

Oracle® Cloud

Using the Oracle Sales Cloud Adapter

Release 16.4

E66642-02

October 2016

This guide describes how to configure and add the Oracle Sales Cloud Adapter to an integration in Oracle Integration Cloud Service.

Oracle Cloud Using the Oracle Sales Cloud Adapter, Release 16.4

E66642-02

Copyright © 2015, 2016, Oracle and/or its affiliates. All rights reserved.

Primary Author: Mark Kennedy

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.

Contents

Preface	v
Audience	v
Related Resources	v
Conventions	v
 1 Getting Started with the Oracle Sales Cloud Adapter	
Oracle Sales Cloud Adapter Capabilities	1-1
Supported Business Event-Enabled Objects	1-2
What Application Version Does the Oracle Sales Cloud Adapter Support	1-3
About Oracle Integration Cloud Service	1-3
About Oracle Integration Cloud Service Connections	1-4
About Oracle Integration Cloud Service Integrations	1-4
About Oracle Sales Cloud Adapter Use Cases	1-4
Typical Workflow for Creating and Including an Adapter Connection in an Integration	1-5
 2 Creating an Oracle Sales Cloud Adapter Connection	
Prerequisites for Creating a Connection	2-1
Obtaining the Oracle Sales Cloud Adapter Service Catalog Service WSDL, Event Catalog URL, or Interface Catalog URL	2-2
Enabling Event Subscriptions in Oracle Sales Cloud	2-5
Enabling Echo Suppression Filters	2-11
Integrating Groovy Scripts	2-12
Uploading an SSL Certificate	2-14
Creating a Connection	2-15
Adding a Contact Email	2-16
Configuring Connection Properties	2-16
Configuring Connection Security	2-17
Testing the Connection	2-17
Editing a Connection	2-17
Cloning a Connection	2-18
Deleting a Connection	2-18
Refreshing Integration Metadata	2-19

3	Creating an Integration	
4	Adding the Oracle Sales Cloud Adapter Connection to an Integration	
	Configuring Basic Information Properties	4-1
	What You Can Do from the Basic Info Page.....	4-1
	What You See on the Basic Info Page	4-2
	Configuring Oracle Sales Cloud Trigger Request Properties.....	4-2
	What You Can Do from the Oracle Sales Cloud Trigger Request Page	4-2
	What You See on the Oracle Sales Cloud Trigger Request Page.....	4-3
	Configuring Oracle Sales Cloud Trigger Response Properties.....	4-5
	What You Can Do from the Oracle Sales Cloud Trigger Response Page	4-6
	What You See on the Oracle Sales Cloud Trigger Response Page.....	4-6
	Configuring Oracle Sales Cloud Invoke Operation Properties.....	4-8
	What You Can Do from the Oracle Sales Cloud Invoke Operations Page	4-8
	What You See on the Oracle Sales Cloud Invoke Operations Page.....	4-8
	Reviewing Configuration Values on the Summary Page	4-10
	What You Can Do from the Summary Page	4-10
	What You See on the Summary Page	4-10
5	Creating Mappings and Lookups in Integrations	
6	Administering Integrations	
7	Troubleshooting the Oracle Sales Cloud Adapter	

Preface

Using the Oracle Sales Cloud Adapter describes how to configure the Oracle Sales Cloud Adapter as a connection in an integration in Oracle Integration Cloud Service.

Topics:

- [Audience](#)
- [Related Resources](#)
- [Conventions](#)

Audience

Using the Oracle Sales Cloud Adapter is intended for developers who want to use the Oracle Sales Cloud Adapter in integrations in Oracle Integration Cloud Service.

Related Resources

For more information, see these Oracle resources:

- Oracle Cloud
<http://cloud.oracle.com>
- *Using Oracle Integration Cloud Service*
- *Using the Oracle Mapper*
- *Getting Started with Oracle Cloud*
- *Managing and Monitoring Oracle Cloud*

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.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.

Convention	Meaning
<code>monospace</code>	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

Getting Started with the Oracle Sales Cloud Adapter

Review the following conceptual topics to learn about the Oracle Sales Cloud Adapter and how to use it as a connection in integrations in Oracle Integration Cloud Service. A typical workflow of adapter and integration tasks is also provided.

Topics

- [Oracle Sales Cloud Adapter Capabilities](#)
- [What Application Version Does the Oracle Sales Cloud Adapter Support](#)
- [About Oracle Integration Cloud Service](#)
- [About Oracle Integration Cloud Service Connections](#)
- [About Oracle Integration Cloud Service Integrations](#)
- [About Oracle Sales Cloud Adapter Use Cases](#)
- [Typical Workflow for Creating and Including an Adapter Connection in an Integration](#)

Oracle Sales Cloud Adapter Capabilities

Oracle Sales Cloud Adapter enables modern selling with tools that are easy to deploy and use, completely mobile, packed with powerful analytics, and built for collaborative selling and revenue generation. Oracle Sales Cloud includes a set of features for creating and tracking sales campaigns, developing leads into business opportunities, and pursuing opportunities to generate revenue. Sales accounts, leads, and opportunities can be automatically assigned to territories and sales teams.

The Oracle Sales Cloud Adapter enables you to create an integration with an Oracle Sales Cloud application.

The Oracle Sales Cloud Adapter enables customers to easily integrate their on-premises or SaaS applications with Oracle Sales Cloud without having to know the specific details involved in the integration.

The Oracle Sales Cloud Adapter provides the following capabilities:

- Generates a local integration-centric WSDL that is an abstract WSDL. It defines strongly-typed message structures (request and response types) for the selected objects and the name of operations. It provides a simplified user experience in terms of creating data mappings at design time while constructing integrations with Fusion Application services. This WSDL also exposes the generic custom objects as named objects.

- Generates automatic mapping to the exposed business object, event, or Oracle Fusion Applications REST API resource that you select during adapter configuration:
 - Business object: Represents a self-contained business document that can be acted upon by the integration. An integration can send requests to create a new record for that business object. They can send a request either to update or delete an existing record for a business object. Integrations can also send requests to retrieve information about one or more records representing that business object.
 - Event: Represents an event document to which you subscribe. The event is raised by the Oracle Sales Cloud application. For information about supported events, see [Supported Business Event-Enabled Objects](#).
 - Business (REST) API: Represents an Oracle Fusion Applications REST API resource. Support is provided in the invoke (outbound) direction.

Note: The Oracle Sales Cloud Adapter currently pulls in all resources exposed by the interface catalog and displays them for selection, including private resources. Private resources are not supported. For information about the public resources that are supported, see the Resource Types section of [REST API for Oracle Sales Cloud Release 11](#).

- Enables you to view annotations on Oracle Sales Cloud Adapter elements in the mapper. For information about viewing annotations in the mapper, see About Mappings in *Using the Oracle Mapper*.
- Automatically handles security policy details required to connect to the Oracle Sales Cloud application.
- Provides standard error handling capabilities.
- Enables you to map business objects that have polymorphic data structures.

Support for Calling Integrations with Concrete Values of Custom Objects from the Groovy Script Editor

The Oracle Sales Cloud Adapter inbound endpoint WSDL interface supports the use of concrete values for custom business objects in the WSDL in place of `xsd:anyType` parameters. This feature enables you to use the groovy script editor to create scripts to invoke integrations. The groovy script editor is unable to recognize `xsd:anyType` parameters.

For instructions on integrating a groovy script, see [Integrating Groovy Scripts](#).

Supported Business Event-Enabled Objects

The following business event-enabled objects to which you can subscribe during adapter configuration in the Adapter Endpoint Configuration Wizard are supported.

Supported Outbound Event-Enabled Objects and Supported Operations	Supported Inbound Event-Enabled Objects
--	--

Object: Accounts Operations: create, update, and delete	All top level objects.
--	------------------------

Supported Outbound Event-Enabled Objects and Supported Operations	Supported Inbound Event-Enabled Objects
Object Contacts Operations: create, update, and delete operations	
Object Partner Operations: create, update, and delete operations Note: Supported in Release 11 through a backport.	
Object Deal Registration Operations: create, update, and delete operations Note: Supported in Release 11 through a backport.	
Object Opportunities Operations: create, update, and delete operations Note: Supported in Release 11 through a backport.	
Object Leads Operations: create, update, and delete operations Note: Supported in Release 11 through a backport.	

