**Oracle Order to Activate Integration Pack for Siebel CRM and Oracle Communications Order and Service Management**

2.5: Installation Guide Addendum

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# Contents

# Installing Comms Order to Activate: Siebel CRM - OSM PIP

This guide provides an overview of software requirements for Comms Order to Activate: Siebel CRM - OSM PIP and discusses how to:

- Perform pre-installation configurations.

- Install Comms Order to Activate: Siebel CRM - OSM PIP.

- Perform post-installation configurations.

You need to install Foundation Pack before you install Comms Order to Activate: Siebel CRM - OSM PIP. Download the latest *Oracle Application Integration Architecture 2.5: Installation and Upgrade Guide* from My Oracle Support and install Foundation Pack following the instructions in the guide.

## Software Requirements for the Comms Order to Activate: Siebel CRM - OSM PIP

This section details the software requirements for Comms Order to Activate: Siebel CRM - OSM PIP. You need to fulfill the software requirements of Foundation Pack 2.5 before you install Comms Order to Activate: Siebel CRM - OSM PIP.

In addition to Foundation Pack software requirements, the Comms Order to Activate: Siebel CRM - OSM PIP requires:

- Siebel 8.1.1.3 FP (patch 9882361) with ACR 474.

- OSM 7.0.1

## Performing Pre-installation Configurations

**Important:** If you are installing AIA 2.5 Comms Order to Bill: Siebel CRM - BRM PIP along with Comms Order to Activate: Siebel CRM - OSM PIP in the same SOA Suite instance, ensure that you have installed the AIA 2.5 Comms Order to Bill: Siebel CRM - BRM PIP before installing the Comms Order to Activate: Siebel CRM - OSM PIP.

If you are installing this PIP on Microsoft Windows platform, ensure that "USERS" tablespace exists in the AIA database. You need to create one if you do not find one.

To create a tablespace with the name "USERS" in the AIA database run the Oracle database **create tablespace** command.

> Sample command to create the tablespace looks `create tablespace users datafile '[your file name]' size [file size]`

For more details on creating tablespace refer to Oracle DBA guide.

# Installing Comms Order to Activate: Siebel CRM - OSM PIP

The section discusses the installation process of Comms Order to Activate: Siebel CRM - OSM PIP.

## To install Comms Order to Activate: Siebel CRM - OSM PIP

1. Go to the <AIA_HOME>, where Foundation Pack is installed.

2. Unzip the package content directly under the <AIA_HOME> replacing the existing content.

3. Navigate to directory <AIA_HOME>/PIPS/Industry/Communications/Setup/OrderToActivate/Install.

**Note:** If you want to redirect the output to a log then run the command **ant –f AskDeployProperties.xml** before you proceed with the next step. If you do not redirect, then you will see an on screen log once you finish providing information related Siebel CRM and OSM installations.

4. Follow the command line installation instructions for your platform.

| Platform | To launch the Oracle AIA Installer: |
|---|---|
| Linux x86<br><br>Solaris SPARC (64-bit)<br><br>IBM AIX Based Systems (64-bit)<br><br>HP-UX 11i (64 bit) | Edit deployOrderToActivatePIP.sh and replace @AIA_HOME@ with the actual path for AIA_HOME.<br><br>At the command line prompt, enter:<br>`. ./deployOrderToActivatePIP.sh` |
| Microsoft Windows (32-bit) | Edit deployOrderToActivatePIP.bat and replace @AIA_HOME@ with the actual path for AIA_HOME.<br><br>At the command line prompt, enter:<br>`deployOrderToActivatePIP.bat` |

**Note:** If you have installed any PIP that required Siebel CRM, the information below is skipped and is picked from <AIA_HOME>/config/deploy.properties file. If not provide the following information when prompted.

5. Provide the following information related to your Siebel CRM installation when prompted.

    a. Siebel HTTP Hostname – Siebel HTTP host for Siebel inbound web service calls

    b. Siebel HTTP Port – HTTP port for the Siebel HTTP host

    c. Siebel EIA Application User – User for Siebel EIA for making inbound webservice calls

    d. Siebel EAI Application Password – the password the Siebel EAI user

**e.** Siebel Enterprise Server Name – the EnterpriseServerName that Siebel stamps on the outbound message from Siebel.

> **Note:** If you have installed any PIP that required Siebel OSM, the information below is skipped and is picked from <AIA_HOME>/config/deploy.properties file. If not provide the following information when prompted.

