

**Oracle® Business Approvals Connector
for Managers**

Configuration Guide

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Overview

This chapter includes the following topics:

- About the Oracle Business Approvals for Managers Configuration
- Prerequisites

About the Oracle Business Approvals Connector for Managers Configuration

This guide provides information about the Oracle Service-Oriented Architecture Suite configuration for Oracle Business Approvals Connector for Managers (hereafter referred to as the Connector).

This configuration is required to use Oracle Business Approvals for Managers (hereafter referred to as Managers), which is the corresponding Apple iPhone client application.

Information for End Users

In addition to following the instructions in this guide, a system administrator must supply configuration information to users of Managers. This information includes:

- Endpoint URL for BPEL server.

This URL provides the connection to the Oracle E-Business Suite application through Oracle SOA Suite.

- Enabled worklists.

You must inform users of the worklists, or approval types, that are enabled for the application. On the Apple iPhone, users must enable the worklists to which they have access. Using one of the domain value maps that Oracle provides, you associate worklists with users. See “Importing Domain Value Maps” in this guide.

Access to Analytical Reports from Oracle Business Intelligence Enterprise Edition Plus

Users can set up analytic reports in Oracle Business Intelligence Suite Enterprise Edition Plus (Oracle BI EE Plus) that can be accessed from Managers. This configuration is optional and is not required to use Managers.

See *Oracle Business Approvals for Managers User Guide* for information about this configuration.

Prerequisites

You must install the following prerequisites:

- Oracle SOA Suite 10.1.3.1
See Oracle Application Server Installation Guide 10g Release 3 (10.1.3.1.0) for details.
- Oracle SOA Suite to 10.1.3.3 Patch and higher
See Oracle Application Server Patch Set Notes 10g Release 3 (10.1.3) Patch Set 3 (10.1.3.3.0) for details.
- Oracle E-Business Suite release 12.0.4 and higher, including the appropriate ARU.

Configuring Oracle Business Approvals Connector for Managers

This chapter includes an architectural overview and the following topics:

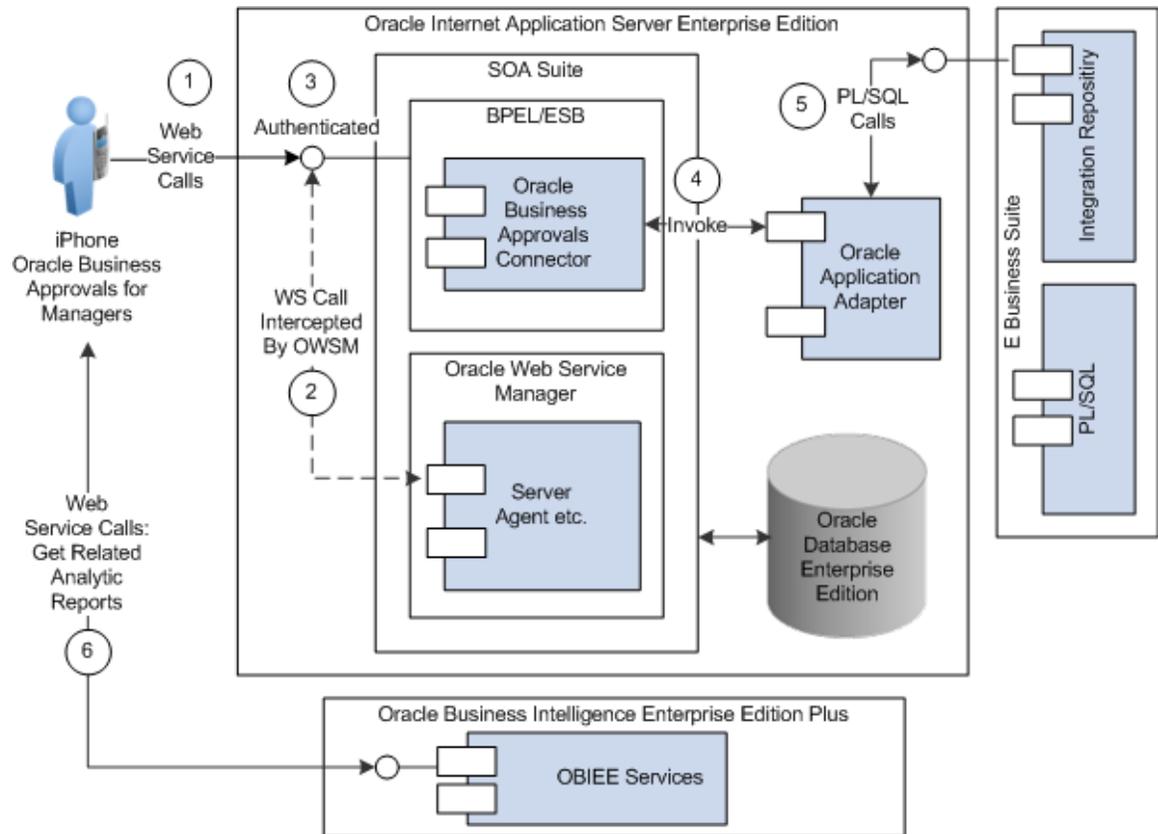
- Configuring Oracle Application Server Adapter
- Deploying Connector BPEL Flows
- Importing Domain Value Maps (DVMs)
- Testing Connector BPEL Flows

Note: Some topics in this chapter do not provide step-by-step instructions. Instead, they refer to other guides that provide the applicable information.

Architectural Overview

This diagram shows the interaction between the Managers application on the Apple iPhone and the servers that support the integration.

Configuring Oracle Business Approvals Connector for Managers



Interaction between Oracle Business Approvals Connector for Managers and Oracle SOA Suite

Oracle SOA Suite, running on the Oracle application server, handles the main worklist functionality and the subsequent back-end integration with Oracle EBS. In addition, if access to analytic reports is enabled in Managers, Oracle BI EE Plus handles the request for business intelligence data that supports each worklist item.

Configuring Oracle Application Server Adapter

The Oracle SOA Suite configuration for Managers requires configuring the Oracle Application Server Adapter. Instructions on how to configure this adapter are located in the following guide:

Oracle Application Server Adapter for Oracle Applications User's Guide 10g (10.1.3.1.0)

Important! When configuring the partner link, as described in the aforementioned guide, take note of this directory path:

eis/Apps/ebsr12

You must enter this directory path for the JNDI name.

