRODUCT_HOME/config/deploy.properties** to invoke the script. This completes the **end to end CCB-PS integration** installation by performing the following tasks:

- Creates database user / tables required for the integration at the SOA database.

Table Name	Description
INTEGRATION_LOOKUP_TABLE	A lookup table to store all the configuration parameters used by the BPEL processes. This table is also used to configure the e-mail addresses to be notified if errors occur. This table is seeded with data at the time of integration product installation.
INTEGRATION_PROCESS_ACTIVATION	This table is used to activate or de-activate various integration points. During the installation process this table is seeded with data. By default, it is populated to activate all the available integration points in the product.
INTEGRATION_ERROR_STORE	The table is used to hold the information regarding the errors encountered during integration transactions. A record is inserted for each error encountered by the BPEL processes. The mail notification process, MailNotification, accesses this table to get the error information needed to construct the notification email. This table is delivered with no data.

- Creates JDBC DataSource for the SOA Database hosting tables mentioned above.
- Creates JDBC DataSource for the CCB database the integration should connect to.
- Creates JDBC DataSource for the PS database the integration should connect to.
- Creates outbound connection pool instance for Database used by CCB / PS and SOA DB by updating DBAdapter.rar file.
- Creates JDBC Multi DataSource for the SOA Database.
- Creates JDBC Multi DataSource for the CCB database.
- Creates JDBC Multi DataSource for the PS database.

Note: Add data source list comma separated in deploy.properties

- Updates MDS repository with all the artifacts.
- Creates the application partition where the composites are going to be deployed. For example: CCB-PS
- Compiles / Packages and then deploy all the composites to the enterprise manager.
- Attaches “oracle/Utilities_wss_http_token_service_policy_OPT_ON” and “oracle/Utilities_wss_http_token_client_policy_OPT_ON” local security policies for all the services and references for CCB-PS composites.

Post Installation Checklist

After running the installation scripts you must complete the following tasks to finalize the installation.

- Restart WebLogic Admin server
- Restart the SOA server

Re-starting the servers activates the processes that require a restart after installation and ensures that the installation of all artifacts is successful.

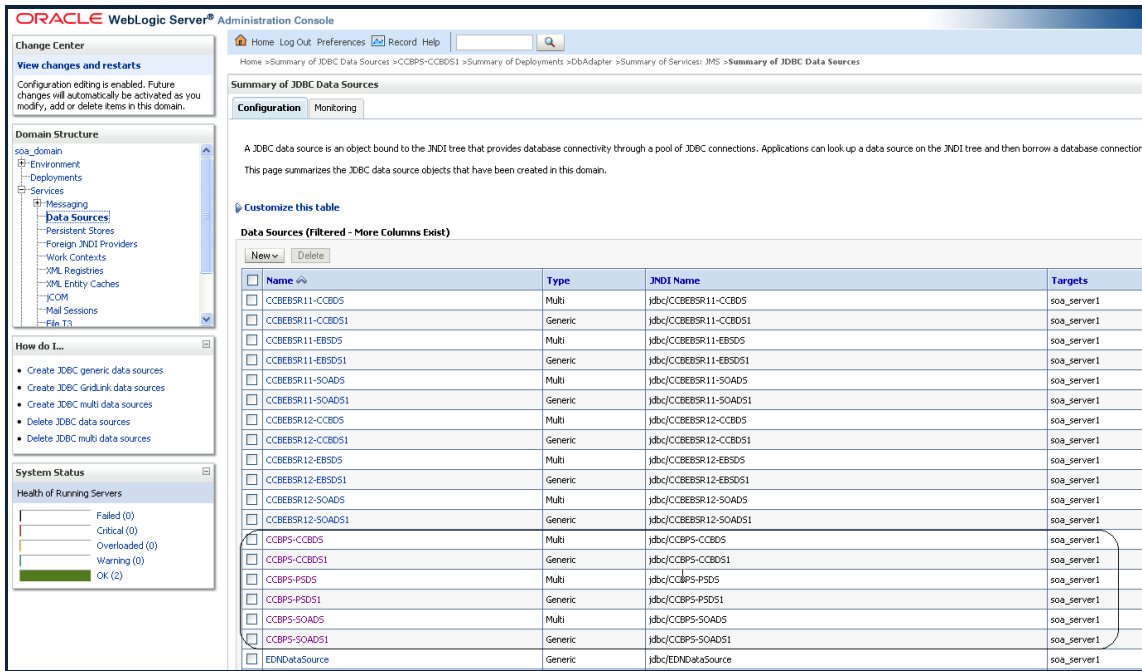
Review the logs under
\$WL_HOME/user_projects/domains/soa_domain/servers/soa_server1/logs to check for deployment errors

