Oracle® Cloud

Using the Oracle WebLogic JMS Adapter with Oracle Integration Generation 2

E85526-19
March 2024

ORACLE

Oracle Cloud Using the Oracle WebLogic JMS Adapter with Oracle Integration Generation 2,

E85526-19

Copyright © 2019, 2024, Oracle and/or its affiliates.

Primary Author: Oracle Corporation

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, software documentation, data (as defined in the Federal Acquisition Regulation), or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, then the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs (including any operating system, integrated software, any programs embedded, installed, or activated on delivered hardware, and modifications of such programs) and Oracle computer documentation or other Oracle data delivered to or accessed by U.S. Government end users are "commercial computer software," "commercial computer software documentation," or "limited rights data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, reproduction, duplication, release, display, disclosure, modification, preparation of derivative works, and/or adaptation of i) Oracle programs (including any operating system, integrated software, any programs embedded, installed, or activated on delivered hardware, and modifications of such programs), ii) Oracle computer documentation and/or iii) other Oracle data, is subject to the rights and limitations specified in the license contained in the applicable contract. The terms governing the U.S. Government's use of Oracle cloud services are defined by the applicable contract for such services. 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®, Java, MySQL, and NetSuite are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Inside 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, Epyc, and the AMD 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.

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.

Contents

Preface

Audience v
Documentation Accessibility v
Diversity and Inclusion v
Related Resources vi
Conventions vi

1 Understand the Oracle WebLogic JMS Adapter

Oracle WebLogic JMS Adapter Capabilities 1-1
Oracle WebLogic JMS Adapter Restrictions 1-2
What Application Version Is Supported? 1-3
About Oracle WebLogic JMS Adapter Use Cases 1-3
Workflow to Create and Add an Oracle WebLogic JMS Adapter Connection to an Integration 1-3

2 Create an Oracle WebLogic JMS Adapter Connection

Prerequisites for Creating a Connection 2-1
Create a Connection 2-1
- Configure Connection Properties 2-2
- Configure Connection Security 2-2
- Configure an Agent Group 2-3
- Test the Connection 2-3

Upload an SSL Certificate 2-3

3 Add the Oracle WebLogic JMS Adapter Connection to an Integration

Basic Information Page 3-1
Configuration Page 3-2
Headers Page 3-3
Summary Page 3-4

4 Troubleshoot the Oracle WebLogic JMS Adapter

Troubleshoot Connection Issues 4-1
Restart the Agent or Reactivate JMS Inbound Integrations If No Messages Are Received 4-4

Preface

This guide describes how to configure this adapter as a connection in an integration in Oracle Integration.

> **Note:**
>
> The use of this adapter may differ depending on the features you have, or whether your instance was provisioned using Standard or Enterprise edition. These differences are noted throughout this guide.

Topics:

- Audience
- Documentation Accessibility
- Diversity and Inclusion
- Related Resources
- Conventions

Audience

This guide is intended for developers who want to use this 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.

Diversity and Inclusion

Oracle is fully committed to diversity and inclusion. Oracle respects and values having a diverse workforce that increases thought leadership and innovation. As part of our initiative to build a more inclusive culture that positively impacts our employees, customers, and

partners, we are working to remove insensitive terms from our products and documentation. We are also mindful of the necessity to maintain compatibility with our customers' existing technologies and the need to ensure continuity of service as Oracle's offerings and industry standards evolve. Because of these technical constraints, our effort to remove insensitive terms is ongoing and will take time and external cooperation.

Related Resources

See these Oracle resources:

- Oracle Cloud

  `http://cloud.oracle.com`

- *Using Integrations in Oracle Integration Generation 2*
- *Using the Oracle Mapper with Oracle Integration Generation 2*

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.
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

Understand the Oracle WebLogic JMS Adapter

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

Topics:

- Oracle WebLogic JMS Adapter Capabilities
- Oracle WebLogic JMS Adapter Restrictions
- What Application Version Is Supported?
- About Oracle WebLogic JMS Adapter Use Cases
- Workflow to Create and Add an Oracle WebLogic JMS Adapter Connection to an Integration

> **Note:**
>
> There are overall service limits for Oracle Integration. A service limit is the quota or allowance set on a resource. See Service Limits.