Deploying Connector BPEL Flows

This section provides an overview and includes the following topics:

- Using an Ant Script to Deploy the Connector BPEL Flows
- Using JDeveloper to Deploy the Connector BPEL Flows

Overview

Oracle provides the following two sets of Connector BPEL flows to deploy to an Oracle BPEL Process Manager (BPEL PM) server:

- A foundation set of BPEL flows for use with all Oracle Business Approval applications.
- A set of application-specific BPEL flows for the Managers application.

You can use an ant script or JDeveloper to deploy the BPEL flows. Both methods are described in this section.

Using an Ant Script to Deploy the Connector BPEL Flows

You must install the following prerequisites before using an ant script.

Prerequisites

- Ant 1.6 or later version
- Oracle BPEL PM (or Oracle SOA Suite) 10.1.3.3 or later version for ant task libraries only
- Functioning Oracle BPEL PM (or Oracle SOA Suite) server 10.1.3.3 or later version

To use an ant script to deploy Connector BPEL flows:

1. In the root directory of the installation, open the AUBL.properties file and modify it as follows for your environment:

Note: This file is similar to the standard deployment properties file generated by JDeveloper when creating a new BPEL project.

- a. Set the `bpel.home` with a path to the `bpel` directory, for example:

```
\\Oracle\product\10.1.3.1\OracleAS_1\bpel
```

Configuring Oracle Business Approvals Connector for Managers

This path is only used to access the necessary ant tasks to successfully deploy the BPEL flows. This home does not need to be part of the target BPEL PM server.

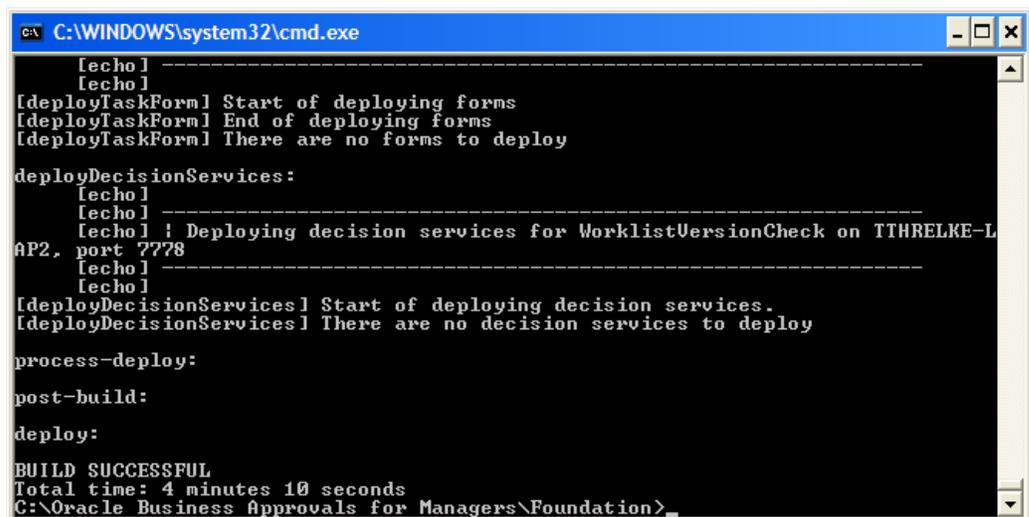
- b. Uncomment the 'domain' property if you are deploying to a domain other than the 'default' domain.
- c. Leave the 'rev' property commented out.
- d. Enter the admin user and password and the BPEL PM server hostname and port.
- e. Enter the opmn port of the BPEL server.
- f. Change the oc4jinstancename property if the target OC4J instance on your server has a name other than "home".
- g. Configure other properties if your installation is more complex.

For more information about these properties and deployment with ant, see "BPEL Process Deployment and Domain Management" in the *Oracle BPEL Process Manager Developer's Guide*.

2. Open a command prompt in the following directories and execute the ant command:

/Foundation

/Approvals



```
C:\WINDOWS\system32\cmd.exe
[echo] -----
[echo]
[deployTaskForm] Start of deploying forms
[deployTaskForm] End of deploying forms
[deployTaskForm] There are no forms to deploy

deployDecisionServices:
[echo] -----
[echo]
[echo] ! Deploying decision services for WorklistVersionCheck on TTHRELKE-L
AP2, port 7778
[echo] -----
[echo]
[deployDecisionServices] Start of deploying decision services.
[deployDecisionServices] There are no decision services to deploy

process-deploy:
post-build:
deploy:
BUILD SUCCESSFUL
Total time: 4 minutes 10 seconds
C:\Oracle Business Approvals for Managers\Foundation>
```

Using JDeveloper to Deploy the Connector BPEL Flows

These instructions assume you know how to administer BPEL flows with JDeveloper.

See “Overview of BPEL Project Creation and Oracle JDeveloper” in the *Oracle BPEL Process Manager Developer’s Guide* for more information.

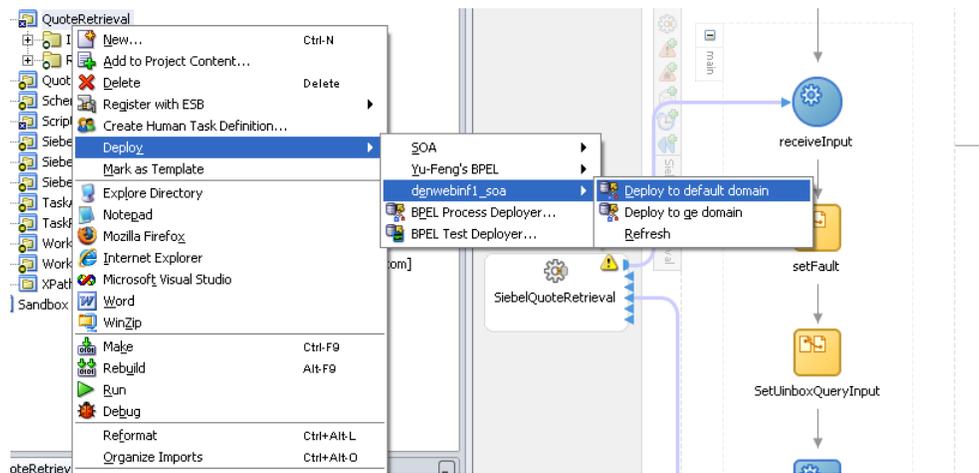
To use JDeveloper to deploy Connector BPEL flows:

1. Create a BPEL project using the source of one of the BPEL flows, for example:

`<install root>/foundation/WorklistRetrieval`

You can do this by using the import tool on the JDeveloper File menu or by manually creating a new project and copying the BPEL flows to the new project. The latter choice is sometimes more reliable, although less convenient.