What Application Version Does the Oracle Sales Cloud Adapter Support

The Oracle Sales Cloud Adapter is compatible with Oracle Sales Cloud release 9.2. It is also compatible with release 10, which includes certification for accounts and contacts events.

About Oracle Integration Cloud Service

Oracle Integration Cloud Service is a complete, secure, but lightweight integration solution that enables you to connect your applications in the cloud. It simplifies connectivity between your applications and connects both your applications that live in the cloud and your applications that still live on premises. Oracle Integration Cloud Service provides secure, enterprise-grade connectivity regardless of the applications you are connecting or where they reside.

Oracle Integration Cloud Service provides native connectivity to Oracle Software as a Service (SaaS) applications, such as Oracle Sales Cloud, Oracle RightNow Cloud, and so on. Oracle Integration Cloud Service *adapters* simplify connectivity by handling the underlying complexities of connecting to applications using industry-wide best practices. You only need to create a *connection* that provides minimal connectivity information for each system. Oracle Integration Cloud Service *lookups* map the different codes or terms used by the applications you are integrating to describe similar items (such as country or gender codes). Finally, the visual data mapper enables you to quickly create direct mappings between the trigger and invoke data

structures. From the mapper, you can also access lookup tables and use standard XPath functions to map data between your applications.

Once you integrate your applications and activate the integrations to the runtime environment, the dashboard displays information about the running integrations so you can monitor the status and processing statistics for each integration. The dashboard measures and tracks the performance of your transactions by capturing and reporting key information, such as throughput, the number of messages processed successfully, and the number of messages that failed processing. You can also manage business identifiers that track fields in messages and manage errors by integrations, connections, or specific integration instances.

About Oracle Integration Cloud Service Connections

Connections define information about the instances of each configuration you are integrating. Oracle Integration Cloud Service includes a set of predefined *adapters*, which are the types of applications on which you can base your connections, such as Oracle Sales Cloud, Oracle Eloqua Cloud, Oracle RightNow Cloud, and others. A connection is based on an adapter. A connection includes the additional information required by the adapter to communicate with a specific instance of an application (this can be referred to as metadata or as connection details). For example, to create a connection to a specific RightNow Cloud application instance, you must select the Oracle RightNow adapter and then specify the WSDL URL, security policy, and security credentials to connect to it.



About Oracle Integration Cloud Service Integrations

Integrations are the main ingredient of Oracle Integration Cloud Service. An integration includes at the least a trigger (source) connection (for requests sent to Oracle Integration Cloud Service) and invoke (target) connection (for requests sent from Oracle Integration Cloud Service to the target) and the field mapping between those two connections.

When you create your integrations, you build on the [connections](#) you already created by defining how to process the data for the trigger (source) and invoke (target) connections. This can include defining the type of operations to perform on the data, the business objects and fields against which to perform those operations, required schemas, and so on. To make this easier, the most complex configuration tasks are handled by Oracle Integration Cloud Service. Once your trigger (source) and invoke (target) connections are configured, the mappers between the two are enabled so you can define how the information is transferred between the trigger (source) and invoke (target) data structures for both the request and response messages.



About Oracle Sales Cloud Adapter Use Cases

The Oracle Sales Cloud Adapter can be used in scenarios such as the following:





Typical Workflow for Creating and Including an Adapter Connection in an Integration

You follow a very simple workflow to create a connection with an adapter and include the connection in an integration in Oracle Integration Cloud Service.

This table lists the workflow steps for both adapter tasks and overall integration tasks, and provides links to instructions for each step.

Step	Description	More Information
1	Create the adapter connections for the applications you want to integrate. The connections can be reused in multiple integrations and are typically created by the administrator.	Creating an Oracle Sales Cloud Adapter Connection
2	Create the integration. When you do this, you add trigger (source) and invoke (target) connections to the integration.	Creating an Integration and Adding the Oracle Sales Cloud Adapter Connection to an Integration
3	Map data between the trigger connection data structure and the invoke connection data structure.	Mapping Integration Cloud Service Data of Using Oracle Integration Cloud Service
4	(Optional) Create lookups that map the different values used by those applications to identify the same type of object (such as gender codes or country codes).	Creating Lookups of Using Oracle Integration Cloud Service
5	Activate the integration.	Managing Integrations of Using Oracle Integration Cloud Service
6	Monitor the integration on the dashboard.	Monitoring Integration Cloud Services of Using Oracle Integration Cloud Service
7	Track payload fields in messages during runtime.	Assigning Business Identifiers for Tracking Fields in Messages and Managing Business Identifiers for Tracking Fields in Messages of Using Oracle Integration Cloud Service
8	Manage errors at the integration level, connection level, or specific integration instance level.	Managing Errors of Using Oracle Integration Cloud Service

Creating an Oracle Sales Cloud Adapter Connection

A connection is based on an adapter. You define connections to the specific cloud applications that you want to integrate. The following topics describe how to define connections.

Topics

- [Prerequisites for Creating a Connection](#)
- [Uploading an SSL Certificate](#)
- [Creating a Connection](#)
- [Editing a Connection](#)
- [Cloning a Connection](#)
- [Deleting a Connection](#)
- [Refreshing Integration Metadata](#)

Prerequisites for Creating a Connection

You must satisfy the following prerequisites to create a connection with the Oracle Sales Cloud Adapter:

- Subscribe to Oracle Sales Cloud. This action enables you to create an Oracle Sales Cloud user account with the correct privileges. You specify this user account when creating an Oracle Sales Cloud Adapter connection on the Connections page. For information, see [Configuring Connection Security](#).
For information about subscribing, see [Oracle Sales Cloud](#).
- Upload a security certificate. For information, see [Uploading an SSL Certificate](#).
- Obtain the necessary Oracle Sales Cloud service catalog service WSDL URL, event catalog URL, or interface catalog URL. For information, see [Obtaining the Oracle Sales Cloud Adapter Service Catalog Service WSDL, Event Catalog URL, or Interface Catalog URL](#).
- To subscribe to events with Oracle Sales Cloud, you must perform a number of configuration steps. For information, see [Enabling Event Subscriptions in Oracle Sales Cloud](#).
- During bidirectional object synchronization (for example, of account, contact, or any other object), echoes are generated. Oracle Integration Cloud Service-based integrations use echo suppression to prevent unwanted update or create events

(the echoes) from returning to the source application. See [Enabling Echo Suppression Filters](#).

- To use groovy scripts in integrations, see [Integrating Groovy Scripts](#).

Obtaining the Oracle Sales Cloud Adapter Service Catalog Service WSDL, Event Catalog URL, or Interface Catalog URL

You must obtain a mandatory Oracle Sales Cloud Adapter service catalog service WSDL (for accessing business objects) and optionally an event catalog URL (for accessing event subscriptions) or interface catalog URL (for accessing Oracle Fusion Applications REST API resources). You specify the necessary WSDL and URLs in the Connection Properties dialog.

A mandatory Oracle Sales Cloud Adapter service catalog service WSDL is required to configure the adapter for both inbound and outbound endpoints using either business objects or business services. You can also optionally specify the following:

- An event catalog URL for accessing and configuring the inbound adapter to use event subscriptions.
- An interface catalog URL for accessing and configuring the outbound adapter to use Oracle Fusion Applications REST API resources.

You specify the appropriate property values in the Oracle Sales Cloud Adapter Connection Properties dialog on the Connections page.

Connection Properties

Enter information so we can connect to your application/endpoint and process requests.

