Oracle® Cloud

Using the Oracle Utilities Adapter with Oracle Integration
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Preface

The Oracle Utilities Adapter integrates Oracle Utilities applications with your sales, human resources, customer service, contact center, marketing, and reporting applications. The Oracle Utilities Adapter lets you integrate Oracle Utilities applications with applications from any vendor. Simplified integration with your existing legacy or non-Oracle applications makes for faster implementation and reduces cost. The Oracle Utilities Adapter supports web service standards for the creation of open and reusable service-oriented applications (SOA).

Using the Oracle Utilities Adapter includes information and procedures to help you configure the Oracle Utilities Adapter as a connection in an Oracle Integration integration.

Note:
The information in this guide applies to all of your Oracle Integration instances. It doesn't matter which edition you're using, what features you have, or who manages your cloud environment. You'll find what you need here, including notes about any differences between the various flavors of Oracle Integration when necessary.

Topics:
- Audience
- Documentation Accessibility
- Related Resources
- Conventions

Audience

This guide is intended for developers who want to use the Oracle Utilities Adapter in integrations in Oracle Integration.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.
Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.

Related Resources

See these Oracle resources:

- Oracle Cloud
  http://cloud.oracle.com
- Using Integrations in Oracle Integration
- Using the Oracle Mapper with Oracle Integration

Conventions

The following text conventions are used in this document:

<table>
<thead>
<tr>
<th>Convention</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>boldface</strong></td>
<td>Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.</td>
</tr>
<tr>
<td><em>Italic</em></td>
<td>Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.</td>
</tr>
<tr>
<td>monospace</td>
<td>Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.</td>
</tr>
</tbody>
</table>
Understand the Oracle Utilities Adapter

As a developer, you can use the Oracle Utilities Adapter to integrate Oracle Utilities applications with your sales, human resources, customer service, contact center, marketing, and reporting applications. The Oracle Utilities Adapter supports web service standards for the creation of open and reusable service-oriented applications (SOA).

Topics:

• Oracle Utilities Adapter Capabilities
• Oracle Utilities Adapter Restrictions
• What Application Version Is Supported?
• About Oracle Utilities Adapter Use Cases
• Workflow to Create and Add an Oracle Utilities Adapter to an Integration

Oracle Utilities Adapter Capabilities

The Oracle Utilities Adapter lets you integrate the Oracle Utilities application suite with other Oracle applications such as Oracle Enterprise Resource Planning (ERP).

Implement the Oracle Utilities Adapter to:

• Integrate on-premise Oracle Utilities applications with Oracle Cloud applications.
• Integrate Oracle Utilities Customer Care and Billing with Oracle ERP Cloud.
• Integrate Oracle Service Order Management with Oracle TOA Field Service.

The Oracle Utilities Adapter provides trigger (inbound) and invoke (outbound) support. This enables Oracle Utilities Applications to trigger an integration in Oracle Integration or invoke an Oracle Utilities Application using web services from Oracle Integration.

Both inbound and outbound services are exposed using the Oracle Utilities service catalog. This catalog provides a simplified user experience to create data mappings at design time while constructing integrations with utilities applications using the Oracle Utilities Adapter.

Every inbound and outbound service structure is exposed using a SOAP-based WSDL. (No support for REST.) Only synchronous invocations of utilities web services are currently supported.

You can also manually upload a WSDL in the trigger (inbound) direction for a specific service instead of parsing the WSDL from the HTTP-based service catalog WSDL specified on the Connections page. This option enables you to upload a WSDL for a particular service in which element-to-element mappings can be performed to deal with anytype elements.

Integrating with on-premises Oracle Utilities applications can be done using the on-premises agent.
Secure WSDL Support

The Oracle Utilities Adapter provides secure WSDL support.