2. Create an integration connection to your BPEL PM server.
See the Connection Navigator on the View menu.
3. Right-click the BPEL project in the Application Navigator.
4. Select the server from the Deploy menu.



Deploy menu

Importing Domain Value Maps

This section includes an overview and the following topics:

- Importing DVMs for the Connector

- Importing Values into an Existing DVM

Overview

Oracle provides the following DVMs that you must import for this configuration:

- **AUBI_LOOKUP.xml.**
Maps the codes used by the Connector to the back-end Oracle EBS system.
- **AUBI_SERVICE_PROVIDER.xml.**
Identifies, by functionality, the logical back-end enterprise information system to use. This allows the Connector to be hosted on one Oracle SOA Suite server.
- **AUBI_USER_ROLE_LOOKUP.xml**
Override the default responsibility (role) for a given user when interacting with Oracle EBS.
- **AUBI_CONF.xml**
The DVM includes a MaxRecord parameter that is used to limit the total records returned to the Apple iPhone. The default setting for this parameter is 50. You can increase or decrease this number as needed. Because there is limited space for applications on the Apple iPhone, this setting can help reduce the limited space available on the Apple iPhone by limiting the number of records returned.

DVMs are global for the entire BPEL PM server. If you deploy the BPEL flows to multiple domains on the same BPEL PM Server, be aware that these settings will be used by all the flows. However, these settings should be static over time and can be safely shared between domains.

Importing DVMs for the Connector

When installing the Oracle Business Approvals Connector for Managers, you might have already imported some of the DVMs. This section describes how to import DVM maps that you did not import during the installation. If the maps were already imported, skip this section and proceed to the “Importing the Values into and Existing DVM” section.

To import the DVMs:

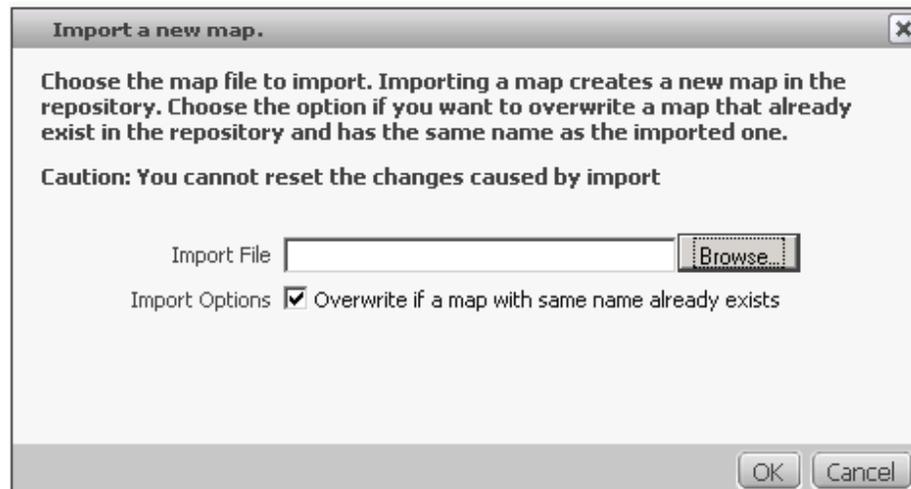
1. Log in to Oracle Enterprise Manager and access the ESB Control.

2. At the top of the ESB Control, click the Map icon.
3. On ESB Control, click the Create drop-down menu and select Import a new map.



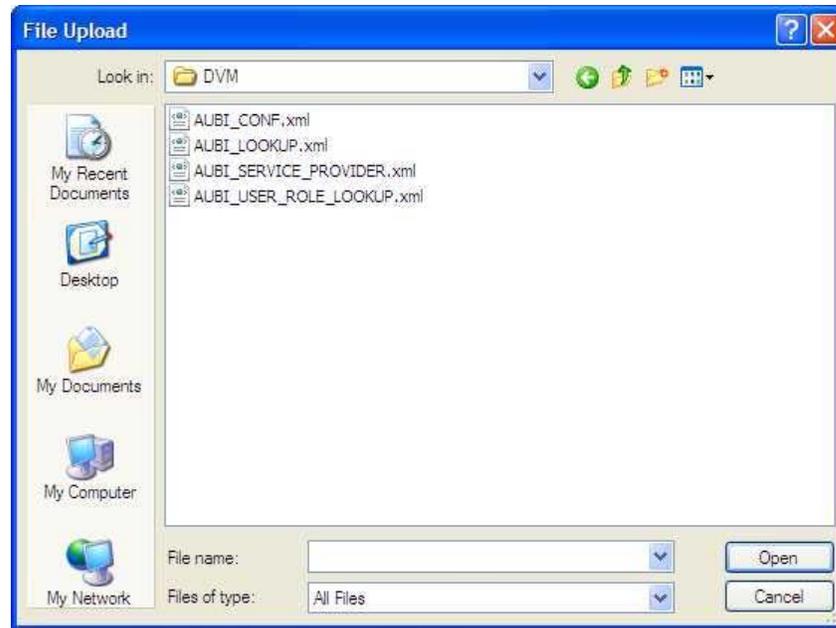
ESB Control - Import a new map

4. On Import a new map, click the Browse button to locate the map that you want to import.
5. Select the option to overwrite a map if you want to overwrite a map that already exists in the repository.



Import a new map

6. Click OK to import a new map.
7. Repeat these steps for all the lookup mappings in the DVM folder that do not already exist on the server. The sequence in which you import the mappings is not important.