6. Provide the following information related to your OSM installation when prompted.

   **a.** OSM CFS Admin Username – username for webservice call for OSM Central Fulfillment System

   **b.** OSM CFS Admin Password – Password for webservice call for OSM Central Fulfillment System

   **c.** OSM Provisioning Admin Username – username for webservice call for OSM Provisioning system

   **d.** OSM Provisioning Admin Password. – Password for webservice call for OSM Provisioning system

7. Review the on screen log for any failures or errors.

8. If you see error pertaining to failed deployment of any of the following ESB services, apply the patch 9796481(COMMS 2.5IPS1: ORDER TO ACTIVATE ROLLUP 1) and perfrom the steps again from step 3.

   - CommunicationsFulfillmentOrderEBSV1

   - CommunicationsProvisioningOrderEBSV1

   - CommunicationsTroubleTicketResponseEBSV1

   - CommunicationsBillingResponseEBSV1

# Performing Post-Installation Configurations

This section discusses the following post installation configuration for Comms Order to Activate: Siebel CRM - OSM PIP.

- Suppressing auto-retry and preventing multiple error notifications and trouble tickets.

- Making Distributed Transaction (XA) Related Changes.

- Enabling the global JNDI for the OC4J container for enabling local ESB to BPEL invocation.

Before you perform the post-install configurations apply the following patches:

- AIA Foundation Pack patch 9496941 to address the changes in Enterprise Business Ojbects.

- The latest roll-up patches for your PIPs located in My Oracle Support.

## Suppressing Auto-Retry and Preventing Multiple Error Notifications and Trouble Tickets

This step is necessary to ensure that an transaction does not get auto tried using Database or SOA's inbuilt auto retry mechanism. Relying on Database or SOA's inbuild retry would cause undesirable effect on AIA flows and end to end transactionlity.

To suppress auto-retry and prevent multiple error notifications and trouble tickets:

1.  Stop **opmn** server.

2.  Change the value of property **retry-count** in the *$ORACLE_HOME/j2ee/{oc4j_instance name}/config/transaction-manager.xml* file from 4 to 0.

    <commit-coordinator retry-count="4"> to <commit-coordinator retry-count="0">

3.  Navigate to $ORACLE_HOME /j2ee/oc4j_soa/application-deployments/esb-dt

    Take a backup of orion-application.xml and replace the following parameters in the file with the following values.

    ```
    <property name="InboundRetryCount" value="0" />
    <property name="InboundRetryInterval" value="0" />
    <property name="InboundRetryEnabled" value="false" />
    <property name="OutboundRetryCount" value="0" />
    <property name="OutboundRetryInterval" value="0" />
    <property name="OutboundRetryEnabled" value="false" />
    ```

4.  Navigate to $ORACLE_HOME /j2ee/oc4j_soa/application-deployments/esb-rt

    Take a backup of orion-application.xml and replace the following parameters in the file with the following values.

    ```
    <property name="InboundRetryCount" value="0" />
    <property name="InboundRetryInterval" value="0" />
    <property name="InboundRetryEnabled" value="false" />
    <property name="OutboundRetryCount" value="0" />
    <property name="OutboundRetryInterval" value="0" />
    <property name="OutboundRetryEnabled" value="false" />
    ```

5.  Navigate to $ORACLE_HOME/integration/esb/config and open the esb_config.ini file.

    Take a backup of the original file and replace the following parameters in the file with the following values.

    ```
    <property name="InboundRetryCount" value="0" />
    <property name="InboundRetryInterval" value="0" />
    <property name="InboundRetryEnabled" value="false" />
    <property name="OutboundRetryCount" value="0" />
    <property name="OutboundRetryInterval" value="0" />
    <property name="OutboundRetryEnabled" value="false" />
    ```

6.  Add the following properties in the esb_config.ini file.

    #ESBSequencer

    EnableResequencer = true

    ResequencerWorkerThreadPoolSize = 5

    ResequencerLockerThreadSleep = 1000

    ResequencerMaxRowsRetrieved = 100

7.  Start the **opmn** server.

8.  Change auditLevel from *development* to *production* in **BPEL Console**, **Configurations** for better performance of the BPEL engine.