- Verify that all JDBC resources were created
- Verify composites in the Enterprise Manager

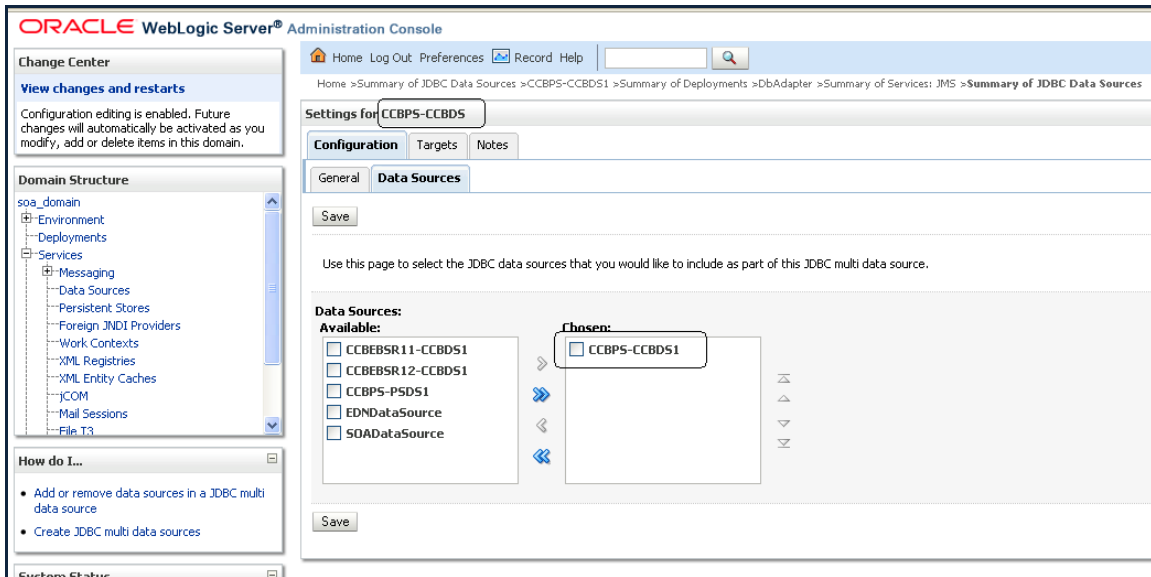
Verify JDBC Configuration

Datasource

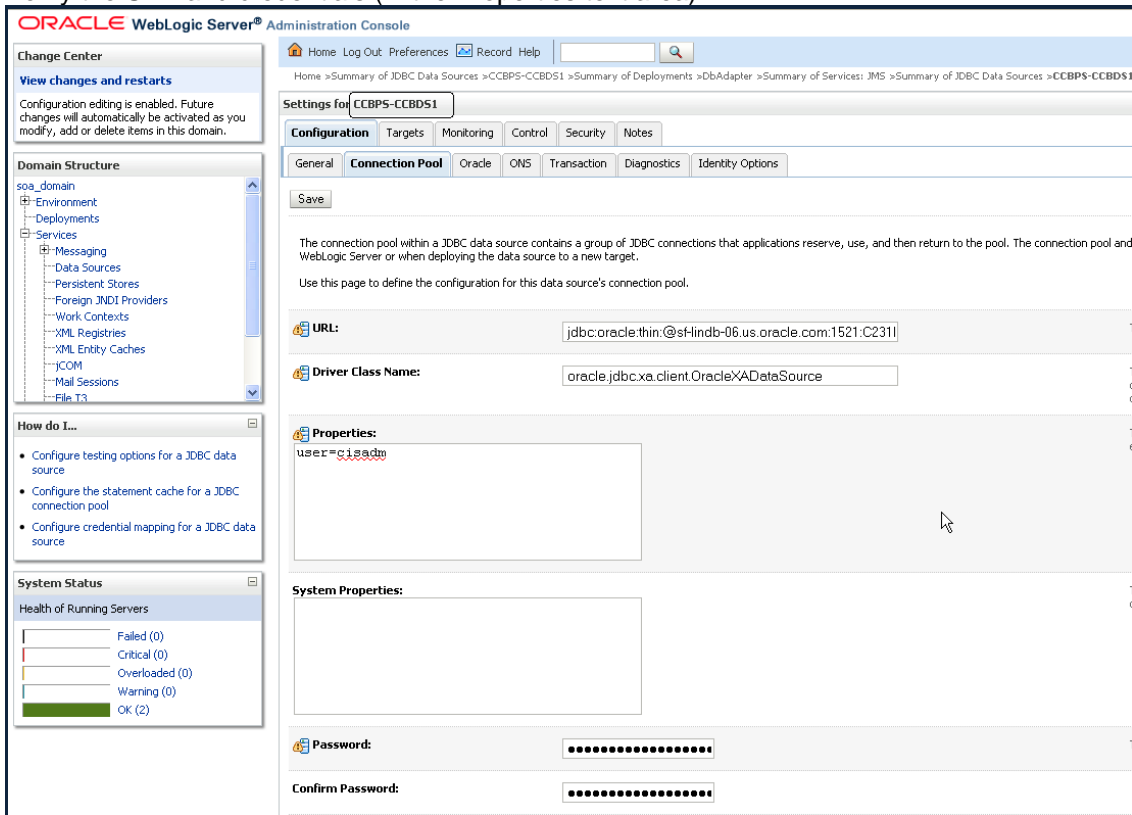
1. Ensure that the required datasources were created on the server:
 - CCBPS-CCBDS1 – Data source used for establishing connection with CCB application database
 - CCBPS-PSDS1 – Data source used for establishing connection with the Oracle PeopleSoft Financials for General Ledger and Accounts Payable application database
 - CCBPS-SOADS1 – Data source used for establishing connection with SOA database
 - CCBPS-CCBDS – Multi Data source contains list of CCBDS data sources
 - CCBPS-PSDS – Multi Data source contains list of PSDS data sources
 - CCBPS-SOADS – Multi Data source contains list of SOADS data sources
2. Open the WebLogic Admin Console and select **Services → Data Sources**.
Verify that the Multi data sources and data sources are created as shown below:



