Oracle® Fusion Middleware

Using the Adapter Configuration Wizard for Salesforce

12*c* (12.2.1.4.0)

ORACLE®

Oracle Fusion Middleware Using the Adapter Configuration Wizard for Salesforce, 12*c* (12.2.1.4.0)

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Preface

Using the Adapter Configuration Wizard for Salesforce describes the pages of the Adapter Configuration Wizard that you use to configure the Salesforce Adapter. This wizard is also used to configure others adapters, such as SAP Ariba Adapter, ServiceNow Adapter, and SuccessFactors Adapter.

Audience

This guide is intended for users who want to create, deploy, test, and monitor applications that use the Salesforce Adapter.

Documentation Accessibility

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Related Documents

Refer to the Oracle Fusion Middleware library on the Oracle Help Center for additional information.

- For adapters information, see On-Premises Integration Adapters.

- For Oracle SOA Suite information, see Oracle SOA Suite.

- For versions of platforms and related software for which Oracle Technology Adapters are certified and supported, review the Certification Matrix on OTN.

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.

Convention	Meaning
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
`monospace`	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

1

Unsupported Features

The Salesforce Adapter does not support the following features:

- Message recovery in the Error Hospital in Oracle Enterprise Manager Fusion Middleware Control.

- The display of properties in the **Properties** tab for a reference (outbound) adapter in Oracle Enterprise Manager Fusion Middleware Control (for example, service WSDL URL, CSF key used, and others). These are the reference adapters that you select on the Services and References page.

- Rejected message handling.

- The following message encryption and decryption features available when you right-click a cloud adapter in the **Exposed Service** swimlane or **External References** swimlane in Oracle JDeveloper:

  - **Protect Sensitive Data** > **Encrypt Request Data** for cloud adapters in the **Exposed Service** swimlane.

  - **Protect Sensitive Data** > **Decrypt Sensitive Data** for cloud adapters in the **External References** swimlane.

- The policy attachments feature available when you right-click a cloud adapter in the **Exposed Service** swimlane or **External References** swimlane in Oracle JDeveloper.

- The localization of WSDL and schemas files. If you are prompted by the Localize Files dialog after completing the Connections page in the Adapter Configuration Wizard, click **Cancel**.

2

Configuring Salesforce Properties

The Salesforce Adapter enables you to create integrations with a Salesforce application.

The following sections describe the wizard pages that guide you through configuration of the Salesforce adapter as a trigger and invoke in an integration. Postconfiguration tasks are also provided.

Topic

- Understanding Salesforce Constraints
- Configuring Basic Information Properties
- Configuring Oracle Cloud Adapter Connection and CSF Key Properties
- Configuring Salesforce Source Outbound Messaging Properties
- Configuring Salesforce Target Operations Properties
- Configuring Salesforce Target Headers Properties
- Reviewing Configuration Values on the Summary Page
- Performing Salesforce Cloud Postconfiguration Tasks

2.1 Understanding Salesforce Constraints

You must be aware of the following constraints before configuring the Salesforce Adapter.

- The Salesforce Adapter uses the SalesForceDotCom (SFDC) API for all activities. Therefore, it is subject to any Salesforce API limitations. The limitations are defined in the Salesforce Limits Quick Reference Guide.
- Not all the push topic queries are supported by Salesforce. See Supported Push Topic Queries and Unsupported PushTopic Queries.
- Client applications must adhere to Salesforce's SOAP API support policy and backward compatibility terms. These terms are available at SFDC SOAP API Support Policy.

2.2 Configuring Basic Information Properties

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

Topics

- What You Can Do from the Basic Info Page
- What You See on the Basic Info Page

2.2.1 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 trigger (source) or invoke (target) area supported by your adapter.

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

2.2.2 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: • 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.`

2.3 Configuring Oracle Cloud Adapter Connection and CSF Key Properties

Enter the Oracle Cloud adapter configuration connectivity and Credential Store Framework (CSF) key values for your integration.

Topics

- What You Can Do from the Oracle Cloud Adapter Connection Page
- What You See on the Oracle Cloud Adapter Connection Page
- What You Can Do from the Oracle Cloud Adapter CSF Key Page
- What You See on the Oracle Cloud Adapter CSF Key Page

2.3.1 What You Can Do from the Oracle Cloud Adapter Connection Page

You can specify the following connection values for the Oracle Cloud adapter.

- Specify the WSDL URL for some adapters. If you are configuring the Oracle Eloqua Cloud adapter, no WSDL is required.

- Specify the security policy.

- Create the authentication key. A key created for one direction (for example, outbound) is also available for selection in the other direction (for example, inbound).

2.3.2 What You See on the Oracle Cloud Adapter Connection Page

The following table describes the key information on the Oracle Cloud adapter Connection page.