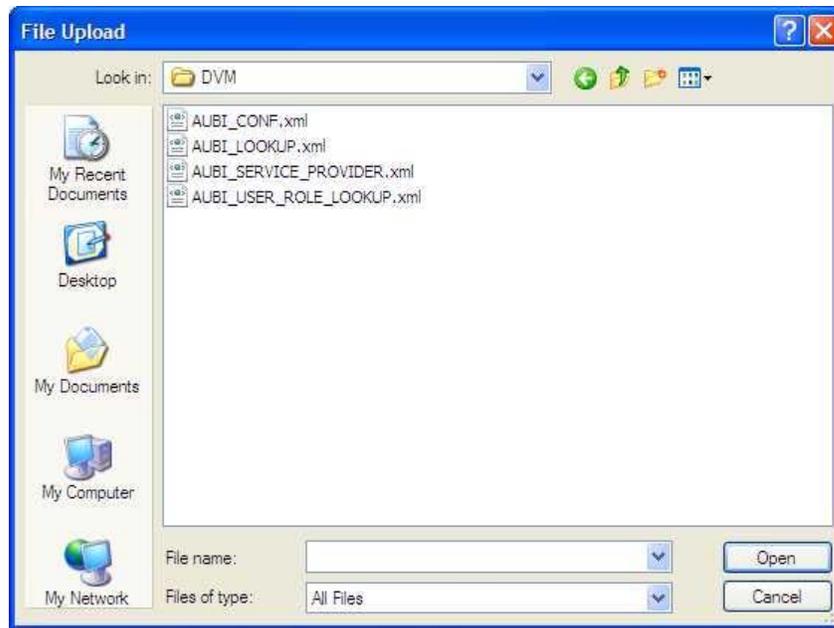
File Upload – Upload DVM mappings

Importing Values into an Existing DVM

If you already installed the Oracle Business Approvals Connector for Managers DVMs and need to import values, complete the following steps.

To import values into an existing DVM:

1. In Oracle Enterprise Manager, access the ESB Control.
2. Select a map and click the Import button in the upper right-hand corner.
3. On Import into an Existing Map, click the Browse button to locate the map that matches the map you selected.
4. Select the “Add conflicting rows” option to avoid overriding any customizations that might have occurred.
5. Click OK to import the new rows.
6. Repeat these steps for all the lookup mappings in the DVM folder that already exist on the server. The sequence in which you import the mappings is not important.



File Upload – Upload DVM mappings

Testing Connector BPEL Flows

After you deploy the Connector BPEL flows, you should test them to ensure that they operate correctly in your environment.

To test the Connector BPEL flows:

1. On BPEL Control, click the BPEL Processes tab.

Configuring Oracle Business Approvals Connector for Managers

The screenshot shows the Oracle Enterprise Manager 10g BPEL Control interface. The top navigation bar includes 'ORACLE Enterprise Manager 10g BPEL Control' and 'Manage BPEL Domain'. Below this, there are tabs for 'Dashboard' and 'BPEL Processes'. The main content area is divided into three sections:

- Search Processes:** Contains a text input for 'Process Name', a dropdown for 'State' (set to 'Any'), and a dropdown for 'Lifecycle' (set to 'Any'). A 'Go' button is located to the right of these filters.
- Related Tasks:** A list of links: [Clear WSDL Cache](#), [Deploy New Process](#), [Perform Manual Recovery](#), [Refresh Alarm Table](#), and [View Process Log](#).
- Deployed Processes:** A table listing various BPEL processes. Each row includes a checkbox, the process name and version, the lifecycle, and the state.

	BPEL Process	Lifecycle	State
<input type="checkbox"/>	ExpenseRetrieval (v. 1.0)	Active	On
<input type="checkbox"/>	OfferRetrieval (v. 1.0)	Active	On
<input type="checkbox"/>	POReqRetrieval (v. 1.0)	Active	On
<input type="checkbox"/>	QuoteRetrieval (v. 1.0)	Active	On
<input type="checkbox"/>	ReqInfoUsersRetrieval (v. 1.0)	Active	On
<input type="checkbox"/>	SiebelQuoteRetrieval (v. 1.0)	Active	On
<input type="checkbox"/>	SiebelTaskResponse (v. 1.0)	Active	On
<input type="checkbox"/>	SiebelWorklistRetrieval (v. 1.0)	Active	On
<input type="checkbox"/>	TaskActionHandler (v. 1.0)	Active	On
<input type="checkbox"/>	TaskActionHistoryRetrieval (v. 1.0)	Active	On
<input type="checkbox"/>	TaskAttributesRetrieval (v. 1.0)	Active	On
<input type="checkbox"/>	TaskClose (v. 1.0)	Active	On
<input type="checkbox"/>	TaskManager (v. 1.0)	Active	On
<input type="checkbox"/>	TaskRequestInfo (v. 1.0)	Active	On
<input type="checkbox"/>	TaskResponse (v. 1.0)	Active	On
<input type="checkbox"/>	VacancyRetrieval (v. 1.0)	Active	On
<input type="checkbox"/>	WorklistRetrieval (v. 1.0)	Active	On
<input type="checkbox"/>	WorklistVersionCheck (v. 1.0)	Active	On

The BPEL Processes tab lists all the deployed processes

2. Click the BPEL process that you want to test.
3. Click the Initiate tab.

Configuring Oracle Business Approvals Connector for Managers

BPEL Process: [WorklistVersionCheck](#) Version: 1.0 Lifecycle: Active
Statistics: [0 Open Instances](#) | [588 Closed Instances](#)

[Manage](#) **Initiate** [Descriptor](#) [WSDL](#) [Sensors](#) [Source](#) [Test Suites](#)

Testing this BPEL Process Through

Initiating a test instance
To create a new 'test' instance of this BPEL Process, fill this form and click on the 'Post XML Message' button.

Operation: HTML Form XML Source

WS-Security Include In Header

User Name: xsd:string

Password: xsd:string

WS-Addressing Include In Header

payload

CheckMode: string

Note: XML source view contents will not be reflected in the HTML form view

Save Test

Perform stress test

Example of testing the BPEL process – WorklistVersionCheck

4. On the Initiate tab, click the Include in Header checkbox next to WS-Security and expand the section.
5. Enter a user name and password to test if the BPEL process will retrieve the appropriate information.