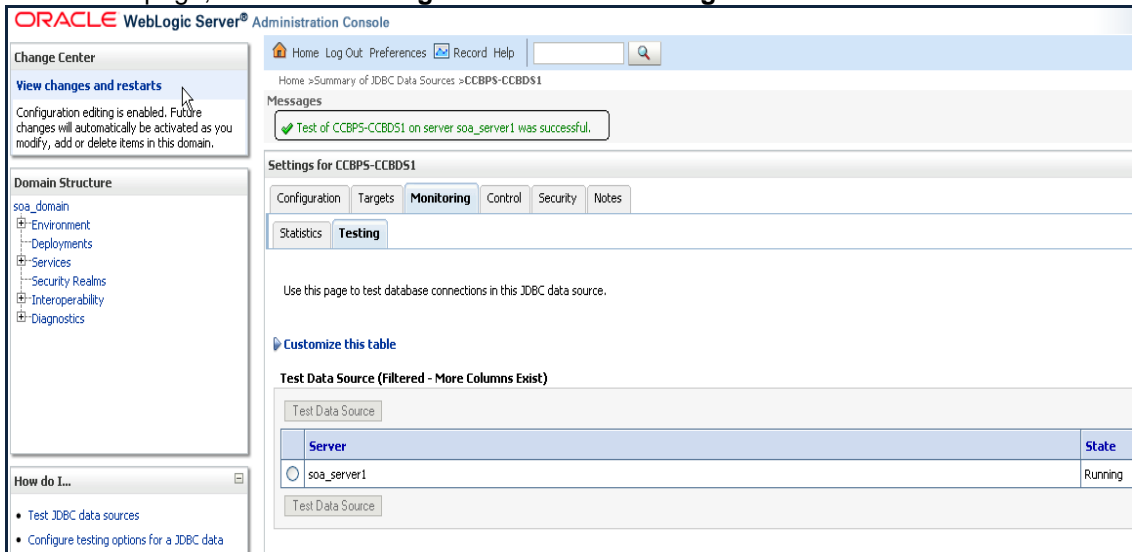
3. Verify whether all the data sources are included under their respective multi data source.



- Verify whether the URL settings are correctly pointed to the database.
 Select **Services** → **Data Sources**
 In the main page, select the **Configuration** tab then the **Connection Pool** sub tab.
 Verify the URL and credentials (in the Properties text area).



- Test the database for the correct configurations.
 Select **Services** → **Data Sources**.
 In the main page, select **Monitoring** then select the **Testing** sub tab.



Database Outbound Connection Pool

1. Ensure that following three connection pools are created on the server:
 - eis/DB/CCBPS-CCBDS for CCB database connection pool.
 - eis/DB/CCBPS-PSDS for PS database connection pool
 - eis/DB/CCBPS-SOADS for SOA 11g database connection pool
2. Select Deployments.
3. Select the **DBAdapter** then select the **Configuration** tab.
4. Select the **Outbound Connection Pools** tab under the Configuration tab.
5. Expand **javax.resource.cci.ConnectionFactory**

The screenshot shows the Oracle WebLogic Server Administration Console interface. The main content area displays the 'Settings for DbAdapter' configuration page, specifically the 'Outbound Connection Pools' tab. A table titled 'Outbound Connection Pool Configuration Table' is visible, listing various connection pool groups and instances. The table has two columns: 'Groups and Instances' and 'Connection Factory Interface'. The instances listed include:

Groups and Instances	Connection Factory Interface
javax.resource.cci.ConnectionFactory	javax.resource.cci.ConnectionFactory
eis/DB/CCBESR11-CCBDS	javax.resource.cci.ConnectionFactory
eis/DB/CCBESR11-EBSDS	javax.resource.cci.ConnectionFactory
eis/DB/CCBESR11-SOADS	javax.resource.cci.ConnectionFactory
eis/DB/CCBESR12-CCBDS	javax.resource.cci.ConnectionFactory
eis/DB/CCBESR12-EBSDS	javax.resource.cci.ConnectionFactory
eis/DB/CCBESR12-SOADS	javax.resource.cci.ConnectionFactory
eis/DB/CCBPS-CCBDS	javax.resource.cci.ConnectionFactory
eis/DB/CCBPS-PSDS	javax.resource.cci.ConnectionFactory
eis/DB/CCBPS-SOADS	javax.resource.cci.ConnectionFactory
eis/DB/SOADemo	javax.resource.cci.ConnectionFactory

Verify Composites in Enterprise Manager

Verify that the CCB-PS partition was created with all the composites deployed.

1. Login to the Enterprise Manager.
2. Expand **SOA** → **soa-infra** → CCB-PS partition.
3. Verify that all the composites are deployed and in an active state.

Configure the Edge Applications

Configure Oracle Utilities Customer Care and Billing and Oracle PeopleSoft Financials for General Ledger and Accounts Payable installation according to the guidelines in the Implementation Guide for this integration package.

Deploying/Undeploying Individual Composites

This section describes how to deploy/undeploy individual composites for incremental builds or patches.