Property Name	Property Value
OSC Services Catalog WSDL URL	<input type="text" value="https://myhost.us.example.com:10614/FindAppCoreServices/ServiceCatalogService?WSDL"/>
OSC Events Catalog URL (optional)	<input type="text" value="https://myhost.us.example.com:10616/soa-infra"/>
Interface Catalog URL (optional)	<input type="text" value="https://myhost.us.example.com:10614/helpPortalApi/otherResources/latest/InterfaceCatalogs"/>

OK Cancel

Obtaining the Service Catalog Service WSDL

WSDL Requirements	Where Do You Get the WSDL?
<p>The URL must be that of a service catalog service WSDL. The service catalog service is a Fusion Application service that returns a list of external services available for integration. It allows clients to retrieve information about all public Fusion Application service endpoints available for that instance.</p> <p>The service catalog service enables clients to retrieve information about all public Oracle Fusion Application service endpoints available for that instance. The information it returns is specific to the particular cloud instance and also reflects the new services that may have been introduced in patches applied to the instance. This service is used to programmatically discover the SOAP services available on the cloud instance and retrieve the necessary metadata to invoke the SOAP services to manage business objects.</p>	<p>The developer creating an Oracle Sales Cloud connection must work with the Oracle Sales Cloud service administrator to get the concrete WSDL URL for the service catalog service provisioned for the specific SaaS application.</p>

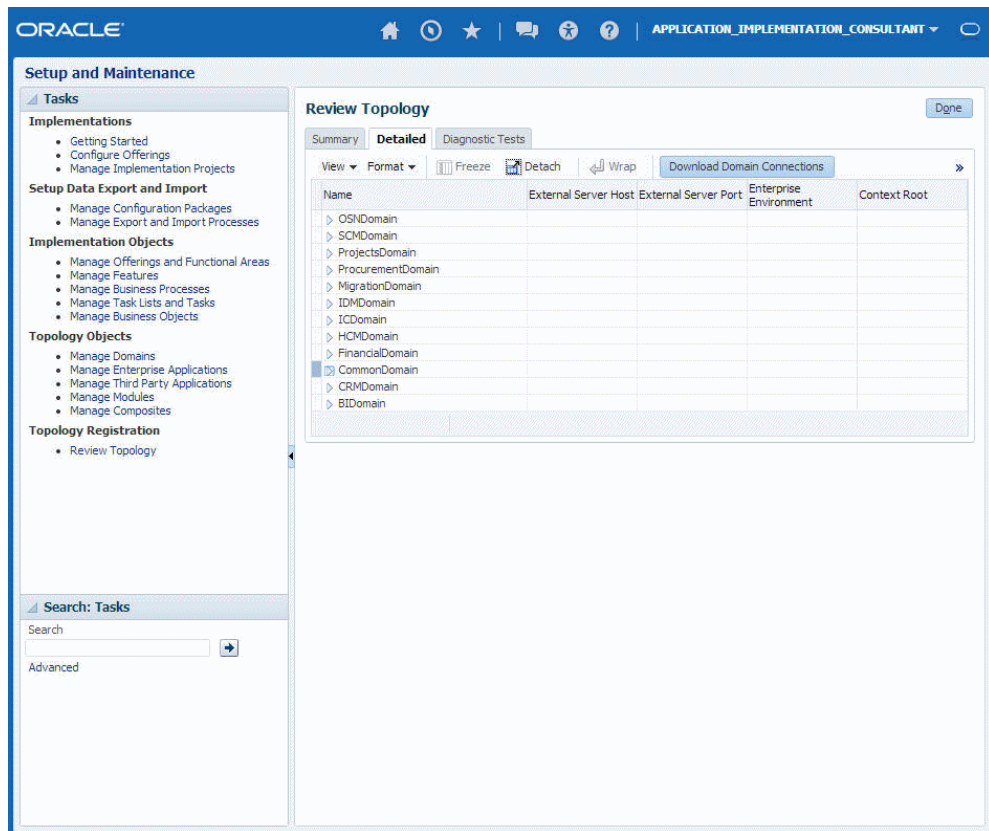
This section describes how to derive the external virtual host and port for a tokenized service catalog service WSDL. The topology information in the Topology Registration setup task contains the external virtual host and port for the domains and applications. The following instructions describe the steps for deriving the values using the service catalog service WSDL URL as an example: `https://atf_server:port/fndAppCoreServices/ServiceCatalogService`.

To access the Review Topology page, the `ASM_REVIEW_TOPOLOGY_HIERARCHY_PRIV` entitlement must be granted to the user's job role. The entitlement is granted to the `ASM_APPLICATION_DEPLOYER_DUTY` duty role, which is inherited by the duty roles `ASM_APPLICATION_DEVELOPER_DUTY` and `ASM_APPLICATION_ADMIN_DUTY`.

If the menu items and tasks described in the following procedure are not available in your cloud instance, your user account is missing the required role. Contact your cloud instance security administrator for assistance.

1. Log in to the cloud instance.
2. Click the **Navigator** icon in the global area in the top part of the window, then chose **Setup and Maintenance** under the **Tools** heading.
3. Select **Review Topology** under the **Topology Registration** section in the **Tasks** regional area on the left side of the window.
4. Click the **Detailed** tab in the middle of the window.

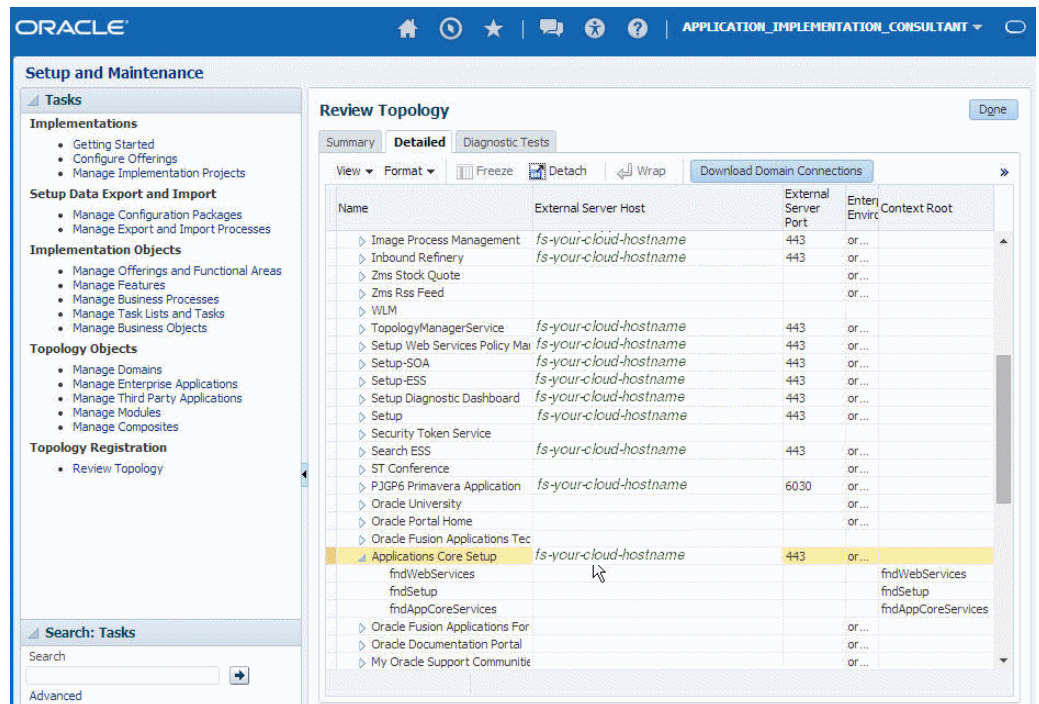
The tab shows the list of domains configured in the cloud instance.



5. Map the token name for the service path value to the domain name in the Topology Manager:

Token Name in Service Path	Domain Name
atf_server	CommonDomain
crm_server	CRMDomain
fin_server	FinancialDomain
hcm_server	HCMDomain
ic_server	ICDomain
prc_server	ProcurementDomain
prj_server	ProjectsDomain
scm_server	SCMDomain

6. Expand the domain name and select any external virtual host and port for the J2EE applications that are deployed on the domain. In the sample window, the values for this particular instance are **fs-your-cloud-hostname** and **443**, respectively.