- The Oracle Utilities Adapter works with the new SOAP catalog exposed in the Oracle Utilities Application Framework (OUAF) in the cloud using a SOAP proxy.
- SOAP proxy and OUAF changes for the cloud are made so that the behavior of the SOAP catalog is similar as in on-premises environments except for the following important changes:
  - The WSDL to retrieve the catalog is secured by default. Therefore, the credentials must be passed to retrieve the WSDL.
  - Individual WSDLs of all services exposed by the SOAP catalog are secured by default. Therefore, credentials must be passed to retrieve the WSDL.
  - The WSDL link used to retrieve the catalog and individual WSDLs is different. It points to the SOAP proxy server. For example:

    http://host:port/soap/api/iws/F1-SOAPCatalog?WSDL

  - The endpoint within the WSDLs also points to the SOAP proxy. For example:

    http://host:port/soap/api/iws/F1-SOAPCatalog

Whenever you use the secured/protected WSDL from a cloud environment, ensure that the security policy for SOAP-based integrations is Basic Authentication.

See Configure Connection Security.

REST Support

The Oracle Utilities Adapter provides REST support.

You can create SOAP-based and REST-based integrations using the Oracle Utilities Adapter with a catalog of inbound/outbound services exposed by an OUAF application.

- Users of the Oracle Utilities Adapter can either create the integration using a SOAP catalog URL or REST Swagger definition URL-based connection.
- The existing SOAP catalog works as is and only fetches SOAP-based inbound and outbound services that are available in the SOAP catalog.
- The Oracle Utilities Adapter consumes inbound and outbound REST-based services that are available as part of the Swagger definition URL provided by OUAF.
- For each REST interface (inbound or outbound), an OpenAPI/Swagger definition URL is provided to Oracle Integration as part of the catalog.
- The OpenAPI/Swagger specification describes the REST interface.
- The current version of Oracle Integration supports only the Swagger Version 2 specification for the REST Adapter. Therefore, the Oracle Utilities Adapter should receive Version 2 of the Swagger document.
- Using the Oracle Utilities Adapter as an invoke connection in an integration invokes the inbound OUAF REST web services.
Using the Oracle Utilities Adapter as a trigger connection in an integration consumes an outbound message from OUAF.

**OAuth 2.0 Support**

The Oracle Utilities Adapter supports the Open Authorization (OAuth 2.0) security policy for REST-based connections.

This enables you to configure the Oracle Utilities Adapter to consume a Swagger 2.0 API protected with OAuth 2.0 Token-Based Authentication. Under Token-Based Authentication, OAuth Resource Owner Password Credentials are supported. This policy is useful when the Basic Authentication security policy is not sufficient.

Most HTTP or HTTPS services typically use the OAuth authorization framework to protect their resources. In accordance with the OAuth 2.0 specification, the OAuth 2.0 authorization framework enables a third-party application to obtain limited access to an HTTP service. This is either on behalf of a resource owner by orchestrating an approval interaction between the resource owner and the HTTP service or by enabling the third-party application to obtain access on its own behalf.

See [Configure Connection Security](#).

**Oracle Utilities Adapter Restrictions**

The Oracle Utilities Adapter can only be used with Oracle Utilities applications that support web services. If you are using DB file or Java Message Service (JMS) integration services, generic Oracle Integration adapters must be used and not the Oracle Utilities Adapter.

**What Application Version Is Supported?**

For information about which application version is supported by this adapter, see the Oracle Integration Adapters Certification Matrix under section [Oracle Integration Adapters Certification](#) at the top of the page:

Oracle Integration Adapters Certification Matrix

**About Oracle Utilities Adapter Use Cases**

This use case describes how the Oracle Utilities Adapter and the Oracle ERP Cloud Adapter can be used to integrate Oracle Utilities Customer Care and Billing with Oracle Enterprise Resource Planning (ERP).

- A bill is created in the Oracle Utilities Customer Care and Billing application and a batch job to send an outbound message is run.
- The Oracle Utilities Adapter receives the inbound message and invokes the Oracle ERP Cloud Adapter to create an adjustment in Oracle ERP.
- An invoice is created in Oracle ERP.
- The Oracle ERP Cloud Adapter receives the message from Oracle ERP and the payment details are sent to the Oracle Utilities Adapter.
- The Oracle Utilities Adapter sends the payment details to the Oracle Utilities Customer Care and Billing application.
• The previously created invoice is cancelled in Oracle ERP.
• The Oracle ERP Cloud Adapter receives the message from Oracle ERP that the invoice has been cancelled.
• The Oracle Utilities Adapter sends the cancelled invoice information to the Oracle Utilities Customer Care and Billing application.
• The Adjustment Maintenance service in the Oracle Utilities Customer Care and Billing application cancels the invoice.
• A ledger is created in Oracle Utilities Customer Care and Billing and a batch job to send outbound message to the Oracle Utilities Adapter is run.
• The Oracle Utilities Adapter receives the ledger information.
• The Oracle Utilities Adapter sends the ledger information to the Oracle ERP Cloud Adapter.
• The Oracle ERP Cloud Adapter sends the ledger information to the Oracle ERP.