Oracle WebLogic JMS Adapter Capabilities

The Oracle WebLogic JMS Adapter enables you to integrate Oracle WebLogic JMS with Oracle Integration through use of the on-premises connectivity agent. Using the Oracle WebLogic JMS Adapter, Oracle Integration can consume messages for processing from Oracle WebLogic JMS in Oracle Integration and produce messages to Oracle WebLogic JMS from Oracle Integration. The Oracle WebLogic JMS Adapter can be configured as an outbound (invoke) or inbound (trigger) connection in an integration.

The Oracle WebLogic JMS Adapter provides the following capabilities:

- Supports JMS queues, a point-to-point messaging domain in which messages are exchanged through a queue and each message is delivered to only one receiver.
- Supports JMS topics, a publish/subscribe messaging domain in which messages are exchanged by subscribing to a topic. A topic publisher (producer) sends messages to a specific topic. A topic subscriber (consumer) retrieves messages from a specific topic.
- Supports both text and byte JMS message types.
- Supports opaque and XML schema payloads.
- Supports both consume message (inbound) and produce message (outbound) features. The consume message polls for incoming messages on a queue and the produce message publishes a message to a queue.

- Supports the upload of a schema archive. A schema archive can have a single top level schema with nested imports and includes that contain absolute or relative paths. See Headers Page.
- Supports JMS headers in both the trigger and invoke directions. You can set message headers to dequeue messages from queues and set message headers to enqueue messages into queues.
- Supports the processing of message payloads up to 10 MB in size. The Oracle WebLogic JMS Adapter rejects dequeued messages greater than 10 MB.

  Invalid message channel configuration is valid for all types of failures (message payload size failures, system errors, and so on). Messages move to the invalid message channel once the retry count is reached, even in the case of system errors. The Oracle WebLogic JMS Adapter invokes **onReject** for each retry. Therefore, multiple notifications can be sent for the same message. This can be avoided by setting the retry count to the minimum possible number.

  The Summary page of the Adapter Endpoint Configuration Wizard describes the behavior and configurations required for the Oracle WebLogic JMS Adapter.

  It is recommended that you set the following JMS Module properties in the Oracle WebLogic Server Administration Console:

  – Set **Redelivery Limit** to a minimum value such as 1 or 2 to limit retries of failed message payloads.

  – Set **Error Destination** to the queue location to which to move the failed message payload.

  See Configure queue message delivery failure options. Once the retry count is exhausted for all consumers, the message is moved to the exception queue. You can create a custom exception queue and specify that queue while publishing messages. Otherwise, the default exception queue **AQ$_QTAB_E** is used.

The Oracle WebLogic JMS Adapter is one of many predefined adapters included with Oracle Integration. You can configure the Oracle WebLogic JMS Adapter as an invoke or trigger connection in an integration in Oracle Integration.

Oracle WebLogic JMS Adapter Restrictions

Note the following Oracle WebLogic JMS Adapter restrictions.

- The Oracle WebLogic JMS Adapter can only be used with the on-premises connectivity agent.
- The Oracle WebLogic JMS Adapter doesn't support weighted distributed queues. Oracle Integration filters out weighted distributed queues in order to ensure successful agent connectivity with the on-premises JMS WebLogic cluster. Oracle recommends that you use uniform distributed queues instead of weighted distributed queues.

> **Note:**
>
> There are overall service limits for Oracle Integration. A service limit is the quota or allowance set on a resource. See Service Limits.

What Application Version Is Supported?

For information about which application version is supported by this adapter, see the Connectivity Certification Matrix.

See Connectivity Certification Matrix.

About Oracle WebLogic JMS Adapter Use Cases

The Oracle WebLogic JMS Adapter can be used in scenarios such as the following.

- The Oracle WebLogic JMS Adapter can allow an Internet order processing application to communicate with a business process management application such as SAP. The Internet order processing application uses the Oracle WebLogic JMS Adapter to deliver business data about new orders to a topic. The business process management gateway application, which accesses the SAP application using its native API, subscribes to the order topic. As new orders are broadcast to the topic, the gateway receives the orders and enters them into the SAP application.
- An automobile manufacturer can use the Oracle WebLogic JMS Adapter to monitor inventory levels, order parts, and update budget information. The inventory application uses the Oracle WebLogic JMS Adapter to send a message to the factory application when the inventory level for a specific part falls below a critical level. The factory application uses the Oracle WebLogic JMS Adapter to send a message to the parts application so the factory can assemble the parts necessary to build a car. The parts applications use the Oracle WebLogic JMS Adapter to send messages to their own inventory and order the applications to update their inventories and order new parts from suppliers. Both the factory and parts applications can use the Oracle WebLogic JMS Adapter to send messages to the accounting application to update budgetary figures.