7. Replace the *domainName_server:PortNumber* with the external virtual host and port identified in the previous step. For example:

```
https://fs-your-cloud-hostname:port/fndAppCoreServices/ServiceCatalogService?wsdl
```

Obtaining the Event Catalog URL

You must know the customer relationship management (CRM) URL format to access the CRM application user interface. Follow the URL format to determine the event catalog URL. For example, if the CRM URL format is:

```
https://fusxxxx-crm-ext.us.oracle.com:port/customer/faces/CrmFusionHome
```

Then the event catalog URL is:

```
https://fusxxxx-crm-ext.us.oracle.com:port/soa-infra
```

Obtaining the Interface Catalog URL

The interface catalog URL is formatted as follows. Obtain the host name in the same way as you obtained the host for the service catalog service WSDL.

```
https://host/port_for_the_common_domain/helpPortalApi/otherResources/latest/interfaceCatalogs
```

Enabling Event Subscriptions in Oracle Sales Cloud

Before you can subscribe to events with the Oracle Sales Cloud Adapter, you must perform a series of configuration tasks. For this example, Oracle RightNow Cloud is the other connection with which Oracle Sales Cloud is communicating.

Verifying the Source System Record in Oracle Sales Cloud

The integration is designed to work with Oracle Sales Cloud Release 10.

To verify the source system record in Oracle Sales Cloud:

1. Log in to an Oracle Sales Cloud instance with a user with system administrator privileges.
2. Navigate to the Setup and Maintenance page.
3. Select the **All Tasks** tab.
4. Enter `Manage Trading community Source System` in the **Name** field, and click **Search**.
5. In the **Search Results** section, click the icon under **Go to Task**.
The Manage Trading Community Source Systems page is displayed.
6. Select **Starts with** from the **Code** drop-down menu.
7. To the right of **Starts with**, enter a value in the field, then click **Search**. For this example, `RNOW` is entered.
8. In the **Search Results** section, verify the value you entered (for this example, `RNOW`) is displayed in the **Code** column and ensure the **Enable for Trading Community Members** checkbox is selected. If the **Enable for Trading Community Members** check box is not selected, then perform the following steps:
 - a. Select the `RNOW` row.
 - b. Click the **Edit** icon.
 - c. Select the **Enable for Trading Community Members** checkbox.

Creating the Source System Record in Sales Cloud

To create the Source System Record in Sales Cloud:

If the Source System definition `RNOW` record is not found in the Sales Cloud instance, then follow the steps below to create one:

1. Log in to the Oracle Sales Cloud instance with a user with system administrator privileges.
2. Navigate to the Setup and Maintenance page.
3. Select the **All Tasks** tab.
4. Enter `Manage Trading community Source System` in the **Name** field, and click **Search**.
5. In the **Search Results** section, click the icon under **Go to Task**.
The Manage Trading Community Source Systems page is displayed.
6. Select **Starts with** from the **Code** drop-down menu.
7. Enter `RNOW` in the field, then click **Search**. For this example, Oracle RightNow Cloud is the other connection with which Oracle Sales Cloud is communicating.

8. Under **Search Results**, click the **New** icon.
9. On the Create Source System page, fill in the values as follows. For this example, Oracle RightNow Cloud is the other connection with which Oracle Sales Cloud is communicating.
 - **Code** field: Enter RNOW.
 - **Name** field: Enter RightNow Service Cloud.
 - **Description** field: Enter a description. For example:

Maintains cross references between the Oracle Fusion Applications database and records imported using comma-separated files.
 - **Enable for Trading Community Members** checkbox: Select the checkbox.
10. Click **Save**, then click **Close**.

Verifying Source System Entities

To verify source system entities:

1. Navigate to the Setup and Maintenance page.
2. Select the **All Tasks** tab.
3. Enter `Manage Source System Entities` in the **Name** field, and click **Search**.
4. In the **Search Results** section, click the icon under **Go to Task**.
 The Manage Source System Entities page is displayed.
5. From the **Source Systems for Trading Community Members** list, select **RightNow Service**. For this example, Oracle RightNow Cloud is the other connection with which Oracle Sales Cloud is communicating.
6. In the **RightNow Service Cloud: Entities** section, ensure that the **Address**, **Contact Points**, and **Parties** checkboxes are selected.

Enabling the Trading Community Events Profile Option

To enable the trading community events profile option:

1. Navigate to the Setup and Maintenance page.
2. Select the **All Tasks** tab.
3. Enter `Manage Trading Community Common Profile Options` in the **Name** field, and click **Search**.
4. In the **Search Results** section, click the icon under **Go to Task**.
 The Manage Trading Community Common Profile Options page is displayed.
5. Select **HZ_ENABLE_EVENT_TRACKING**.
 The Manage Trading Community Common Profile Options page for **HZ_ENABLE_EVENT_TRACKING** is displayed.
6. In the **HZ_ENABLE_EVENT_TRACKING:Profile Values** section, set the **Site** level **Profile Value** to **Yes**.

7. Click **Save**, then click **Close**.
8. On the Manage Trading Community Common Profile Options page, select **HZ_INVOKE_OBJ_WF_ON_TRACKING**.
The Manage Trading Community Common Profile Options page for **HZ_INVOKE_OBJ_WF_ON_TRACKING** page is displayed.
9. In the **HZ_INVOKE_OBJ_WF_ON_TRACKING: Profile Values** section, set the **Site level Profile Value** to **Yes**.
10. Click **Save**, then click **Close**.

Creating an Integration User Account

To invoke an Oracle Sales Cloud service catalog or event catalog web service from Oracle Integration Cloud Service, you create a separate user.

To create the integration user account:

1. Log in to Oracle Sales Cloud with a user with system administrator privileges.
2. Navigate to **Navigator > My Team > Manage Users**.
The Manage Users page is displayed.
3. Click **Manage Users**.
4. Click the **Create New User** icon beside **Show Photo**.
5. Enter the following information, and click **Save**.

Field	Description
Last Name	Enter FUSION_APPS_ICS_APPID
Email	Enter a valid email address.
Hire Date	Enter the date.
User Name	Enter FUSION_APPS_ICS_APPID.
Person Type	Enter Employee.
Legal Employer	Select a valid legal organization.
Business Unit	Select a valid business unit.
Send user name and password	Select this checkbox.
User Login	Enter FUSION_APPS_ICS_APPID.
Password	Enter a password for the username.

A notification email is sent to the email address after the user is created.

6. Log out of Oracle Sales Cloud.
7. Log in to the Oracle Sales Cloud instance with **FUSION_APPS_ICS_APPID** and the temporary password provided in the notification email.

8. Change the password after logging in initially.

The Oracle Sales Cloud page appears.

9. Log out of Oracle Sales Cloud.

Assigning Integration Roles

You associate a user with the following roles and privileges in Oracle Authorization Policy Manager on the Oracle Entitlements Server.

You can configure an Oracle Integration Cloud Service instance to use the Username Password Token security policy to access the resources in an Oracle Sales Cloud instance.

Oracle Sales Cloud instance exposes service catalogs and event catalogs to Oracle Integration Cloud Service. These resources are secured in Oracle Sales Cloud. You need to assign the required roles and privileges to the **FUSION_APPS_ICS_APPID** user.

You associate the user **FUSION_APPS_ICS_APPID** with the following roles and privileges.

- **ALL_INTEGRATION_POINTS_ALL_DATA**
- **SOA Operator**
- **FND_MANAGE_CATALOG_SERVICE_PRIV**

Note: You must have administrator privileges in Oracle Authorization Policy Manager to perform the following steps.

To assign integration roles:

1. Log in to Oracle Authorization Policy Manager.
2. Under **Search**, select **Users** from the **For** dropdown list.
3. Enter **FUSION_APPS_ICS_APPID** in the **Search** field, then click the **Search** icon.
4. Select **FUSION_APPS_ICS_APPID** in the search results, then click the **View** icon.
5. On the **FUSION_APPS_ICS_APPID** tab, click the **Application Role Assignments** subtab.
6. Click **Map**.
7. In the Map Application Roles to User dialog:
 - a. Select **crm** from the **Application Name** dropdown list.
 - b. Select **Contains** from the **Role Name** dropdown list, enter **ALL_INTEGRATION_POINTS_ALL_DATA** in the **Role Name** field, and then click **Search**.
 - c. Select **ALL_INTEGRATION_POINTS_ALL_DATA** in the search results, then click **Map Roles**.