Element	Description
WSDL URL	**Note**: This field is not displayed for the Oracle Eloqua Cloud adapter.
	Specify the WSDL. The WSDL is used to build integrations specific to your instance. You can also select the WSDL from a file system or another source by choosing the browser icon next to the **WSDL URL** field. Click **File System** at the top of the dialog, then browse for the WSDL.
Security Policy	Select the security policy appropriate to your environment (for example, **USERNAME_PASSWORD_TOKEN**).
	• The wizard shows all policies, including those that may not be applicable. To make a correct selection, you must have a knowledge of policies. For example, you cannot select a SAML-based policy because the identity is not propagated.
	• The policies you apply to the cloud adapter are unique to the cloud adapter and do not impact other endpoints in the composite.
Authentication Key	Select the CSF authentication key.
	• **Add**: Click to create a new authentication key. You must specify the key name, user name, and password.
	• **Edit**: Click to edit an authentication key.
	• **Delete**: Click to delete an authentication key.
Test	Click to validate the authentication key.

2.3.3 What You Can Do from the Oracle Cloud Adapter CSF Key Page

You can specify the following CSF key values for the Oracle Cloud adapter.

- CSF key name

- User name and password

- If you are configuring the Oracle Eloqua Cloud adapter only, you must specify a company name.

2.3.4 What You See on the Oracle Cloud Adapter CSF Key Page

The following table describes the key information on the Oracle Cloud adapter CSF Key page.

Element	Description
CSF Key Name	Specify the CSF key to enable runtime injection of credentials. The adapter uses the CSF to retrieve the username and password required for authentication with the application (for example, the Oracle Sales Cloud or Oracle ERP application). This key identifies your login credentials during design-time.
Company Name (Oracle Eloqua Cloud adapter only)	**Note**: This field is only displayed for the Oracle Eloqua Cloud adapter. Specify the Oracle Eloqua company name.
Email Account and Role	**Note**: This field is only displayed for the Oracle NetSuite Cloud adapter. Specify the email account and role.
User Name	Enter the user name for connecting to your application (for example, the Oracle Sales Cloud or Oracle ERP application). Your administrator provides you with user credentials.
Password	Enter the password for connecting to your application.
Re-enter Password	Re-enter the same password a second time.
Application ID (NetSuite Adapter only)	Enter the application ID. When creating a SOA composite application, this field is optional if you are using a NetSuite 2015 WSDL and mandatory if using a NetSuite 2016 WSDL.

2.4 Configuring Salesforce Source Outbound Messaging Properties

Enter the Oracle Salesforce Cloud source outbound messaging values for your integration.

Topics

- What You Can Do from the Salesforce Cloud Source Outbound Messaging Properties Page
- What You See on the Salesforce Cloud Source Outbound Messaging Properties

2.4.1 What You Can Do from the Salesforce Cloud Source Outbound Messaging Properties Page

You can configure the source outbound messaging WSDL for the Salesforce Cloud adapter.

This process consists of several steps:

- The outbound message consists of a workflow, approval, or milestone action that sends your specified information to your specified endpoint. You configure outbound messaging in the Salesforce setup menu. Afterward, you configure the endpoint.

  To create a workflow rule:

  1. Log in to your Salesforce account and go to **Setup**.

  2. Under the **App Setup** menu, expand **Create**, followed by **Workflow & Approvals**.

  3. Select a workflow rule or approval process as per your integration requirement.

  4. Click **Create New**, provide the required information in the following wizards, and click **Save**.

     a. For the workflow rule, click **Edit** under the **Workflow Action** menu followed by **Add Workflow Action**, and then **New Outbound Message**.

     b. For the approval process, click **Add New** (you can select for one or more actions including **Submission**, **Approval**, **Rejection**, and **Recall**) followed by **New Outbound Message**.

  Outbound messaging WSDLs associated with approval processes or entitlement processes are also supported and consumed by the adapter.

- Generate the Salesforce outbound messaging WSDL at www.salesforce.com, then select the target outbound messaging WSDL you created to receive outbound message notifications from the Salesforce application. For instructions, see What You See on the Salesforce Cloud Source Outbound Messaging Properties.

2.4.2 What You See on the Salesforce Cloud Source Outbound Messaging Properties

The following table describes the key information on the source Outbound Messaging page.