Workflow to Create and Add an Oracle WebLogic JMS Adapter Connection to 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.

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.	Create an Oracle WebLogic JMS Adapter Connection
2	Create the integration. When you do this, you add trigger and invoke connections to the integration.	Understand Integration Creation and Best Practices and Add the Oracle WebLogic JMS Adapter Connection to an Integration
3	Map data between the trigger connection data structure and the invoke connection data structure.	Map Data in *Using Integrations in Oracle Integration Generation 2*

Step	Description	More Information
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).	Manage Lookups in *Using Integrations in Oracle Integration Generation 2*
5	Activate the integration.	Manage Integrations in *Using Integrations in Oracle Integration Generation 2*
6	Monitor the integration on the dashboard.	Monitor Integrations in *Using Integrations in Oracle Integration Generation 2*
7	Track payload fields in messages during runtime.	Assign Business Identifiers for Tracking Fields in Messages and Manage Business Identifiers for Tracking Fields in Messages in *Using Integrations in Oracle Integration Generation 2*
8	Manage errors at the integration level, connection level, or specific integration instance level.	Manage Errors in *Using Integrations in Oracle Integration Generation 2*

2

Create an Oracle WebLogic JMS 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

You must satisfy the following prerequisites to create a Oracle WebLogic JMS Adapter connection:

- The Oracle WebLogic JMS Adapter in Oracle Integration only supports the non-XA connection factory.
- The Oracle WebLogic JMS Adapter always connects through the WebLogic JMS admin host and port. At the time of integration configuration and activation, the WebLogic JMS admin server must be up and running.

Create a Connection

Before you can build an integration, you have to create the connections to the applications with which you want to share data.

To create a connection in Oracle Integration:

1. In the left navigation pane, click **Home** > **Integrations** > **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.)

3. In the Create Connection — Select Adapter dialog, select the adapter to use for this connection. To find the adapter, scroll through the list, or enter a partial or full name in the **Search** field and click

Search.

4. In the Create Connection dialog, enter the information that describes this connection.
   a. 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, don't include blank spaces (for example, `SALES OPPORTUNITY`).
   b. Enter optional keywords (tags). You can search on the connection keywords on the Connections page.
   c. Select the role (direction) in which to use this connection (trigger, invoke, or both). Only the roles supported by the 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, you'll get an error when you try to drag the adapter into the section you didn't select. For example, let's say you configure a connection for the Oracle Service Cloud (RightNow) Adapter as only an **invoke**. Dragging the adapter to a **trigger** section in the integration produces an error.
   d. Enter an optional description of the connection.
5. Click **Create**.

   Your connection is created. You're now ready to configure the connection details, such as connection properties, security policies, connection login credentials, and (for certain connections) agent group.

Configure Connection Properties

Enter connection information so your application can process requests.

1. Go to the **Connection Properties** section.
2. Enter the path for the host JMS server.
3. Enter the port number for the host JMS server.

Configure Connection Security

Configure security for your Oracle WebLogic JMS Adapter connection by selecting the security policy and security token.

1. Go to the **Security** section.

   Username Password Token displays in the **Security Policy** field by default. This value cannot be changed.
2. Complete these fields:
   a. In the **Username** field, enter the JMS server user name.
   b. In the **Password** field, enter the JMS server password.
   c. In the **Confirm Password** field, re-enter the JMS server 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 Connectivity Agent Installer and About Connectivity Agents and Integrations Between On-Premises Applications and Oracle Integration in *Using Integrations in Oracle Integration Generation 2*.

Test the Connection

Test your connection to ensure that it's configured successfully.

1. In the page title bar, click **Test**. What happens next depends on whether your connection uses a Web Services Description Language (WSDL) file.

If Your Connection...	Then...
Doesn't use a WSDL	The test starts automatically and validates the inputs you provided for the connection.
Uses a WSDL	A dialog prompts you to select the type of connection 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.