Workflow to Create and Add an Oracle Utilities Adapter to an Integration

You can set up the Oracle Utilities Adapter by completing the tasks listed in the table. This image represents the workflow for setting up an adapter:

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>More Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>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.</td>
<td>Create a Connection</td>
</tr>
<tr>
<td>2</td>
<td>Create the integration. When you do this, you add trigger and invoke connections to the integration.</td>
<td>Create Integrations and Add the Oracle Utilities Adapter Connection to an Integration</td>
</tr>
<tr>
<td>3</td>
<td>Map data between the trigger connection data structure and the invoke connection data structure.</td>
<td>Map Data of Using Integrations in Oracle Integration</td>
</tr>
<tr>
<td>4</td>
<td>(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).</td>
<td>Manage Lookups of Using Integrations in Oracle Integration</td>
</tr>
<tr>
<td>5</td>
<td>Activate the integration.</td>
<td>Manage Integrations of Using Integrations in Oracle Integration</td>
</tr>
<tr>
<td>6</td>
<td>Monitor the integration on the dashboard.</td>
<td>Monitor Integrations of Using Integrations in Oracle Integration</td>
</tr>
<tr>
<td>Step</td>
<td>Description</td>
<td>More Information</td>
</tr>
<tr>
<td>------</td>
<td>----------------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>7</td>
<td>Track payload fields in messages during runtime.</td>
<td>Assign Business Identifiers for Tracking Fields in Messages and Manage Business Identifiers for Tracking Fields in Messages of <em>Using Integrations in Oracle Integration</em></td>
</tr>
<tr>
<td>8</td>
<td>Manage errors at the integration level, connection level, or specific integration instance level.</td>
<td>Manage Errors of <em>Using Integrations in Oracle Integration</em></td>
</tr>
</tbody>
</table>
Create an Oracle Utilities Adapter Connection

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

Topics:
- Prerequisites for Creating a Connection
- Create a Connection
- Upload an SSL Certificate

Prerequisites for Creating a Connection

Before you set up the Oracle Utilities Adapter:
- Upload a trusted public certificate (if required). Typically, the certificate is included with Oracle Integration. See Upload an SSL Certificate.
- Make sure the Oracle Utilities server is running and accessible.
- Know the host name address and port number of the Oracle Utilities server.
- Know the user name and password used to access the Oracle Utilities server.
- Download the connectivity agent. See Download and Run the Connectivity Agent Installer of Using Integrations in Oracle Integration Cloud.
- After downloading and installing the connectivity agent, perform the following steps:
  2. Copy the commons-lang3-3.4.jar file to AGENT_INSTALL_LOCATION.
     On Linux:
     $AGENT_INSTALL_LOCATION/agenthome/thirdparty/lib
     For example:
     /scratch/AgentHome/agenthome/thirdparty/lib
     On Windows:
     %AGENT_INSTALL_LOCATION%\agenthome\thirdparty\lib
For example:

D:\oic_connectivity_agent\agenthome\thirdparty\lib

3. Stop and restart the agent for the changes to take effect.

Not performing this task results in the following error:

CASDK-0005 : A connector specific exception was raised by the application.
java.lang.NoClassDefFoundError: org/apache/commons/lang3/StringUtils
org.apache.commons.lang3.StringUtils

Create 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 navigation pane, click **Integrations**, then click **Connections**.
2. Click **Create**.

![Note:
You can also create a connection in the integration canvas of:
• An orchestrated integration (See Define Inbound Triggers and Outbound Invokes.)
• A basic routing integration (See Add a Trigger (Source) Connection.)

The Create Connection — Select Adapter dialog is displayed.

3. 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 Create New Connection dialog is displayed.

4. 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, **Sales Opportunity**).