Configuring Oracle Business Approvals Connector for Managers

The screenshot displays the Oracle Enterprise Manager 10g BPEL Control interface. At the top, the page title is "ORACLE Enterprise Manager 10g BPEL Control". On the right, there are links for "Manage BPEL Domain", "Logout", and "Support Log". Below the title bar, there are three tabs: "Dashboard", "BPEL Processes", and "Instances". The "BPEL Processes" tab is active, showing details for the "WorklistVersionCheck" process. The process version is "1.0" and its lifecycle is "Active". Statistics indicate "0 Open Instances" and "588 Closed Instances". A navigation bar includes "Manage", "Initiate", "Descriptor", "WSDL", "Sensors", "Source", "Test Suites", and "Reports". The "Initiate" tab is selected, showing a "Test Instance Initiated" message. Below this, a message states: "Your test request was processed synchronously. It took 375.0milliseconds to finish and generated the following output: Value: <WorklistVersionCheckRESPhttp://xmlns.oracle.com/bpel/aubi/mobile/WorklistVersionCheck>". The output is an XML document containing four <WorklistFeatureRESP> elements, each with a <WorklistType> and a <ConnectorVersion>1.0</ConnectorVersion> element. The worklist types are PO_REQUISITION, AP_EXPENSE, HR_OFFER, and SALES_QUOTE.

```
<WorklistVersionCheckRESPhttp://xmlns.oracle.com/bpel/aubi/mobile/WorklistVersionCheck>
  <WorklistFeatureRESPhttp://xmlns.oracle.com/bpel/aubi/mobile/WorklistVersionCheck>
    <WorklistType>PO_REQUISITION</WorklistType>
    <ConnectorVersion>1.0</ConnectorVersion>
  </WorklistFeatureRESP>
  <WorklistFeatureRESPhttp://xmlns.oracle.com/bpel/aubi/mobile/WorklistVersionCheck>
    <WorklistType>AP_EXPENSE</WorklistType>
    <ConnectorVersion>1.0</ConnectorVersion>
  </WorklistFeatureRESP>
  <WorklistFeatureRESPhttp://xmlns.oracle.com/bpel/aubi/mobile/WorklistVersionCheck>
    <WorklistType>HR_OFFER</WorklistType>
    <ConnectorVersion>1.0</ConnectorVersion>
  </WorklistFeatureRESP>
  <WorklistFeatureRESPhttp://xmlns.oracle.com/bpel/aubi/mobile/WorklistVersionCheck>
    <WorklistType>HR_VACANCY</WorklistType>
    <ConnectorVersion>1.0</ConnectorVersion>
  </WorklistFeatureRESP>
  <WorklistFeatureRESPhttp://xmlns.oracle.com/bpel/aubi/mobile/WorklistVersionCheck>
    <WorklistType>SALES_QUOTE</WorklistType>
    <ConnectorVersion>1.0</ConnectorVersion>
  </WorklistFeatureRESP>
</WorklistVersionCheckRESP>
```

Successful example of testing WorklistVersionCheck – the BPEL process retrieved information about the application version

Configuring Connector Security

This chapter includes an overview and the following topics:

- Configuring User Responsibility DVM
- Configuring Access to BPEL Web Service Processes

Overview

Oracle Business Approvals for Managers client application on the Apple iPhone sends the user and password to the server using standard WS-Security UsernameToken elements. The password is in plain-text in the SOAP headers. Therefore, the connection from the Apple iPhone to the servers must use HTTPS over SSL. In addition, you should ensure that the server log settings do not log incoming SOAP header information, especially for production servers.

The Oasis 1.0 WS-Security standard is used to format the user name and password in the SOAP header. The password is only used to authenticate the user prior to the BPEL flow. A proxy user name and password provides authentication with Oracle EBS through the Oracle Application Adapter. The WS-Security header is only used to pass the user name to the BPEL flow.

Configuring User Responsibility DVM

You must configure your own user responsibility DVM. The name of the DVM map is AUBI_USER_ROLE_LOOKUP.xml. See “Importing Domain Value Maps (DVMs)” in this guide for more information about this DVM.

Configuring Access to BPEL Web Service Processes

Use Oracle Web Services Manager (OWSM) to set up security for clients to access BPEL web service processes. This setup involves these tasks:

- Adding a New Server Agent Component
- Adding a Policy

Configuring Connector Security

- Enabling Server Agent Components
- Associating a Web Service with this Server Agent

Adding a New Server Agent Component

To add a new server agent component:

1. Log in to Oracle Enterprise Manager.
2. Click the Add New Component button.

ORACLE Enterprise Manager 10g
Web Services Manager Control

Policy Management > Manage Policies

Enforcement Points [Help](#)

List of Components: [Add New Component](#)

Id	Name	Type	Details	Edit	Delete	Policies	Steps
C0003001	MOBILE	Server Agent	Q	✎	✖	Policies	Steps

3. On Enforcement Points, click the drop-down menu for Component Type and select Server Agent.

ORACLE Enterprise Manager 10g
Web Services Manager Control

Policy Management > Manage Policies > Add New Component

Enforcement Points [Help](#)

Add New Component:

Basic Parameters

Component Name (*):

Component Type (*):

Container Type (*):

Component Groups:

Modify privileges: su1-grp, da1-grp

Add Groups with Modify privileges: ca1-grp, ca2-grp

View privileges:

Add Groups with View privileges: cs1-grp, cs2-grp

<< Add

Remove >>

Register Cancel

4. Click the Register button.

Oracle Enterprise Manager adds the new server agent component.

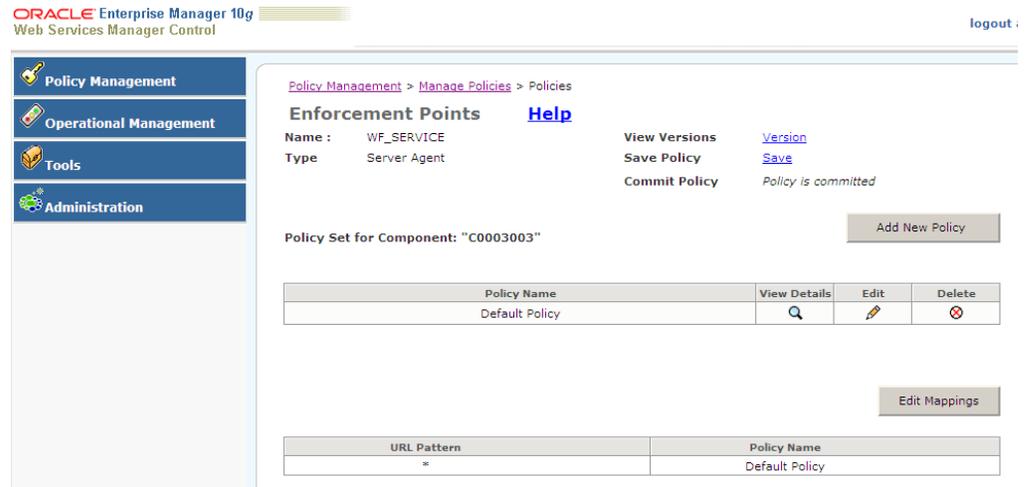
Configuring Connector Security



Adding a Policy

To add a policy:

1. On Enforcement Points, click Policies next to the component to which you want to add a policy.
2. Click the Edit icon (pencil) next to Default Policy.