9.  The property **dspMaxRequestDepth** in BPEL configurations page should be set to a higher value. For example *5000*.


## Making Distributed Transaction (XA) Related Changes

1.  Open <**SOA_HOME**>/j2ee/<**oc4j_soa**>/config/data-sources.xml.

2.  Look for the entries **BPELPM_CONNECTION_POOL**, **ESBAQJMSPool**, **ESBPool** and **BRMConnectionPool**.

3.  Change the factory-class from "oracle.jdbc.pool.OracleDataSource" to "oracle.jdbc.xa.client.OracleXADataSource".

    The entries should looks as below

```
  <connection-pool name="BPELPM_CONNECTION_POOL">
      <connection-factory factory-
class="oracle.jdbc.xa.client.OracleXADataSource" ..../>
      ...
   </connection-pool>
   <connection-pool name="ESBAQJMSPool">
      <connection-factory factory-
class="oracle.jdbc.xa.client.OracleXADataSource" ..../>
      ...
   </connection-pool>
  <connection-pool name="ESBPool">
    <connection-factory factory-
class="oracle.jdbc.xa.client.OracleXADataSource" ..../>
      ...
   </connection-pool>
   <connection-pool name="BRMConnectionPool">
      <connection-factory factory-
class="oracle.jdbc.xa.client.OracleXADataSource" ..../>
      ...
   </connection-pool>
```

4. Save and close the file.

5. For each of the database user, used in various XA connection pools (those using factory class "oracle.jdbc.xa.client.OracleXADataSource"), grandt select privileges on DBA_PENDING_TRANSACTIONS and execute privileges on the SYS.DBMS_SYSTEM package.

> For example, for the user "jmsuser" used by out of the box AIA connection pools or the BRM Database user used by BRMConnectionPool, grant select privileges on DBA_PENDING_TRANSACTIONS and execute privileges on the SYS.DBMS_SYSTEM package.

```
SQL> GRANT SELECT ON DBA_PENDING_TRANSACTIONS TO jmsuser;
SQL> GRANT EXECUTE ON SYS.DBMS_SYSTEM TO jmsuser;
```

## Enabling the Global JNDI for the OC4J Container for Enabling Local ESB to BPEL Invocation

To enable global JNDI for the OC4J container for enabling local ESB to BPEL invocation:

1. Open **$SOA_HOME/j2ee/oc4j_soa/config/server.xml**.

2. Add **global-jndi-lookup-enabled="true"** as shown below.

```
<?xml version="1.0"?>
<application-server  xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance"
xsi:noNamespaceSchemaLocation="http://xmlns.oracle.com/oracleas/sche
ma/application-server-10_1.xsd"
localhostIsAdmin="true"
application-directory="../applications"
check-for-updates="adminClientOnly"
deployment-directory="../application-deployments"
connector-directory="../connectors"
global-jndi-lookup-enabled="true"
schema-major-version="10" schema-minor-version="0" >
```

3. Restart SOA server.

4. Verify the installation using steps in the verifying Comms Order to Activate: Siebel CRM - OSM PIP Installation section.

## Creating XREF Tables

XREF tables do not get created when you install the PIP due to a security feature in 10.1.3.5. You need to manually create the XREF tables.

To create XREF tables:

1. Login to the server using your FTP client .

2. Navate to $AIA_HOME/PIPS/Industry/Communications/Setup/OrderToBill/Install

3. Open file XrefInstall.xml.

    a. Replace all the instances of string **OC4J_USERNAME** with **oc4j_username**.

    b. Replace all the instances of string **OC4J_PASSWORD** with **oc4j_password**.

4. Run the ant command to execute the file (for example ant -f XrefInstall.xml)

**Read** Oracle Order to Activate Integration Pack for Siebel CRM and Oracle Communications Order and Service Management 2.5 - Implementation Guide to complete PIP implementation.

# Verifying Comms Order to Activate: Siebel CRM - OSM PIP Installation

To verify the Comms Order to Activate: Siebel CRM - OSM PIPinstallation:

1. Verify Foundation Pack Installation following the steps in *Verifying Installation* chapter of *Oracle Application Integration Architecture 2.5: Installation and Upgrade Guide.*

2. Confirm that the Comms Order to Activate: Siebel CRM - OSM PIP components were successfully installed.

    a. Navigate to the BPEL Console, Dashboard. Verify that you can see the following Comms Order to Activate: Siebel CRM - OSM PIP BPEL processes:

CreateOrderFalloutNotificationOSMCFSCommsJMSProducer

CreateOrderFalloutNotificationOSMCFSCommsProvImpl

CreateTroubleTicketAIACommsReqImpl

CreateTroubleTicketRespOSMCFSCommsJMSProducer

CreateTroubleTicketSiebelCommsProvABCSImpl

ProcessFulfillmentOrderUpdateOSMCFSCommsJMSProducer

ProcessProvisioningOrderOSMPROVCommsJMSProducer

ProcessSalesOrderFulfillmentOSMCFSCommsJMSProducer

ProcessSalesOrderFulfillmentSiebelCommsReqABCSImpl

QueryClassificationListSiebelCommsProvABCSImpl

QueryProductClassAndAttributesSCECommsReqABCSImpl

QuerySpecificationListSiebelCommsProvABCSImpl

QuerySpecificationValueSetListSiebelCommsProvABCSImpl

UpdateSalesOrderSiebelCommsProvABCSImpl

UpdateTroubleTicketSiebelCommsProvABCSImpl

ProcessFOBillingAccountListRespOSMCFSCommsJMSProducer

ProcessFulfillmentOrderBillingResponseOSMCFSCommsJMSProducer

**b.** Navigate to the ESB Console, AIASystem. Verify that you can see the following Comms Order to Activate: Siebel CRM - OSM PIP ESB processes. For EBS services ensure that there are routing rules present for atleast one operation.

AIACOMOrderFalloutNotificationJMSConsumer_RS

AIACOMOrderFalloutNotificationJMSConsumer

AIAOrderFalloutJMSProducer

AIAOrderFalloutJMSConsumer_RS

AIAOrderFalloutJMSConsumer

OSM/ABCS/Consume_ProcessProvOrder_RS

OSM/ABCS/Consume_ProcessProvOrder

OSM/ABCS/ConsumeProvUpdate_RS

OSM/ABCS/ConsumeProvUpdate

OSM/ABCS/Consume_UPDSO_RS

OSM/ABCS/Consume_UPDSO

OSM/ABCS/CreateTroubleTicketOSMCFSCommsJMSConsumer_RS

OSM/ABCS/CreateTroubleTicketOSMCFSCommsJMSConsumer

OSM/ABCS/UpdateTroubleTicketOSMCFSCommsJMSConsumer_RS

OSM/ABCS/UpdateTroubleTicketOSMCFSCommsJMSConsumer

EBS/CommunicationsClassificationEBSV1

EBS/CommunicationsFulfillmentOrderEBSV1

EBS/CommuniQcationsProvisioningOrderEBSV1

EBS/CommunicationsSalesOrderEBSV2

EBS/CommunicationsSpecificationEBSV1

EBS/CommunicationsSpecificationValueSetEBSV1

EBS/CommunicationsTroubleTicketEBSV1

EBS/CommunicationsTroubleTicketResponseEBSV1

Siebel/ProcessSalesOrderFulfillmentSiebelCommsSequencer

Siebel/ProcessSalesOrderFulfillmentSiebelCommsJMSConsumer_RS

Siebel/ProcessSalesOrderFulfillmentSiebelCommsJMSConsumer

**c.** Connect to the AIA Database using "jmsuser" credential. Please ensure that following queues are present. (e.g. select * from user_queues)

AIA_SALESORDERJMSQ

AIA_CRTFO_IN_JMSQ

AIA_CRTBO_OUT_JMSQ

AIA_UPDBO_IN_JMSQ

AIA_CRTCUST_OUT_JMSQ

AIA_UPDCUST_IN_JMSQ

AIA_UPDSO_OUT_JMSQ

AIA_CRTFO_OUT_JMSQ

AIA_FOCFS_IN_JMSQ

AIA_FOPROV_OUT_JMSQ

AIA_FOPROV_IN_JMSQ

AIA_CRTTTREQ_JMSQ

AIA_UPDTTREQ_JMSQ

AIA_CRTTTRESP_JMSQ

AIA_FALLOUT_JMSQ

AIA_LFERROR_JMSQ

# Uninstalling Comms Order to Activate: Siebel CRM - OSM PIP

Oracle does not support individual PIP unilstall due to shared artifacts across multiple PIPs. As part of Foundation Pack uninstall, normally all the PIPs automatically gets uninstalled. But since this PIP has manual install, uninstallation need to happen manually too. Before uninstall of Foundation Pack, you can uninstall Order to Actiave PIP by following below steps.

1. Navigate to directory <AIA_HOME>/PIPS/Industry/Communications/Setup/OrderToActivate/Install

2. Follow the command line uninstalltion instructions for your platform.

| Platform | To launch the Oracle AIA Installer: |
|---|---|
| Linux x86<br><br>Solaris SPARC (64-bit)<br><br>IBM AIX Based Systems (64-bit)<br><br>HP-UX 11i (64 bit) | At the command line prompt, enter:<br>`. ./deployOrderToActivatePIP.sh –uninstall` |
| Microsoft Windows (32-bit) | At the command line prompt, enter:<br>`deployOrderToActivatePIP.bat –uninstall` |

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