   • 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 Service Cloud (RightNow) Adapter as only an invoke, but drag the adapter to the trigger section).

   • Enter an optional description of the connection.
5. Click Create.

Your connection is created and you are now ready to configure connection details, such as email contact, connection properties, security policies, connection login credentials, and (for certain connections) agent group.

Add 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.

Configure Connection Properties

You can consume the REST web service catalog provided by OUAF in the Oracle Utilities Adapter.

1. Click Configure Connectivity.

The Connection Properties dialog is displayed.

2. Enter the URL for the Oracle Utilities server in the Catalog URL field and click OK. If you want to configure the Oracle Utilities Adapter REST connection to use the OAuth 2.0 security policy, enter the Swagger catalog URL exposed by an OUAF application.

The configured REST web service catalog should return only a list of REST inbound/outbound services:

• Inbound services consist of REST Integrated Web Services (IWS).
• Outbound services consist of the external system - the outbound message type for a real-time HTTP or JSON sender.

3. Click OK.

Configure Connection Security

Configure security for your Oracle Utilities Adapter connection by selecting the security policy.

1. Click **Configure Security**.

2. Select a security policy, and then complete the fields.

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Authentication</td>
<td>Enter the following information:</td>
</tr>
<tr>
<td></td>
<td>• Username</td>
</tr>
<tr>
<td></td>
<td>• Password</td>
</tr>
<tr>
<td></td>
<td>• Confirm Password</td>
</tr>
</tbody>
</table>
### OAuth Resource Owner Password Credentials

**Note:** When using this security policy, do not configure the connectivity agent.

- **Access Token URI:** The OAuth server URL from which to obtain the access token. It is generally used by Oracle Identity Cloud Service server to identify where your application is registered.

- **Client ID:** The client identifier issued to the client during the registration process of the application with the Oracle Identity Cloud Service server.

- **Client Secret:** The client secret issued to the client during the registration process of the application with the Oracle Identity Cloud Service server.

- **Confirm Client Secret:** Enter the client secret a second time.

- **Scope:** The scope for accessing the request. The scope enables you to specify which type of access you need. Scopes limit access for the OAuth token. They do not grant any additional permissions beyond that which you already possess (for example, `http://hostname:port/*`).

- **Auth Request Media Type:** The format of the data you want to receive (for example, `application/x-www-form-urlencoded;charset=UTF-8`). This is an optional parameter that can be kept blank.

- **Username:** The resource owner’s username (the application username).

- **Password:** The resource owner’s password (the application user password).

### Username Password Token

This policy is only supported for a SOAP-based catalog connection.

- **Username**
- **Password**
- **Confirm Password**

---

**Configure an Agent Group**

Configure an agent group for accessing the service hosted on your premises behind the fire wall.

1. Click **Configure Agents**.

   The Select an Agent Group page appears.

2. Click the name of the agent group.
3. **Click Use.**

To configure an agent group, you must download and install the on-premises connectivity agent. See Download and Run the On-Premises Agent Installer and About Agents and Integrations Between On-Premises Applications and Oracle Integration in *Using Integrations in Oracle Integration*.

### Test the Connection

Test your connection to ensure that it is successfully configured.

1. In the upper right corner of the page, click **Test**.

   *If your adapter connection uses a WSDL, a dialog is displayed that prompts you to select the type of connection testing to perform. Otherwise, this step is not applicable.*

   a. Select the testing to perform:

      • **Validate and Test**: Performs a full validation of the WSDL, including processing of the imported schemas and WSDLs. Complete validation can take several minutes depending on the number of imported schemas and WSDLs. No requests are sent to the operations exposed in the WSDL.

      • **Test**: Connects to the WSDL URL and performs a syntax check on the WSDL. No requests are sent to the operations exposed in the WSDL.

   

   If successful, the following message is displayed and the progress indicator shows 100%.

   Connection *connection_name* was tested successfully.

   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**, then click **Close**.

### Upload 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, an exception is thrown. In that case, you must upload the appropriate certificate. A certificate enables Oracle Integration to connect with external services. If the external endpoint requires a specific certificate, request the certificate and then upload it into Oracle Integration.

To upload an SSL certificate:

1. In the navigation pane, click **Integrations**, then click the < arrow next to **Designer**.

2. Click **Settings > Certificates**.

   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. 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.