3. In the Pipeline: "Request" section, on the Log line, click Add Step Below.

Configuring Connector Security

ORACLE Enterprise Manager 10g
Web Services Manager Control

Policy Management > Manage Policies > Policies > Policy

Enforcement [Help](#)

Points

Component: "WF_SERVICE"

Policy Definition: "Default Policy"

Pipeline: "PreRequest" [Replace Pipeline](#)

Pipeline Steps:

- Start Pipeline
- End Pipeline

Pipeline: "Request" [Replace Pipeline](#)

Pipeline Steps:

- Start Pipeline [Add Step Below](#)
- Log [Configure](#) | [Add Step Below](#) | [Delete](#)
- Extract Credentials [Configure](#) | [Add Step Below](#) | [Delete](#)
- Insert WS BASIC Credentials Step [Configure](#) | [Add Step Below](#) | [Delete](#)
- File Authenticate [Configure](#) | [Add Step Below](#) | [Delete](#)

4. In the New Step area, click the Select Step Template drop-down menu and select Extract Credentials.

ORACLE Enterprise Manager 10g
Web Services Manager Control

Policy Management > Manage Policies > Policies > Policy

Enforcement [Help](#)

Points

Component: "WF_SERVICE"

Policy Definition: "Default Policy"

Pipeline: "PreRequest" [Replace Pipeline](#)

Pipeline Steps:

- Start Pipeline
- End Pipeline

Pipeline: "Request" [Replace Pipeline](#)

Pipeline Steps:

- Start Pipeline [Add Step Below](#)
- Log [Configure](#) | [Add Step Below](#) | [Delete](#)

New Step [Cancel](#)

Select Step Template:

- Extract Credentials

Ok

5. Click OK.
6. Click Configure next to Extract Credentials and enter WS-BASIC for the value.
7. Click OK.

Configuring Connector Security

ORACLE Enterprise Manager 10g
Web Services Manager Control

Policy Management
Operational Management
Tools
Administration

Policy Management > Manage Policies > Policies > Policy

Configure Step [Help](#)

Pipeline: "Request"

Configure pipeline step

Pipeline Step Name: Extract Credentials

Extract Credentials		Environment Properties	
Basic Properties	Type	Default	Value
Enabled (*)	boolean	true	<input checked="" type="radio"/> true <input type="radio"/> false
Extract Credentials Properties			
Credentials location (*)	string	HTTP	WS-BASIC
Namespaces	string		
UserID xpath	string		
Password xpath	string		

Faults and Fault Handlers

Fault Code: http://schemas.xmlsoap.org/ws/2003/08/Faults:AuthenticationFaultAdd_Handler

Ok Cancel

- For the Extract Credentials step, click Add Step Blow, and select "Insert WS Basic Credentials Step."

ORACLE Enterprise Manager 10g
Web Services Manager Control

Policy Management
Operational Management
Tools
Administration

Component: "WF_SERVICE"

Policy Definition: "Default Policy"

Pipeline: "PreRequest" [Replace Pipeline](#)

Pipeline Steps:

Start Pipeline

End Pipeline

Pipeline: "Request" [Replace Pipeline](#)

Pipeline Steps:

Start Pipeline [Add Step Below](#)

Log [Configure](#) [Add Step Below](#) [Delete](#)

Extract Credentials [Configure](#) [Add Step Below](#) [Delete](#)

New Step [Cancel](#)

Select Step Template:

Insert WS BASIC Credentials Step

Ok

End Pipeline

- Click Ok.

Configuring Connector Security

10. On the Insert WS Basic Credentials Step, click the Add Step Below link and then insert a step to authenticate, such as File Authenticate.

Important! OWSM supports several authentication protocols. Your security policies might require more stringent security requirements.

The screenshot displays the Oracle Enterprise Manager 10g Web Services Manager Control interface. On the left is a navigation menu with four items: Policy Management, Operational Management, Tools, and Administration. The main content area shows the configuration for a component named "WF_SERVICE" under a "Default Policy". Two pipeline definitions are visible: "PreRequest" and "Request". The "Request" pipeline is expanded, showing a sequence of steps: Start Pipeline, Log, Extract Credentials, Insert WS BASIC Credentials Step, and End Pipeline. A "New Step" dialog box is open over the "Insert WS BASIC Credentials Step", with "File Authenticate" selected in the "Select Step Template" dropdown. The "Log" and "Extract Credentials" steps have "Configure", "Add Step Below", and "Delete" links. The "Insert WS BASIC Credentials Step" also has these links. The "PreRequest" pipeline has a "Replace Pipeline" link. The "Request" pipeline has an "Add Step Below" link at the end of the "Start Pipeline" step.

11. Click OK.

12. On the File Authenticate step, click the Configure link.

Configuring Connector Security

The screenshot shows the Oracle Enterprise Manager 10g Web Services Manager Control interface. On the left is a navigation menu with four items: Policy Management, Operational Management, Tools, and Administration. The main area is titled "POINTS" and shows the configuration for a component named "WF_SERVICE" under the policy definition "Default Policy". Two pipeline configurations are visible:

- Pipeline: "PreRequest"**: Contains two steps: "Start Pipeline" and "End Pipeline", connected by a downward arrow.
- Pipeline: "Request"**: Contains five steps: "Start Pipeline", "Log", "Extract Credentials", "Insert WS BASIC Credentials Step", and "File Authenticate", all connected by downward arrows. Each step has a "Configure" link, an "Add Step Below" link, and a "Delete" link.

13. On Configure Step, click OK.

The screenshot shows the "Configure Step" dialog in Oracle Enterprise Manager 10g Web Services Manager Control. The breadcrumb path is "Policy Management > Manage Policies > Policies > Policy". The dialog is titled "Configure Step" and "Help". It shows the pipeline "Request" and the selected pipeline step "File Authenticate".