Element	Description
Select the Outbound Messaging WSDL	Generate and then select the target Salesforce outbound messaging WSDL to receive outbound message notifications from the Salesforce application.
	Note: You must first create a workflow rule as described in What You Can Do from the Salesforce Cloud Source Outbound Messaging Properties Page. Outbound messaging WSDLs associated with approval processes or entitlement processes are also supported and consumed by the adapter.
	To generate and then select the target Salesforce outbound messaging WSDL:
	1. Log in to your Salesforce account and go to **Setup** > **Outbound Messages**.
	2. Select the required object, and click **Next**.
	3. Enter other required details (in the **Endpoint URL** field, enter a dummy URL), and click **Save**.
	4. Click **Generate WSDL** to download the WSDL.
	5. Return to this wizard page and browse for the generated WSDL.
	6. Activate the integration and copy the endpoint URL from the integration information icon.
	7. Go to the **Outbound Messaging** section at www.salesforce.com and replace the dummy URL you entered in Step 3 with the real endpoint URL.

2.5 Configuring Salesforce Cloud Target Operation Properties

Enter the Salesforce Cloud target operation values for your integration.

Topics

- What You Can Do from the Salesforce Target Operations Page
- What You See on the Salesforce Target Operation Page

2.5.1 What You Can Do from the Salesforce Cloud Target Operations Page

You can configure the following target operations values for Salesforce Cloud.

- Select either of the following operation types:

1. CRUD

2. Salesforce Object Query Language (SOQL) or Salesforce Object Search Language (SOSL) query

- Select the business objects.

- Specify the SOQL/SOSL query.

2.5.2 What You See on the Salesforce Target Operations Page

The following table describes the key information on the Salesforce Cloud target Operations page.

Element	Description

Select an Operation Type	Select the type of operation to perform:
	
	 • **CORE** : Represents all core operations supported by the Salesforce application.
	
	 • **CRUD**: Represents the create, read, update, delete, or destroy operation to perform on Salesforce business objects. Each letter maps to a standard SQL statement, HTTP method, or DDS operation. Select the CRUD operation to perform: **Create**, **Delete**, **Retrieve**, or **Update**.
	
	 • **MISC**: Represents specialized task operations (such as fetching user information associated with the current session) in the Salesforce application.
	
	 • **SOSL/SOQL**: Select to enter a Salesforce Object Query Language (SOQL) or Salesforce Object Search Language (SOSL) query to send as a request to the Salesforce application. The following operations are available:
	
	   – **query**: Executes a query against specific criteria and returns data matching that criteria. Only records not deleted from your Salesforce application account are returned.
	
	   – **queryAll**: Returns the same data as the **query** operation, along with deleted records present in the recycle bin.
	
	   – **search**: Returns records from the Salesforce application. You can specify binding parameters to dynamically provide a search string as input to your search operation.
	
	 If you select this option, the page is refreshed to display a field for entering an SOQL or SOSL query to send for validation:
	
	   – **Query Statement**: Enter a valid query statement. SOQL statements evaluate to a list of sObjects, a single sObject, or an integer for `count` method queries. The following examples are provided:
	
	 `"SELECT Id FROM Contact WHERE Name LIKE 'A%' AND MailingCity = 'California'"`
	
	 `SELECT COUNT() FROM Contact`
	
	 SOSL statements evaluate to a list of sObjects, where each list contains the search results for a particular sObject type. For example:
	
	 `"SELECT a.name, a.id, a.accountNumber, c.name from Contact c, c.Account"`
	
	   – **Binding Parameters**: Displays any parameters included in the query. For example, `orgId` is a parameter in the following query:
	
	 `SELECT a.name, a.id, a.accountNumber, c.name from Contact c, c.Account a WHERE a.name = "&orgId"`

Element	Description
	This query displays a binding parameters text box in which to enter a test value for `orgId`. – **Test My Query**. Click to validate the query against the Salesforce application. Query results are displayed. If errors occur, you receive results about how to correct the query.
Filter By Object Name	Type the initial letters to filter the display of business objects. You can also select a filter type: • **All**: Displays all objects. • **Custom**: Displays objects you created. Custom business objects are appended with "_c." • **Standard**: Business objects delivered as part of the Salesforce application.
Select Business Objects	Select a single or multiple business objects to include in the operation. You can select up to ten objects for one operation.

2.6 Configuring Salesforce Cloud Target Header Properties

Enter the Salesforce Cloud target header values for your integration.

Topics

• What You Can Do from the Salesforce Target Headers Page

• What You See on the Salesforce Target Headers Page

2.6.1 What You Can Do from the Salesforce Cloud Target Headers Page

You can configure the target header properties for Salesforce Cloud.

2.6.2 What You See on the Salesforce Target Headers Page

The following table describes the key information on the Salesforce Cloud target Headers page.

The headers available for configuration are based on the operation you selected on the target Operations page. There are two types of headers:

• Request headers are sent with the request message to the Salesforce application.

• Response headers are received with the response message sent from the Salesforce application.

For more information about these header properties, visit www.salesforce.com and specify the specific name of the property in the search utility.