3. Click **Upload** at the top of the page.

4. In the Upload Certificate dialog box, select the certificate type. Each certificate type enables Oracle Integration to connect with external services.
   - **Trust Certificate**: Use this option to upload a trust certificate.
     a. Enter a unique alias for the certificate.
     b. Click **Browse**, then select the trust file (for example, `.cer` or `.crt`) to upload.
   - **Message Protection Certificate**: Use this option to upload a keystore certificate with SAML token support. Create, read, update, and delete (CRUD) operations are supported on this type of certificate.
     a. Enter a unique alias for the certificate.
     b. Click **Browse**, then select the certificate file (.cer or .crt) to upload.
   - **Identity Certificate**: Use this option to upload a certificate for two-way SSL communication.
     a. Click **Browse**, then select the keystore file (.jks) to upload.
     b. Enter the password of the keystore being imported.
     c. Enter the comma-separated list of aliases from the keystore being imported.
     d. Enter the comma-separated list of passwords corresponding to key aliases.
     e. If you want to display the passwords in clear text, select **Show Key Password(s)**. This enables you to ensure that you are correctly entering a list of keystore passwords.

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.
Add the Oracle Utilities Adapter Connection to an Integration

When you drag the Oracle Utilities Adapter into the trigger or invoke areas of an integration, the Adapter Endpoint Configuration Wizard is invoked. This wizard guides you through configuration of the Oracle Utilities Adapter endpoint properties.

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

Topics

• About the Fields in the Adapter Endpoint Configuration Wizard
• Integration Activation and Runtime

About the Fields in the Adapter Endpoint Configuration Wizard

The following tables provide descriptions of the fields that appear in the Adapter Endpoint Configuration Wizard. The wizard appears when you drag the Oracle Utilities Adapter into an integration.

Basic Info Page

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
</table>
| What do you want to call your endpoint?    | Provide a meaningful name so that others can understand the purpose of the connection. For example, LinkedInTarget_update_status. You can use English alphabetic characters, numbers, underscores, and dashes in the name. You cannot use:  
  • Blank spaces (for example, My FTP Connection)  
  • Special characters (for example, #;83& or righ(t)now4)  
  • Multibyte characters |
| What does this endpoint do?                | Enter an optional description of connection functionality.                  |
| What is the endpoint's relative resource URI? (Available only in the trigger (inbound) direction) | Enter the endpoint's relative resource URI. The endpoint must begin with a / followed by letters. |
### Field Description

**What action do you want to perform on the endpoint?**
*(Available only in the trigger (inbound) direction)*

- Select an action.

**Select an option to define the request and response endpoints**
*(Available only in the trigger (inbound) direction)*

- **Business Objects**: Select this option to use the HTTP-based service catalog WSDL specified on the Connections page.
- **Upload WSDL**: Select this option, then click **Browse** to upload a WSDL for a particular service in which element-to-element mappings can be performed to deal with any type elements. Ensure that the WSDL is available as part of the Utilities Global Business Unit (UGBU) applications and is reachable.
  
  **Note**: Remove the parts of the WSDL that are not needed instead of commenting them out.

---

### Trigger Request Page

This page enables you to select the external system to treat as the request object for this integration.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Browse by Product</strong></td>
<td>Select the Oracle Utilities application that hosts the business object.</td>
</tr>
<tr>
<td><strong>Select a Business Service</strong></td>
<td>Select the business service from the Oracle Utilities application to receive as a request that starts the integration.</td>
</tr>
<tr>
<td><strong>Filter by object name</strong></td>
<td>Enter the initial letters to filter the display of business objects.</td>
</tr>
<tr>
<td><strong>Select the Request Media Type for this Endpoint</strong></td>
<td>Select either JSON or XML as the request media type for this endpoint.</td>
</tr>
</tbody>
</table>