File Authenticate Environment Properties

Basic Properties	Type	Default	Value
Enabled (*)	boolean	true	<input checked="" type="radio"/> true <input type="radio"/> false

Authentication Properties	Type	Default	Value
Passwd file location (*)	string	.htpasswd	<input type="text" value="c:\passwd.txt"/>
.htpasswd file format (*)	string	mixed	<input type="text" value="md5"/>

Below the properties table is a section for "Faults and Fault Handlers" with a "Fault Code" field containing the URL `http://schemas.oblix.com/ws/2003/08/Faults:AuthenticationFault` and an "Add Handler" link. At the bottom are "Ok" and "Cancel" buttons.

See "Using Oracle Web Services Manager to Secure Your Web Services" in the *Oracle Web Services Manager Quick Start Guide* for information about configuring various authentication methods, including setting up and encrypting a flat file (or text file) password.

14. Click Next.

Configuring Connector Security

The screenshot displays the configuration interface for a connector security pipeline. It is divided into three main sections:

- Request Pipeline:** A vertical sequence of steps: "Extract Credentials", "Insert WS BASIC Credentials Step", and "File Authenticate". Each step has a "Configure" link, an "Add Step Below" link, and a "Delete" link. The sequence ends with an "End Pipeline" button.
- Pipeline: "Response":** A section with a "Replace Pipeline" link. It contains a "Start Pipeline" button, a "Log" step (with "Configure", "Add Step Below", and "Delete" links), and an "End Pipeline" button.
- Pipeline: "PostResponse":** A section with a "Replace Pipeline" link. It contains a "Start Pipeline" button and an "End Pipeline" button.

At the bottom of the interface, there are "Next" and "Cancel" buttons.

15. On Enforcement Points, click Save.

The screenshot shows the "Enforcement Points" configuration page in the Oracle Enterprise Manager Web Services Manager Control. The page includes a navigation sidebar on the left with options: "Policy Management", "Operational Management", "Tools", and "Administration". The main content area shows the breadcrumb "Policy Management > Manage Policies > Policies > Policy" and the title "Enforcement Points". Below the title, it displays "Policy for Component: 'c0003003'". A table lists the policy details:

Policy
Policy Name: Default Policy

A "Save" button is located at the bottom of the configuration area.

Enforcement Points.

16. Next to Commit Policy, click Commit.

Policy Management > Manage Policies > Policies

Enforcement Points [Help](#)

Name : WF_SERVICE View Versions [Version](#)
 Type : Server Agent Save Policy [Save](#)
Commit Policy [Commit](#)

Policy Set for Component: "C0003003" Add New Policy

Policy Name	View Details	Edit	Delete
Default Policy	🔍	✎	✖

Edit Mappings

URL Pattern	Policy Name
*	Default Policy

Enforcement Points – Commit Policy.

Enabling Server Agent Components

After you commit the policy, run the script described in this section to enable the server agent components.

To enable server agent components:

1. On the OWSM server machine, set the agent.component.id property in the agent.properties file to the ID of the policy you created in the previous section. The agent.properties file is located in this directory:

`\\SOA Install\owsm\bin\`

For example, change the property to C0003001.

2. On the OWSM server machine, open the command line and run the following script:

Run `<SOA Install>\owsm\bin\wsmadmin installAgent`

Note: The script prompts you to enter a password.

Associating a Web Service to the Server Agent

You must associate a web service with the server agent that you created in the previous section.

To associate a web service to the server agent:

Configuring Connector Security

1. On the Oracle SOA Suite Welcome page, click Application Server Control.

ORACLE SOA Suite

Welcome to Oracle SOA Suite (10.1.3.3.0)

Overview

Oracle SOA Suite is a complete set of service infrastructure components for creating, deploying, and managing Service Oriented Architectures. Oracle SOA Suite enables services to be created, managed, and orchestrated into composite applications and business processes.

Oracle SOA Suite consists of:

- Oracle BPEL Process Manager
- Oracle Enterprise Service Bus (ESB)
- Oracle Web Services Manager (OWSM)
- Oracle Business Rules
- Oracle Application Server Service Registry
- Oracle JDeveloper
- Oracle Application Server

Manage Your SOA Suite
Access management tools of Oracle SOA Suite

- BPEL Control
- ESB Control
- Web Services Manager Control
- Application Server Control
- Rules Author

Learn About SOA
Learn Oracle SOA Suite fundamentals by reading these technical guides

- Oracle SOA Quick Start
- Oracle BPEL Process Manager Quick Start Guide
- Oracle ESB Quick Start Guide
- OWSM User and Administrator Guide
- Oracle Business Rules User's Guide

Build Sample SOA Applications
Try building your first SOA Application by running a quickstart tutorial

- Oracle SOA Quickstart Tutorial
- BPEL Quickstart Tutorial
- ESB Quickstart Tutorial
- ADF Quickstart Tutorial
- WSM Quickstart Tutorial

Plan, Develop, and Deploy Your SOA Applications
Get a technical background by reading documentation about Oracle SOA Suite

- SOA Developer's Guide
- BPEL Developer's Guide
- ESB Developer's Guide
- OWSM Deployment Guide
- ADF Developer's Guide
- Enterprise Deployment Guide
- Oracle Application Server Administrator's Guide
- OC4J Configuration and Administration Guide

Additional Resources on the Oracle Technology Network
Learn more about the underlying technologies of Oracle SOA Suite

- Release Notes
- SOA Documentation Library
- Service Oriented Architecture (SOA)
- BPEL
- JavaServer Faces (JSF)
- Enterprise JavaBean (EJB) 3.0
- JDeveloper
- Oracle Containers for J2EE (OC4J)
- Web Service Management (OWSM)

2. Click the Application Server instance, which in this example is oc4j_soa

ORACLE Enterprise Manager 10g
Application Server Control

Cluster Topology Page Refreshed Aug 26, 2008 3:43:34 PM MDT

Overview

Hosts 1 Application Servers 1
OC4J Instances 2 HTTP Server Instances 1

Members

View By: Application Servers

[Start] [Stop] [Restart]

Select All | Select None | Expand All | Collapse All

Select	Name	Status	Type	Category	Host	CPU (%)	Memory (MB)
<input type="checkbox"/>	▼ All Application Servers						
<input type="checkbox"/>	▼ soahome.yugu-pc8.mlab.jdedwards.com			Application Server	yugu-pc8		
<input type="checkbox"/>	▶ home (JVMs: 1)	↑	OC4J			0.17	179.18
<input type="checkbox"/>	HTTP_Server	↑	Oracle HTTP Server			0.09	64.09
<input type="checkbox"/>	▶ oc4j_soa (JVMs: 1)	↑	OC4J			3.25	400.30

◆ Indicates the active ASControl instance.
 ☑ TIP If a parent topology member is selected all contained members are implicitly selected.