Un-deploy the Composite

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 command:

- a. In Linux:

```
cd $PRODUCT_HOME/bin
```

- b. In Windows:

```
cd %PRODUCT_HOME%\bin
```

2. Execute:

- a. In Windows:

```
ant -f %PRODUCT_HOME%/Install/util/ant/DeployUndeployUtility.xml -  
DInstallProperties=%PRODUCT_HOME%/config/deploy.properties  
UnDeployComposite
```

- b. In Linux:

```
ant -f $PRODUCT_HOME/Install/util/ant/DeployUndeployUtility.xml -  
DInstallProperties=$PRODUCT_HOME/config/deploy.properties  
UnDeployComposite
```

3. Validate the following parameters. To use the default value, press Enter. Default values are picked up from InstallProperties file that you specified as part of Ant command above.

Note: You may choose to provide a different value compared to the default and press Enter.

- a. SOA Server Hostname - Hostname of server hosting SOA server
- b. SOA Server Portnumber - Portnumber of server hosting SOA server
- c. SOA Server Username - Username to connect to SOA server
- d. SOA Server Password - Password to connect to SOA server
- e. Composite Name - Name of composite which needs to be undeployed to SOA server.
There is no default value for this parameter
- f. Composite folder location - Folder name should be absolute path starting
<PRODUCT_HOME>/services/industry/Utilities/<EnterpriseBusinessFlow/utility>

For e.g. if you are planning to undeploy composite from
<PRODUCT_HOME>/services/industry/Utilities/EnterpriseBusinessFlow then pass
<PRODUCT_HOME>/services/industry/Utilities/EnterpriseBusinessFlow for this property.

Default value is
%PRODUCT_HOME%/services/industry/Utilities/EnterpriseBusinessFlow, as most of the business specific composites reside in this folder.

- g. Partition Name - This is the SOA partition name to which this composite should be undeployed.
4. Enter composite name that you wish to undeploy from the partition.

Deploying Individual Composites

1. Open a command prompt and execute the command: `cd $PRODUCT_HOME\bin`
2. Execute:
 - a. In Windows:-

```
ant -f %PRODUCT_HOME%/Install/util/ant/DeployUndeployUtility.xml -
DInstallProperties=%PRODUCT_HOME%/config/deploy.properties
DeployComposite
```
 - b. In Linux:

```
ant -f $PRODUCT_HOME/Install/util/ant/DeployUndeployUtility.xml -
DInstallProperties=$PRODUCT_HOME/config/deploy.properties
DeployComposite
```
3. Validate the following parameters. To use the default value, press Enter. Default values are picked up from InstallProperties file that you specified as part of Ant command above.

Note: You may choose to provide a different value compared to the default and press Enter.

- a. SOA Server Hostname - Hostname of server hosting SOA server
SOA Server Portnumber - Portnumber of server hosting SOA server
SOA Server Username - Username to connect to SOA server
SOA Server Password - Password to connect to SOA server
- b. Admin Server Hostname - Hostname of Admin server
- c. Admin Server Portnumber - Portnumber of Admin server
- d. Admin Server Username - Username to connect to Admin server
- e. Admin Server Password - Password to connect to Admin server
- f. Composite Name - Name of composite which needs to be deployed to SOA server. There is no default value for this parameter
- g. Composite folder location - Folder name should be absolute path starting %PRODUCT_HOME%/services/industry/Utilities/<EBF/utility>. Example if you are planning to deploy composite from %PRODUCT_HOME%/services/industry/Utilities/EBF then pass %PRODUCT_HOME%/services/industry/Utilities/EBF for this property. Default value for this property is %PRODUCT_HOME%/services/industry/Utilities/EBF, as most of business specific composite reside in this folder.
- h. Partition Name - This is the SOA partition name to which this composite should be deployed.

4. Enter the composite name that you wish to deploy. For .g. PSCCBAPDataRequestScheduler
This deploys the composite name specified.