The role is mapped for the user under **crm**.

8. Click **Map**.
9. Perform the following steps in the Map Application Roles to User dialog.
 - a. Select **hcm** from the **Application Name** dropdown list, and repeat steps 7.b, and 7.c.
 - b. The role is mapped for the user under **hcm**.
10. Click **Map**.
11. Perform the following steps in the Map Application Roles to User dialog.
 - a. Select **fscm** from the **Application Name** dropdown list, and repeat steps 7.b, 7.c.
The role is mapped for the user under **fscm**.
12. Click **Map**.
13. Perform the following steps in the Map Application Roles to User dialog.
 - a. Select **soa-infra** from the **Application Name** dropdown list
 - b. Select **Contains** from the dropdown menu next to **Display Name**.
 - c. Enter SOA Operator in the **Display Name** field, and then click **Search**.
 - d. Select the **SOA Operator** role in the search results, then click **Map Roles**.
The role is mapped to the user under **soa-infra**.
14. On **FUSION_APPS_ICS_APPID** tab, click **Find Policies** at the top-right corner of the page
15. In the Choose an Application dialog, select **fscm** and click **OK**.
The **Search Authorization Policies** tab is displayed.
16. Click the **New** icon under **Functional Policies** on the Search Authorization Policies page.
17. On the **Untitled** tab, enter Policy for manage services catalog in the **Name** field.
18. Ensure **FUSION_APPS_ICS_APPID** is listed under **Principals**. If the use is not listed under **Principals**, then click + next to **Principals**.
19. Perform the following steps in the Search Principal dialog.
 - a. Select the **Users** tab.
 - b. Select **Starts With** from the **User Name** dropdown list, enter **FUSION_APPS_ICS_APPID** in the **User Name** field, and then click **Search**.
 - c. Select **FUSION_APPS_ICS_APPID** in the search results, then click **Add Selected**.
 - d. Click **Add Principals**.
20. Select **All** next to **Match** under **Principals**.

21. Click + next to **Targets**.
22. In the Search Target dialog, click the **Entitlements** tab, then select **Starts With** from the **Name** dropdown list.
23. Enter `FND_MANAGE_CATALOG_SERVICE_PRIV`, then click **Search**.
24. Select **Manage Webservices catalog** in the search results, then click **Add Selected**.
25. Ensure **Manage Webservices catalog** is added onto **Selected Targets**.
26. Click **Add Targets**.
A new Policy for manage services catalog is added to the user.
27. Click **Save** on the **Untitled** tab.
28. Sign out from Oracle Authorization Policy Manager.

Logging an Oracle Service Request to Create a CSF Key for Event Subscriptions

To successfully subscribe to events, a CSF key is required. This key must be created by Oracle Support Services on the Oracle Sales Cloud side.

Note: The CSF key name must be the same as your Oracle Integration Cloud Service domain.

The CSF key provides the following benefits:

- The Oracle Integration Cloud Service user name and password credentials are used at run time to add the credentials to the security header of the outgoing SOAP document sent to Oracle Integration Cloud Service.
- The Oracle Sales Cloud Adapter uses these credentials to perform authentication.

Log an Oracle service request for Oracle to create the CSF key and include the Oracle Integration Cloud Service domain and Oracle Sales Cloud instance. Provide the identity domain information (for example, `icssvc.identity.domain= idm2152`) for both the Oracle Integration Cloud Service domain and Oracle Sales Cloud subscriptions in the service request.

If you do not file a service request, you receive the following error when testing the connection:

```
Unable to test connection "ITEMSEVENT_CLOUDERPCONNECTI".[Cause: CASDK-0005]:
CASDK-0005: A connector specific exception was raised by the application.
java.net.ProtocolException: Server redirected too many times (20)
Server redirected too many times (20)
```

Enabling Echo Suppression Filters

During bidirectional object synchronization, echoes are generated. For example, an event triggered in Oracle Sales Cloud is synchronized through Oracle Integration Cloud Service to Oracle Service Cloud (with the Oracle RightNow Adapter), which then triggers an event in Oracle Service Cloud and then back to Oracle Sales Cloud, and so on. Oracle Integration Cloud Service-based integrations use echo suppression to prevent unwanted update or create events (the echoes) from returning to the source application.

Filtering is used at the source application together with a `LastUpdatedBy` attribute in the record payload. Oracle Integration Cloud Service uses the account `FUSION_APPS_ICS_APPID` to invoke each application's API. This means the payload of the echo event being raised after synchronization contains the Oracle Integration Cloud Service user `FUSION_APPS_ICS_APPID` as the `LastUpdatedBy` account. Therefore, each synchronization flow implements filtering at the source based on the account Oracle Integration Cloud Service uses to invoke that application's API.

While the filtering is defined in Oracle Integration Cloud Service, the filters are passed to the Oracle Sales Cloud event handler framework at activation/subscription time so that run-time filtering occurs in Oracle Sales Cloud.

The Oracle Sales Cloud event handler framework evaluates the echo suppression expression after the internal event has been enriched to prevent the echo payload push to Oracle Integration Cloud Service.

- Echo suppression expression for account create/update flows is as follows:

```
<xpathExpr xmlns:ns_0='http://xmlns.oracle.com/adf/svc/types/' xmlns:ns_1='http://xmlns.oracle.com/apps/crmCommon/salesParties/accountService/types/'
xmlns:ns_5='<eventPayload/ns_1:result/ns_0:Value/ns_5:LastUpdatedBy>'>http://xmlns.oracle.com/apps/crmCommon/salesParties/accountService/'><eventPayload/ns_1:result/ns_0:Value/ns_5:LastUpdatedBy != 'FUSION_APPS_ICS_APPID' ;</xpathExpr>
```

- Echo suppression expression for contact create/update flows is as follows:

```
<xpathExpr xmlns:ns_0='http://xmlns.oracle.com/adf/svc/types/' xmlns:ns_5='http://xmlns.oracle.com/apps/crmCommon/salesParties/contactService/'
xmlns:ns_1='<eventPayload/ns_1:result/ns_0:Value/ns_5:LastUpdatedBy>'>http://xmlns.oracle.com/apps/crmCommon/salesParties/contactService/types/'><eventPayload/ns_1:result/ns_0:Value/ns_5:LastUpdatedBy != 'FUSION_APPS_ICS_APPID'</xpathExpr>
```

Integrating Groovy Scripts

The Oracle Sales Cloud Adapter inbound endpoint WSDL interface supports the use of concrete values for custom business objects in the WSDL in place of `xsd:anyType` parameters. This feature enables you to use the groovy script editor to create scripts to invoke integrations. The groovy script editor is unable to recognize `xsd:anyType` parameters.

Perform the following high level steps from the CRM Fusion Home page (that is, the Fuse user interface) to integrate the groovy script.

Note: If you have existing integrations with inbound endpoints (with custom business objects having `xsd:anyType`) generated using an Oracle Integration Cloud Service version prior to 16.3.3 and want to use groovy scripts, the integration must be re-edited and all artifacts must be generated again.

1. Create a sandbox environment in Oracle Sales Cloud.
 - a. In the upper right corner, select **Settings > Manage Sandboxes**.
 - b. Create a sandbox.
 - c. Select **Set as Active** to activate the sandbox.
2. On the desktop, click **Tools > Application Composer**.

3. Register the Oracle Integration Cloud Service web service.
 - a. Click **Web Services**.
 - b. Click the icon to create a new web service connection.
 - c. Enter the name and WSDL URL, then click **Read WSDL**.
 - d. Complete the other fields on the page, then save and close the page.
4. Create the object function to invoke the process method of the web service.
 - a. In the left navigation pane, click **Object Workflows**.
 - b. Expand **Objects > Custom Objects > CommonObject > common_object_name**, then select **Server Scripts**.
 - c. From the **Actions** dropdown list, select **Add**.
 - d. Enter a function name and select a return value (for example, **void**).
 - e. On the right side of the page, click **Show/Hide Function Palette**.
 - f. Click **Web Services**.
 - g. With the process function selected, click **Insert**.

The Edit Script field is partially populated with the code for invoking the process method of the web service.