Element	Description
AllOrNoneHeader (request header)	Specifies the transactional behavior for Salesforce application operations. If you set **AllorNone** to **true**, the call to the Salesforce application is committed only if it completes without any errors. Otherwise, it is rolled back. The default behavior is to commit partial records without any error.
AllowFieldTruncationHeader (request header)	Specifies the truncation behavior for the following fields (each are string data types): • `anyType` • `email` • `picklist` • `encryptedstring` • `textarea` • `mulitpicklist` • `phone` • `string` Set **allowFieldTruncation** to one of the following values: • **True**: If you enter a value of 25 characters in a field of 20 characters, the first 20 records are inserted into the field and the transaction is successful. • **False**: If you enter a value of 25 characters in a field of 20 characters, an error is thrown and the transaction does not commit.
AssignmentRuleHeader (request header)	Specifies the assignment rule to use when creating or updating an account, case, or lead. The assignment rule can be active or inactive. The ID is retrieved by querying the `AssignmentRule` object. If the ID is specified, you do not need to specify the **useDefaultRule** value. • **assignmentRuleId**: The ID of the assignment rule to use. The ID is not validated by the Salesforce Cloud application, whether or not it exists. Validation occurs during runtime. • **useDefaultRule**: If set to **true**, the default (active) assignment rule is used. If set to **false**, the default (active) assignment rule is not used.

Element	Description

EmailHeader (request header)	Specifies whether or not to send a notification email. You can set the following properties:
	• **triggerAutoResponseEmail**
	  – **true**: Triggers automatic response rules for leads and cases.
	  – **false**: Automatic response rules for leads and cases are not triggered.
	• **triggerOtherEmail**
	  – **true**: The email is triggered outside the organization.
	  – **false**: The email is not triggered outside the organization.
	• **triggerUserEmail**
	  – **true**: The email is triggered and sent to users in the organization. This email is triggered by a number of events such as adding comments to a case or updating a task.
	  – **false**: The email is not triggered and sent to users in the organization.

DebuggingHeader (request header)	Specify the debugging log level. The following log levels are supported: • **NONE** (least verbose) • **DEBUGONLY** • **DB** • **PROFILING** • **CALLOUT** • **DETAIL** (most verbose)
MruHeader (request header)	The Salesforce application shows the most recently used (MRU) items. In API version 7.0 or later, the list is not updated by itself. Use **MruHeader** to update the list. Using this header can negatively impact performance. Set **updateMru** to one of the following values: • **true**: The list of MRU items is updated in the Salesforce application. • **false**: The list of most recently used items is not updated in the Salesforce application.
PackageVersionHeader (request header)	Specifies the package version for any installed package. The package version identifies the components in a package. The package version follows the format `majorNumber.minorNumber.patchNumber` (for example, `3.4.5`, where `3` refers to `majorNumber`, `4` refers to `minorNumber`, and `5` refers to `patchNumber`).
QueryOptions (request header)	Specifies the batch size for queries. The default value is `500`, the minimum value is `200`, and the maximum value is `2000`.
DebuggingInfo (response header)	This information is only returned if the **debugLevel** request header is sent with the request payload to the Salesforce application.

Element	Description
LimitInfoHeader (response header)	Provides information about the limitations of API calls on a per-day basis for the organization. • **current**: The number of calls already used in the organization. • **Limit**: The organization's limit for the specified limit type. • **Type**: The limit information type specified in the header `API REQUESTS` (contains limit information about API calls for the organization).

2.7 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](#)

2.7.1 What You Can Do from the Summary Page

You can review source or target 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 source or target adapter. For example, if you have defined an inbound 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.

2.7.2 What You See on the Summary Page

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

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

2.8 Performing Salesforce Cloud Postconfiguration Tasks

After activating your integration, you must update the outbound message for the Salesforce Cloud adapter to send messages to Oracle Integration Cloud Service. This section describes how to activate a workflow rule.

1. Open the Salesforce application.
2. Scroll down and click **Workflow Rules.**
3. In the **Workflow Rules** panel, click the workflow rule.
4. Scroll down to the **Immediate Workflow Actions** section and click the outbound message.
5. In the **Outbound Message** panel, click **Edit**.
6. In the **Edit Outbound Message** panel, enter the endpoint URL from the **Integration Details** icon for the integration.
7. In the **Edit Outbound Message** panel, click **Save**.

   The **Outbound Message** panel is displayed.

8. In the **Outbound Message** panel, scroll down and find the **Workflow Rules Using This Outbound Message** section.
9. Click the workflow link.

   The **Workflow Rule** panel is displayed.

10. In the **Workflow Rule** panel, click **Activate**.

    Your workflow is activated. The Salesforce application starts sending messages to the integration endpoint URL created when you activated the integration.