3. Click the Web Services tab.

Configuring Connector Security

ORACLE Enterprise Manager 10g
Application Server Control

Cluster Topology > Application Server_soahome.vvuu-pc8.mlab.idedwards.com >
OC4J: oc4j_soa

Home Applications **Web Services** Performance Administration

Application: All

Test Service

Select	Port Name	Web Service	Application	Application Status	Port Enabled	Start Time	Invocat
<input checked="" type="radio"/>	ExpenseRetrievalPort	ExpenseRetrieval	orabpel	↑	✓	Aug 26, 2008 3:34:59 PM MDT	
<input type="radio"/>	IdentityConfigServicePort	IdentityService	hw_services	↑	✓	Aug 25, 2008 4:05:17 PM MDT	
<input type="radio"/>	IdentityServicePort	IdentityService	hw_services	↑	✓	Aug 25, 2008 4:05:17 PM MDT	
<input type="radio"/>	OfferRetrievalPort	OfferRetrieval	orabpel	↑	✓	Aug 25, 2008 5:44:25 PM MDT	
<input type="radio"/>	POReqRetrievalPort	POReqRetrieval	orabpel	↑	✓	Aug 25, 2008 4:04:44 PM MDT	
<input type="radio"/>	ReqInfoUsersRetrievalPort	ReqInfoUsersRetrieval	orabpel	↑	✓	Aug 25, 2008 4:04:43 PM MDT	
<input type="radio"/>	TaskActionHandlerPort	TaskActionHandler	orabpel	↑	✓	Aug 25, 2008 4:04:47 PM MDT	
<input type="radio"/>	TaskActionHistoryRetrievalPort	TaskActionHistoryRetrieval	orabpel	↑	✓	Aug 25, 2008 4:04:42 PM MDT	
<input type="radio"/>	TaskAttributesRetrievalPort	TaskAttributesRetrieval	orabpel	↑	✓	Aug 25, 2008 4:04:41 PM MDT	
<input type="radio"/>	TaskClosePort	TaskClose	orabpel	↑	✓	Aug 25, 2008 4:04:41 PM MDT	
<input type="radio"/>	TaskManagerPort	TaskManager	orabpel	↑	✓	Aug 25, 2008 4:04:47 PM MDT	
<input type="radio"/>	TaskMetadataServicePort	TaskMetadataService	hw_services	↑	✓	Aug 25, 2008 4:04:59 PM MDT	
<input type="radio"/>	TaskQueryServicePort	TaskQueryService	hw_services	↑	✓	Aug 25, 2008 4:04:59 PM MDT	

The Web Services tab lists all the BPEL web services that you deployed and need secured by OWSM.

4. Secure all BPEL web services, except for TaskActionHandler and TaskManager, by completing these steps:
 - a. Select a port name associated with a web service, and then click the Administration tab.

ORACLE Enterprise Manager 10g
Application Server Control

Cluster Topology > Application Server_soahome.vvuu-pc8.mlab.idedwards.com > OC4J: oc4j_soa > Application: orabpel >

Confirmation
Your changes have been applied.

Web Service: ExpenseRetrievalPort

Home Operations **Administration**

This table lists the management features available. You can customize the configuration of these management features and selectively enable/disable feature management feature will only affect the runtime when the feature is enabled.

Enable/Disable Features

Feature	Edit Configuration	Enabled	Description
Auditing		✘	Record message contents for purpose of auditing and/or non-repudiation.
Reliability		✘	Configure port level reliability characteristics for web service messages.
Security		✘	Configure security features to be applied to web service requests and responses.
Tracing		✘	Extract contents of messages and store them.
Web Services Agent		✘	Configure the Web Services agent for Oracle Web Services Manager.

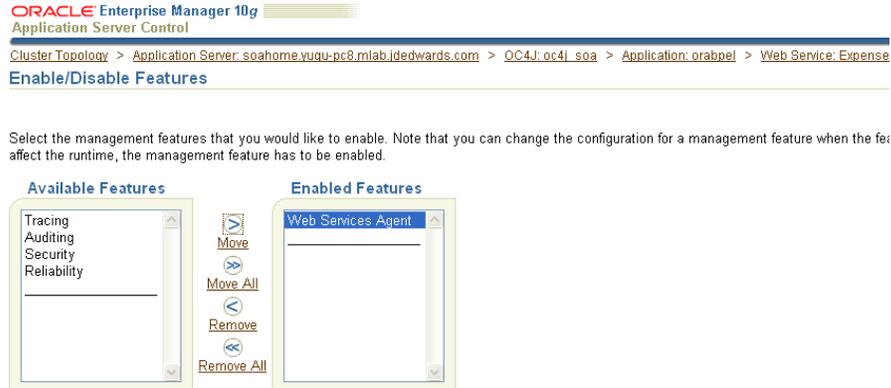
Diagnostics
Diagnostic Logger Configuration

Home Operations **Administration**

- b. Click the Enable/Disable Features button to enable the port.

Configuring Connector Security

- c. On Enable/Disable Features, move the Web Services Agent to the Enabled Features box.



Select the management features that you would like to enable. Note that you can change the configuration for a management feature when the feature affects the runtime, the management feature has to be enabled.

Setup | Logs | Help | Logout

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About Oracle Enterprise Manager 10g Application Server Control

- d. Click OK.

- e. In the Web Services Agent row, click the Edit Configuration icon.



Feature	Edit Configuration	Enabled	Description
Auditing			Record message contents for purpose of auditing and/or non-repudiation.
Reliability			Configure port level reliability characteristics for web service messages.
Security			Configure security features to be applied to web service requests and responses.
Tracing			Extract contents of messages and store them.
Web Services Agent			Configure the Web Services agent for Oracle Web Services Manager.

Diagnostics
Diagnostic Logger Configuration

Home | Operations | Administration

Setup | Logs | Help | Logout

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About Oracle Enterprise Manager 10g Application Server Control

- f. Enter the server agent ID and click Ok.

- g. Repeat these steps for each BPEL web service before continuing.

5. When finished securing the BPEL web services, restart the Oracle SOA Suite.