- h. Complete the script to create the object function. For example:

Create Object Function

Definition

* Function Name:

* Returns:

Description:

Parameters

Edit Script

```

1 def ICS_CrmCommonRefCO =
2 [[
3   RecordName : 'CustomObjectTest_IDCDev_5',
4 ]]
5 def newObj = adf.webServices.OSCDemo.process(ICS_CrmCommonRefCO)
  
```

- i. Click **Validate**.
- j. Save and close.

5. Create the action to execute the function and expose the action as a button in the user interface.
 - a. In the left navigation pane, click **Actions and Links**.
 - b. From the **Actions** dropdown list, select **Create**.
 - c. Enter a display label and name.
 - d. From the **Method Name** dropdown list, select the method to use.
 - e. On the right side of the page, select **Script** from the **Source** dropdown list.
 - f. In the left navigation pane, click **Pages**.
 - g. Click **Desktop Pages**.
 - h. Click **Edit Creation Page**.
 - i. In the **Configure Detail Form: Buttons and Actions** section, move the button you created to the **Selected Buttons** section.
 - j. Save and close.
 - k. Click the **Home** icon at the top of the page.
6. Execute the action by clicking the button.

Uploading an SSL Certificate

Certificates are used to validate outbound SSL connections. If you make an SSL connection in which the root certificate does not exist in Oracle Integration Cloud Service, an exception is thrown. In that case, you must upload the appropriate certificate. A certificate enables Oracle Integration Cloud Service to connect with external services. If the external endpoint requires a specific certificate, request the certificate and then upload it into Oracle Integration Cloud Service.

To upload a certificate:

1. From the Oracle Integration Cloud Service home page, click the **Administration** tab in the upper right corner.

All certificates currently uploaded to the trust store are displayed in the Certificates dialog. The **Filter By > Type** list displays the following details:

- **Preinstalled:** Displays the certificates automatically installed in Oracle Integration Cloud Service. These certificates cannot be deleted.
- **Uploaded:** Displays the certificates uploaded by individual users. These certificates can be deleted and updated.

You can also search for certificates in the **Search** field. The search results are limited to a maximum of ten records sorted by name for performance and usability reasons. To ensure that your search results are more granular, enter as much of the certificate name as possible.

2. Click **Upload** at the top of the page.
3. In the Upload Certificate dialog box, enter a unique identifier for the certificate.

This is a name you can use to identify the certificate.

4. Click **Browse** to locate the certificate file (.cer).
5. Click **Upload**.
6. Click the certificate name to view details such as the subject of the certificate, the issuer of the certificate, the date the certificate was issued, and the date the certificate expires.

Creating a Connection

The first step in creating an integration is to create the connections to the applications with which you want to share data.

1. In the Integration Cloud Service toolbar, click **Designer**.
2. On the Designer Portal, click **Connections**.
3. Click **New Connection**.

The Create Connection — Select Adapter dialog is displayed.

4. Select an adapter from the dialog. You can also search for the type of adapter to use by entering a partial or full name in the Search field, and clicking **Search**.

The New Connection — Information dialog is displayed.

5. Enter the information to describe the connection.
 - Enter a meaningful name to help others find your connection when they begin to create their own integrations. The name you enter is automatically added in capital letters to the **Identifier** field. If you modify the identifier name, do not include a blank space (for example, OSC Inbound).
 - Select the role (direction) in which to use this connection (trigger, invoke, or both). Only the roles supported by this adapter are displayed for selection. When you select a role, only the connection properties and security policies appropriate to that role are displayed on the Connections page. If you select an adapter that supports both invoke and trigger, but select only one of those roles, then try to drag the adapter into the section you did not select, you receive an error (for example, configure an Oracle RightNow Cloud Adapter as only an invoke, but drag the adapter to the trigger section).
 - Enter an optional description of the connection.

New Connection - Information

Enter information that describes the connection. Use a meaningful name and description to help others find your connection when they create their own integrations. The Identifier must be unique and can be set only when the connection is created.

* **Connection Name** Order Status

* **Identifier** ORDER_STATUS

Connection Role Invoke

Description Enter a brief description...

Create Cancel

6. Click **Create**.

Your connection is created and you are now ready to configure connection details, such as email contact, connection properties, security policies, and connection login credentials.

Adding a Contact Email

From the Connection Administrator section of the connection, you can add a contact email address for notifications.

1. In the **Email Address** field, enter an email address to receive email notifications when problems occur.
2. In the upper right corner, click **Save**.

Configuring Connection Properties

Enter connection information so your application can process requests.

1. Click **Configure Connectivity**.

The Connection Properties dialog is displayed.

2. In the **WSDL URL** field, specify the URL to use in this integration:
 - OSC Services Catalog WSDL URL
 - OSC Events Catalog URL (optional)
 - Interface Catalog URL (optional)

For information about obtaining the URL, see [Obtaining the Oracle Sales Cloud Adapter Service Catalog Service WSDL, Event Catalog URL, or Interface Catalog URL](#).

3. Click **OK**.

4. Configure connection security. See [Configuring Connection Security](#).

Configuring Connection Security

Configure security for your Update Adapter Product Name connection by selecting the security policy and security token.

1. Click **Configure Security**.
2. Enter your login credentials:
 - a. Select the security policy. Only the Username Password Token policy is supported. It cannot be deselected.
 - b. Enter a username and password.
 - c. Reenter the password a second time.
3. Click **OK**.

Testing the Connection

Test your connection to ensure that it is successfully configured.

1. In the upper right corner of the page, click **Test**.
 If successful, the following message is displayed and the progress indicator shows 100%.
 The connection test was successful!
2. If your connection was unsuccessful, an error message is displayed with details. Verify that the configuration details you entered are correct.
3. When complete, click **Save**.

Editing a Connection

You can edit connection settings after creating a new connection.

1. In the Oracle Integration Cloud Service toolbar, click **Designer**.
2. On the Designer Portal, click **Connections**.
3. On the Connections page, search for the connection name.
4. Select **Edit** from the connection **Actions** menu or click the connection name.



The Connection page is displayed.

5. To edit the notification email contact, change the email address in the **Email Address** field.

6. To edit the connection properties, click **Configure Connectivity**. Note that some connections do not include this button. If your connector does not include a **Configure Connectivity** button, then click the **Configure Credentials** button.

Cloning a Connection

You can clone a copy of an existing connection. It is a quick way to create a new connection.

1. In the Oracle Integration Cloud Service toolbar, click **Designer**.
2. On the Designer Portal, click **Connections**.
3. On the Connections page, search for the connection name.
4. Select **Clone** from the connection **Actions** menu.



The Clone Connection dialog is displayed.

5. Enter the connection information.
6. Click **Clone**.
7. Click **Edit** to configure the credentials of your cloned connection. Cloning a connection does not copy the credentials.

See [Editing a Connection](#) for instructions.

Deleting a Connection

You can delete a connection from the connection menu.

1. In the Oracle Integration Cloud Service toolbar, click **Designer**.
2. On the Designer Portal, click **Connections**.
3. On the Connections page, search for the connection name.
4. Click **Delete** from the connection **Actions** menu.



The Delete Connection dialog is displayed if the connection is not used in an integration.

5. Click **Yes** to confirm deletion.

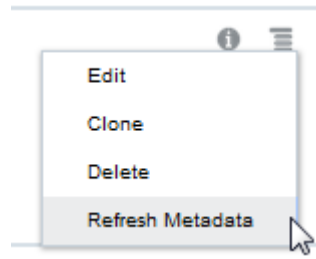
Refreshing Integration Metadata

You can manually refresh the currently-cached metadata available to adapters that have implemented metadata caching. Metadata changes typically relate to customizations of integrations, such as adding custom objects and attributes to integrations. There may also be cases in which integrations have been patched, which results in additional custom objects and attributes being added. This option is similar to clearing the cache in your browser. Without a manual refresh, a staleness check is only performed when you drag a connection into an integration. This is typically sufficient, but in some cases you may know that a refresh is required. For these cases, the **Refresh Metadata** menu option is provided.

To refresh integration metadata:

Note: The **Refresh Metadata** menu option is only available with adapters that have implemented metadata caching.