### Trigger Response Page

This page enables you to select the external system to treat as the response object for this integration.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Browse by Product</strong></td>
<td>Select the Oracle Utilities application that hosts the business object.</td>
</tr>
<tr>
<td><strong>Select a Business Service</strong></td>
<td>Select the business service from the Oracle Utilities application to receive as a response from the integration.</td>
</tr>
<tr>
<td><strong>Filter by object name</strong></td>
<td>Enter the initial letters to filter the display of business objects.</td>
</tr>
<tr>
<td><strong>Select the Response Media Type for this Endpoint</strong></td>
<td>Select either JSON or XML as the response media type for this endpoint.</td>
</tr>
</tbody>
</table>
Field Description
Response Type
- Request-Response: The default. The Oracle Utilities application waits until a response is received from the integration. This is also known as the request and response message exchange pattern.
- Send Faults

Invoke Operations Page
This page enables you to select the business service and operation to use for the target integration. Select the request or response payload type through which the endpoint can reply.

Field Description
Browse by Product
Select the Oracle Utilities application that hosts the business object.

Select a Business Service
Select a business service to invoke.

Filter by service name
Enter the initial letters to filter the display of business services.

Request Payload Type
Select the request payload type. Supported payload types are XML and JSON.

Response Payload Type
Select the response payload type. Supported payload types are XML and JSON.

Select the Operation to Perform on the Business Service
Select an operation from the published web service.

Summary Page

Field Description
Summary
Displays a summary of the trigger (source) or invoke (target) configuration values that you defined on previous pages of the wizard. The information that’s displayed can vary by adapter. For some adapters, the selected business objects and operation name are displayed. 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.

Integration Activation and Runtime
The activated integration provides one endpoint to trigger the integration.
This endpoint has the following information:
- REST endpoint URL
- Swagger definition URL
• Resource URI
• Request and response media type

For example:

**Endpoint Description**

**Endpoint URL**

http://_______.______:7003/jjapi/integration/1/flows/oracleutils/RESTFAULTOUTBOUND/1.0/testRest

**Swagger**

http://_______.______:7003/jjapi/integration/1/flows/oracleutils/RESTFAULTOUTBOUND/1.0/metadata/swagger

**How to Run**


**Resource /testRest**

**Method POST**

**Request**

**Request Media Type**

• application/json

**Response**

**Response Media Type**

• application/json
Troubleshoot the Oracle Utilities Adapter

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

Topics:

- Error Handling and Validations
- java.net.ConnectException Error Message
- Unable to Connect to OUAF Application at Run Time Error Message
- Unresponsive Agent Error Message

Additional integration troubleshooting information is provided. See Troubleshoot Oracle Integration in Using Integrations in Oracle Integration.

Error Handling and Validations

Note the following issues when designing an integration with the Oracle Utilities Adapter.

- Only the Basic Authentication security policy is currently supported for REST-based connections. If you configure any other security policy, an error is displayed when testing the connection.

- Dragging the Oracle Utilities Adapter connection to the trigger area of the integration canvas prompts you to enter the relative resource URI on the Basic Info page. The standard resource URI format starts with a / followed by letters. If you enter any other URI format, an error message is displayed.

- Handling the cross-combination connection catalog error:
  If you create an integration using a SOAP-based connection, changing the connection to use a REST-based catalog has the following impact on that integration:
  - If the integration was already activated, there is no impact on the integration.
  - If the integration was not activated and you now attempt to activate the integration, it fails with the following error message:

  Activation Error:- This Integration was created using SOAP based connection
  but now connection changed to REST. Configure your connection to SOAP again or edit
  the integration for REST.
• If you create an integration using a REST-based connection, changing the connection to use a SOAP-based catalog has the same impact on that integration. The following error message is displayed:

Activation Error:- This Integration was created using REST based connection but now connection changed to SOAP. Configure your connection to REST again or edit the integration for SOAP.

java.net.ConnectException Error Message

If the error message java.net.ConnectException: Connection refused: connect; No available router to destination. appears, make sure the Oracle SOA server hosting the catalog is operating and accessible.

Unable to Connect to OUAF Application at Run Time Error Message

If the error message Unable to connect to OUAF Application at run time appears, make sure the connectivity and security credentials for the connection are correct.

See Create a Connection.

Unresponsive Agent Error Message

If the error message No response received within response time out window of 120 seconds. Agent may not be running, or temporarily facing connectivity issues to Oracle Messaging Cloud Service. Please check the health of the Agent in Agent. appears and you are using the on premises agent, make sure the agent is operational and accessible.