Deploying/Undeploying MDS Folder

This section describes how to deploy/undeploy individual MDS folder for incremental builds or patches.

Un-deploy MDS folder

To undeploy a particular folder from MDS, run below command and pass the folder name which needs to be undeployed.

1. Open a command prompt and execute the command:
 - a. In Linux:

```
cd $PRODUCT_HOME/bin
```
 - b. In Windows:

```
cd %PRODUCT_HOME%\bin
```
2. In order to undeploy a folder under \$PRODUCT_HOME/MDS-Artifacts from MDS repository, run below command -
 - a. In Windows:

```
ant -f %PRODUCT_HOME%/Install/util/ant/DeployUndeployUtility.xml -  
DInstallProperties=%PRODUCT_HOME%/config/deploy.properties  
UnDeployMDS
```
 - b. In Linux:

```
ant -f $PRODUCT_HOME/Install/util/ant/DeployUndeployUtility.xml -  
DInstallProperties=$PRODUCT_HOME/config/deploy.properties UnDeployMDS
```
3. Validate the following parameters. To use the default value, press Enter. Default values are picked up from InstallProperties file that you specified as part of Ant command above.

Note: You may choose to provide a different value compared to the default and press Enter.

 - a. SOA Server Hostname - Hostname of server hosting SOA server
 - b. SOA Server Portnumber - Portnumber of server hosting SOA server,
 - c. SOA Server Username - Username to connect to SOA server
 - d. SOA Server Password - Password to connect to SOA server
 - e. MDS Folder Name - Name of folder which needs to be undeployed from MDS repository. The folder name should be relative path inside %PRODUCT_HOME%/MDS-Artifacts, i.e. it should start with CCB-PS. Example, if you are planning to undeploy %PRODUCT_HOME%/MDS-Artifacts/CCB-PS/MetaData/ApplicationObjectLibrary then pass CCB-PS/MetaData/ApplicationObjectLibrary for this property.

Note - Only folder level undeployment is possible using this command. File level undeployment is not supported using this command.

Deploying MDS Folder

1. Open a command prompt and execute the command: `cd $PRODUCT_HOME\bin`
2. Execute:

- a. Windows -

```
ant -f %PRODUCT_HOME%/Install/util/ant/DeployUndeployUtility.xml -
DInstallProperties=%PRODUCT_HOME%/config/deploy.properties DeployMDS
```

- b. Linux -

```
ant -f $PRODUCT_HOME/Install/util/ant/DeployUndeployUtility.xml -
DInstallProperties=$PRODUCT_HOME/config/deploy.properties DeployMDS
```

3. Validate the following parameters. To use the default value, press Enter. Default values are picked up from InstallProperties file that you specified as part of Ant command above.

Note: You may choose to provide a different value compared to the default and press Enter.

- a. SOA Server Hostname - Hostname of server hosting SOA server
SOA Server Portnumber - Portnumber of server hosting SOA server
SOA Server Username - Username to connect to SOA server command
- b. SOA Server Password - Password to connect to SOA server
- c. MDS Folder Name - Name of folder which needs to be deployed to MDS repository. The folder name should be relative path inside %PRODUCT_HOME%/MDS-Artifacts, i.e., it should start with CCB-PS. Example if you are planning to deploy %PRODUCT_HOME%/MDS-Artifacts/CCB-PS/MetaData/ApplicationObjectLibrary then pass CCB-PS/MetaData/ApplicationObjectLibrary for this property.
- d. It is recommended to re-deploy the composite which are using the MDS Artifacts modified by the steps mentioned above so that the changes done to MDS Artifacts are used by the composites.

Note - Only folder level deployment is possible using this command. File level deployment is not supported using this command.

Uninstalling the Integration

If you need to uninstall the integration, perform the following steps:

1. Restart the SOA server and the WebLogic Admin server.
2. Set environment variables as mentioned above in the Installation steps.
3. Ensure that user soa.db.user is disconnected from the database.