1. In the Integration Cloud Service toolbar, click **Designer**.
2. In the Designer Portal, click **Connections**.
3. Locate the connection to refresh.
4. From the menu at the right, select **Refresh Metadata**.



A message is displayed indicating that the refresh was successful.

Metadata refresh for connection "*connection_type*" has been initiated successfully.

Creating an Integration

Integrations use the adapter connections you created to your applications, and define how information is shared between those applications. You can view, export, create, import, edit, or delete integrations; create integrations to publish or subscribe to messages; add and remove request and response enrichment triggers; and create routing paths for different target endpoints in integrations. Click the following topics for more information.

Topic

- [Creating Integrations \(in *Using Oracle Integration Cloud Service*\)](#)

Adding the Oracle Sales Cloud Adapter Connection to an Integration

When you drag the Oracle Sales Cloud Adapter into the trigger and invoke area of an integration, the Cloud Endpoint Configuration Wizard is invoked. This wizard guides you through configuration of the Oracle Sales Cloud Adapter endpoint properties.

The following sections describe the wizard pages that guide you through configuration of the Oracle Sales Cloud Adapter as a trigger or invoke in an integration.

Topics

- [Configuring Basic Information Properties](#)
- [Configuring Oracle Sales Cloud Trigger Request Properties](#)
- [Configuring Oracle Sales Cloud Trigger Response Properties](#)
- [Configuring Oracle Sales Cloud Invoke Operation Properties](#)
- [Reviewing Configuration Values on the Summary Page](#)

For more information about the Oracle Sales Cloud Adapter, see [Oracle Sales Cloud Adapter Capabilities](#).

Configuring Basic Information Properties

You can enter a name and description on the Basic Info page of each adapter in your integration.

Topics

- [What You Can Do from the Basic Info Page](#)
- [What You See on the Basic Info Page](#)

What You Can Do from the Basic Info Page

You can specify the following values on the Basic Info page. The Basic Info page is the initial wizard page that is displayed whenever you drag an adapter to the section of the integration canvas supported by your adapter.

- Specify a meaningful name.
- Specify a description of the responsibilities.

What You See on the Basic Info Page

The following table describes the key information on the Basic Info page.

Element	Description
What do you want to call your endpoint?	Provide a meaningful name so that others can understand the responsibilities of this connection. You can include English alphabetic characters, numbers, underscores, and dashes in the name. You cannot include the following: <ul style="list-style-type: none">• Blank spaces (for example, My Inbound Connection)• Special characters (for example, #;83& or righ(t)now4)• Multibyte characters
What does this endpoint do?	Enter an optional description of the connection's responsibilities. For example: This connection receives an inbound request to synchronize account information with the cloud application.

Configuring Oracle Sales Cloud Trigger Request Properties

Enter the Oracle Sales Cloud connection trigger request values for your integration. The values you specify start the integration.

Topics

- [What You Can Do from the Oracle Sales Cloud Source Request Page](#)
- [What You See on the Oracle Sales Cloud Source Request Page](#)

What You Can Do from the Oracle Sales Cloud Trigger Request Page

You can select the following trigger request values for the Oracle Sales Cloud application.

Select the specific type to receive as a request from Oracle Sales Cloud. Your ability to select either a business object or event subscription is based on the content of the WSDL file (for business objects) or event catalog URL (for event subscriptions) you specified during Oracle Sales Cloud Adapter configuration.

- Select to receive a business object as a request from Oracle Sales Cloud. This selection invokes the integration.
- Select to receive an event subscription raised by the Oracle Sales Cloud application as a request from Oracle Sales Cloud. This selection invokes the integration.

Note: If the options for selecting business objects and events are missing, that indicates that the event catalog URL was not supplied on the Connections page.

What You See on the Oracle Sales Cloud Trigger Request Page

The following table describes the key information on the Oracle Sales Cloud Adapter trigger Request page.

Element	Description
Configure a Request	Select the request type appropriate to your integration. The fields that are displayed below are based on the request type that you select. <ul style="list-style-type: none">• With Business Objects: Select to display a list of business objects.• With Business Events: Select to display a list of event subscriptions
Select a Business Object (is displayed if With Business Objects is selected)	Select the business object from the Oracle Sales Cloud application to receive as a request that starts the integration.
Business Event For Subscription (is displayed if With Business Events is selected)	Select the event subscription from the Oracle Sales Cloud application to which to subscribe. This event is received as a request that starts the integration. Only events that can be subscribed to are displayed.

Element	Description
Filter Expr for <i>Business_Event_Name</i> (is displayed if With Business Events is selected)	<p>Enter an event condition filter expression. A filter expression specifies that the contents (payload or headers) of a message be analyzed before any event subscription is sent. For example, you can apply a filter expression that specifies that an event subscription be sent only if the message includes a customer ID. When the expression logic is satisfied, the event is accepted for delivery to the integration.</p> <p>As another example, assume you have the following event payload and want to process records where OwnerName is provided.</p> <pre> ... <Body xmlns="http://schemas.xmlsoap.org/soap/envelope/"> <ns0:onEvent xmlns:ns0="http:// xmlns.oracle.com/cloud/adaptor/osc/ UpdateCustomerFromAccount_REQUEST/ types"> <ns0:getAccountResponse xmlns:wsu="http://docs.oasis- open.org/wss/2004/01/oasis-200401-wss- wssecurity-utility-1.0.xsd" xmlns:wsa="http://www.w3.org/ 2005/08/addressing" xmlns:ns0="http:// xmlns.oracle.com/cloud/adaptor/osc/ UpdateCustomerFromAccount_REQUEST/ types" xmlns:env="http:// schemas.xmlsoap.org/soap/envelope/"> <ns0:result xmlns:ns4="http:// xmlns.oracle.com/apps/crmCommon/ salesParties/accountService/" xmlns:xsi="http://www.w3.org/ 2001/XMLSchema-instance" xmlns:ns3="http:// xmlns.oracle.com/apps/crmCommon/notes/ noteService" xmlns:ns="http:// xmlns.oracle.com/apps/crmCommon/ salesParties/commonService/" xmlns:ns0="http:// xmlns.oracle.com/apps/crmCommon/ salesParties/accountService/types/" xsi:type="ns4:Account"> <ns4:PartyId>100000003362469</ ns4:PartyId> <ns4:PartyNumber>AIMA-16BBRP</ ns4:PartyNumber> <ns4:SourceSystem>CPI</ </pre>

Element	Description
	<pre> ns4:SourceSystem> <ns4:SourceSystemReferenceValue>AIMA-16B BRP</ns4:SourceSystemReferenceValue > <ns4:OrganizationName>Bank of America</ns4:OrganizationName> <ns4:UniqueNameSuffix xsi:nil="true" /> <ns4:PartyUniqueName>Bank of America</ns4:PartyUniqueName> <ns4:Type>ZCA_CUSTOMER</ ns4:Type> <ns4:OwnerPartyId>100000000225011</ ns4:OwnerPartyId> <ns4:OwnerPartyNumber>2008</ ns4:OwnerPartyNumber> <ns4:OwnerEmailAddress>jhays@cpicardgrou p.com</ns4:OwnerEmailAddress> <ns4:OwnerName>Jim Hays</ ns4:OwnerName> . . . </ns0:result> </ns0:getAccountResponse> </ns01:onEvent> </Body> </pre> <p>The incoming event payload is referenced with \$inputVariable. The payload response from the enrichment service can be referenced with \$eventPayload. Given the event payload, you reference OwnerName as follows:</p> <pre> <xpathExpr xmlns:ns0 ='http://xmlns.oracle.com/cloud/ adapter/osc/ UpdateCustomerFromAccount_REQUEST/types ' xmlns:ns1='http://xmlns.oracle.com/ apps/crmCommon/salesParties/ accountService/'> \$inputVariable/ns0:result/ns1:OwnerName = 'Jim Hays'</xpathExpr> </pre>
Filter by object name or Filter By Event Name	Type the initial letters of the name to filter the display of business objects or event subscriptions.

Configuring Oracle Sales Cloud Trigger Response Properties

Enter the Oracle Sales Cloud trigger response values for your integration.

Topics

- [What You Can Do from the Oracle Sales Cloud Source Response Page](#)
- [What You See on the Oracle Sales Cloud Source Response Page](#)

What You Can Do from the Oracle Sales Cloud Trigger Response Page

You can configure the operation and business object that comprise the response type for Oracle Sales Cloud.

- Immediate (synchronous) response: A response business object is immediately returned as output. You select **Immediate** as the response type on the Response page and select the business object as part of the response to the client.
- Delayed (asynchronous) response: A callback service to which to route the callback is exposed. You select **Delayed** as the response type on the Response page and select the operation and business object that comprise a successful callback response, a failed callback response, or both.
- No response is required: You select **None** on the Response page because a response is not required.

The Response page looks as follows:

The screenshot displays the 'Response' configuration page. On the left, a sidebar contains tabs: 'Basic Info' (checked), 'Request' (checked), 'Response' (active), and 'Summary'. The main content area is titled '? Response Type' and features three radio buttons: 'Immediate' (selected), 'Delayed', and 'None'. Below this, a section titled '? * Select a Business Object' includes a search box labeled 'Filter by object name' with the value 'ALL'. A list of business objects is shown in a scrollable container: 'Account', 'AnalyticsReport', 'Answer', 'Asset', 'AssetStatus', 'CO.Contact_CustomObj', 'CO.Custom', and 'CO.CustomRightNow'. The 'Account' object is currently selected.

What You See on the Oracle Sales Cloud Trigger Response Page

Select the business object for the integration to send as a response document to the Oracle Sales Cloud application.

The following types of responses are available.

- Immediate: A synchronous response is required (See [Table 4-1](#) for instructions)
- Delayed: An asynchronous response is required (See [Table 4-2](#) for instructions)
- None: No response is required (See [Table 4-3](#) for instructions)

Table 4-1 Response Type — Immediate (Synchronous) Response is Required

Element	Description
Response Type	Select Immediate for the Oracle Sales Cloud application to wait until a response is received from the integration. This is also known as the request and response message exchange pattern. This is the default selection.
Filter by object name	Type the initial letters to filter the display of business objects.
Select a Business Object	Select the business object to receive from the Oracle Sales Cloud application as a response. You can filter the display of business objects by typing the initial letters of business objects in the Filter by object name field. A description of the selected business object is displayed below this list.

Table 4-2 Response Type — Delayed (Asynchronous) Response is Required

Element	Description
Response Type	<p>Select Delayed to configure a successful callback response, a failed callback response, or both.</p> <p>This enables you to configure the operation and business objects that you want the Oracle Sales Cloud application to process as part of a successful callback response, a failed callback response, or both.</p>
Successful Response/Failed Response	<p>Select the type of callback to configure. After configuring one type of callback (for example, successful), you can configure the other type (for example, failed).</p> <ul style="list-style-type: none"> • Successful Response: Select to configure the operation and business objects that you want the Oracle Sales Cloud application to process as part of a successful callback response sent by the integration. • Failed Response: Select to configure the operation and business objects that you want the Oracle Sales Cloud application to process as part of an error callback response sent by the integration.
Select the operation to perform on the business object	Select the operation to perform on the business object.

Table 4-2 (Cont.) Response Type — Delayed (Asynchronous) Response is Required

Element	Description
Life Cycle	Displays the current state of the selected business document. Active indicates the business document is available for use. Deprecated indicates the business document is nearing the end of use and must be used with caution.
Description	Displays a description of the selected business object or service.

The following table describes the fields available if no response is required.

Table 4-3 None — No Response is Required

Element	Description
Response Type	Select None .
Select a Business Object	If you select None , this section is hidden.

Configuring Oracle Sales Cloud Invoke Operation Properties

Enter the Oracle Sales Cloud invoke operation values for your integration.

Topics

- [What You Can Do from the Oracle Sales Cloud Target Operations Page](#)
- [What You See on the Oracle Sales Cloud Target Operations Page](#)

What You Can Do from the Oracle Sales Cloud Invoke Operations Page

You can configure the following invoke operations values for Oracle Sales Cloud.

- Browse for and select a business object, service, or Oracle Fusion Applications REST API resource.
- Select the operation to perform on the business object, service, or Oracle Fusion Applications REST API resource.

What You See on the Oracle Sales Cloud Invoke Operations Page

The following table describes the key information on the Oracle Sales Cloud invoke Operations page.

Element	Description
Browse by	<p>Select to browse by business object or service. There is a one-to-one correspondence between the business object and service. The service acts on the business document.</p> <ul style="list-style-type: none"> • Business Objects: Select to browse a list of available business objects. • Services: Select to browse a list of available business services. • Business (REST) Resource: Select to browse a list of available Oracle Fusion Applications REST API resources. This option is only available if you specified an interface catalog URL in the Interface Catalog URL field on the Connection Properties page when configuring the Oracle Sales Cloud Adapter. For information about this URL, see Obtaining the Oracle Sales Cloud Adapter Service Catalog Service WSDL, Event Catalog URL, or Interface Catalog URL. <p>Note: The Oracle Sales Cloud Adapter currently pulls all resources exposed by the interface catalog and displays them for selection, including private resources. Private resources are not supported. For information about the public resources that are supported, see the Resource Types section of REST API for Oracle Sales Cloud Release 11.</p>
Filter by object name (displayed if Business Objects is selected)	Type the initial letters to filter the display of business objects.
Select a Business Object (displayed if Business Objects is selected)	Select the business object to use.
Filter by service (displayed if Services is selected)	Type the initial letters to filter the display of services.
Select a Service (displayed if Services is selected)	Select the service to use.
Select a Service Application (displayed if Business (REST) Resources is selected)	Select the service application to see the business resources defined in the application.
Select a Business Resource (displayed if Business (REST) Resources is selected)	Select the business resource to use.

Element	Description
Select the Operation to Perform on the Business Object/Resource or Service	Select the operation to perform on the selected business object, business (REST) resource, or service.
Life Cycle	Displays the state of the selected business object or service. Deprecated indicates the business document is nearing the end of use and must be used with caution.
Description	Displays a description of the selected business object or service.

Reviewing Configuration Values on the Summary Page

You can review the specified adapter configuration values on the Summary page.

Topics

- [What You Can Do from the Summary Page](#)
- [What You See on the Summary Page](#)

What You Can Do from the Summary Page

You can review configuration details from the Summary page. The Summary page is the final wizard page for each adapter after you have completed your configuration.

- View the configuration details you defined for the adapter. For example, if you have defined an inbound trigger (source) adapter with a request business object and immediate response business object, specific details about this configuration are displayed on the Summary page.
- Click **Done** if you want to save your configuration details.
- Click a specific tab in the left panel or click **Back** to access a specific page to update your configuration definitions.
- Click **Cancel** to cancel your configuration details.

What You See on the Summary Page

The following table describes the key information on the Summary page.

Element	Description
Summary	<p>Displays a summary of the source or target configuration values you defined on previous pages of the wizard.</p> <p>For adapters for which a generated XSD file is provided, click the XSD link to view a read-only version of the file.</p> <p>To return to a previous page to update any values, click the appropriate tab in the left panel or click Back.</p>

Creating Mappings and Lookups in Integrations

You must map data between trigger connections and invoke connections in integrations. You can also optionally create lookups in integrations.

Topics

- Mapping Integration Cloud Service Data (in *Using Oracle Integration Cloud Service*)
- Creating Lookups (in *Using Oracle Integration Cloud Service*)

Administering Integrations

Oracle Integration Cloud Service provides you with the information and tools required to activate, monitor, and manage your integrations in the runtime environment.

Topic

- Administering Integration Cloud Service (in *Using Oracle Integration Cloud Service*)

Troubleshooting the Oracle Sales Cloud Adapter

Review the following topics to learn about troubleshooting issues with the Oracle Sales Cloud Adapter.

Topics

- If you receive an authentication failure error message when testing the Oracle Sales Cloud connection, you must file a service request with Oracle Support Services to create the CSF key:

For more information, see [Logging an Oracle Service Request to Create a CSF Key for Event Subscriptions](#).