Run the following query on the database as sysdba user. (This should not return any rows)

```
select username, sid, serial# from v$session where username='ccbpsuser';
```

4. `cd $PRODUCT_HOME\Install\util\ant`

5. Run the script:

```
ant -f UnInstallBuild.xml -
```

```
DInstallProperties=$PRODUCT_HOME/config/deploy.properties
```

This command deletes **everything related to CCB-PS from the server** by completing the following tasks:

- Undeploys all composites from the Enterprise Manager partition
- Deletes the partition
- Undeploys MDS artifacts
- Undeploys DB Outbound Connection Pool
- Deletes the CCBPS related database objects created in SOA database and deletes Multi data sources and data sources

6. Restart the WebLogic server and the SOA server again.

After a successful uninstall, all JDBC resources and CCB-PS partitions created during install are deleted.

Restarting SOA Managed Server

This section describes how to restart WebLogic managed server hosting SOA suite.

1. Open a command prompt and execute the command: `cd $PRODUCT_HOME\bin`
2. Execute:

- a. In Windows -

```
ant -f %PRODUCT_HOME%\Install\util\ant\DeployUndeployUtility.xml -  
DInstallProperties=%PRODUCT_HOME%\config\deploy.properties  
RestartManagedServer
```

- b. In Linux -

```
ant -f $PRODUCT_HOME/Install/util/ant/DeployUndeployUtility.xml -  
DInstallProperties=$PRODUCT_HOME/config/deploy.properties  
RestartManagedServer
```

3. Validate the following parameters. To use the default value, press Enter. Default values are picked up from InstallProperties file that you specified as part of Ant command above.

Note: You may choose to provide a different value compared to the default and press Enter.

- a. Admin Server Hostname - Hostname of server hosting Admin server
Admin Server Portnumber - Portnumber of server hosting Admin server
Admin Server Username - Username to connect to Admin server
- b. Admin Server Password - Password to connect to Admin server
- c. Managed server Name which needs to be started - Name of managed server which you are planning to restart.

Installation Commands

The table below lists the possible commands for the install scripts.

Command	Description	Restart Required?
ant -f InstallBuild.xml - DInstallProperties=\$PRODUCT_HOME/config/deploy.properties	Install CCB-PS Integration from scratch.	Yes
ant -f \$PRODUCT_HOME/Install/util/ant/DeployUndeployUtility.xml - DInstallProperties=\$PRODUCT_HOME/config/deploy.properties UnDeployComposite	This command is used while undeploying a single composite from the server. This prompts for the name of the composite to be undeployed. Name of the composite is nothing but name of the folder under PRODUCT_HOME/services/industry/Utilities/EnterpriseBusinessFlow for example : PSCCBAPDataRequestScheduler	No
ant -f \$PRODUCT_HOME/Install/util/ant/DeployUndeployUtility.xml - DInstallProperties=\$PRODUCT_HOME/config/deploy.properties UnDeployMDS	MDS Folder level undeployment is done using this command.	Yes
ant -f \$PRODUCT_HOME/Install/util/ant/DeployUndeployUtility.xml - DInstallProperties=\$PRODUCT_HOME/config/deploy.properties DeployMDS	MDS Folder level deployment is done using this command	Yes
ant -f \$PRODUCT_HOME/Install/util/ant/DeployUndeployUtility.xml - DInstallProperties=\$PRODUCT_HOME/config/deploy.properties DeployComposite	This command is used while deploying a single composite to the server. This prompts for the name of the composite to be deployed. Name of the composite is the name of the folder under PRODUCT_HOME/services/industry/Utilities/EnterpriseBusinessFlow for example : PSCCBAPDataRequestScheduler	No
ant -f \$PRODUCT_HOME/Install/util/ant/DeployUndeployUtility.xml - DInstallProperties=\$PRODUCT_HOME/config/deploy.properties RestartManagedServer	Restarts the SOA managed server	

Command	Description	Restart Required?
ant -f UnInstallBuild.xml -DInstallProperties=\$PRODUCT_HOME/config/deploy.properties	Uninstall CCB-PS Integration	Yes