2. Wait for a message about the results of the connection test.
   - If the test was successful, then the connection is configured properly.
   - If the test failed, then edit the configuration details you entered. Check for typos, verify URLs and credentials, and download the diagnostic logs for additional details. Continue to test until the connection is successful.
3. When complete, click **Save**.

Upload an SSL Certificate

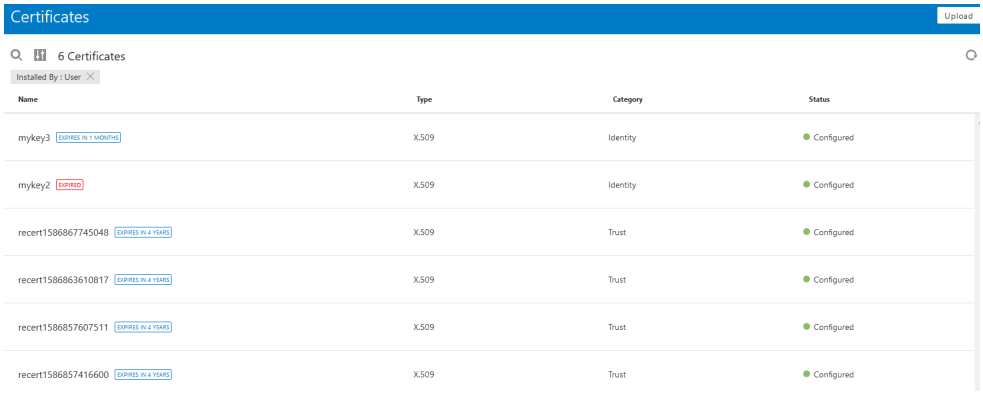
Certificates are used to validate outbound SSL connections. If you make an SSL connection in which the root certificate does not exist in Oracle Integration, an exception is thrown. In that case, you must upload the appropriate certificate. A certificate enables Oracle Integration

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 left navigation pane, click **Home** > **Settings** > **Certificates**.
   All certificates currently uploaded to the trust store are displayed in the Certificates dialog. The

   link enables you to filter by name, certificate expiration date, status, type, category, and installation method (user-installed or system-installed). Certificates installed by the system cannot be deleted.



2. Click **Upload** at the top of the page.
   The Upload Certificate dialog box is displayed.
3. Enter an alias name and optional description.
4. In the **Type** field, select the certificate type. Each certificate type enables Oracle Integration to connect with external services.
   - **X.509 (SSL transport)**
   - **SAML (Authentication & Authorization)**
   - **PGP (Encryption & Decryption)**

X.509 (SSL transport)

1. Select a certificate category.
   a. **Trust**: Use this option to upload a trust certificate.
      i. Click **Browse**, then select the trust file (for example, `.cer` or `.crt`) to upload.
   b. **Identity**: Use this option to upload a certificate for two-way SSL communication.
      i. Click **Browse**, then select the keystore file (`.jks`) to upload.
      ii. Enter the comma-separated list of passwords corresponding to key aliases.

> **Note:**
>
> When an identity certificate file (JKS) contains more than one private key, all the private keys must have the same password. If the private keys are protected with different passwords, the private keys cannot be extracted from the keystore.

iii. Enter the password of the keystore being imported.

c. Click **Upload**.

SAML (Authentication & Authorization)

1. Note that **Message Protection** is automatically selected as the only available certificate category and cannot be deselected. Use this option to upload a keystore certificate with SAML token support. Create, read, update, and delete (CRUD) operations are supported with this type of certificate.
2. Click **Browse**, then select the certificate file (`.cer` or `.crt`) to upload.
3. Click **Upload**.

PGP (Encryption & Decryption)

1. Select a certificate category. Pretty Good Privacy (PGP) provides cryptographic privacy and authentication for communication. PGP is used for signing, encrypting, and decrypting files. You can select the private key to use for encryption or decryption when configuring the stage file action.
   a. **Private**: Uses a private key of the target location to decrypt the file.
      i. Click **Browse**, then select the PGP file to upload.
      ii. Enter the PGP private key password.
   b. **Public**: Uses a public key of the target location to encrypt the file.
      i. Click **Browse**, then select the PGP file to upload.
      ii. In the **ASCII-Armor Encryption Format** field, select **Yes** or **No**. **Yes** shows the format of the encrypted message in ASCII armor. ASCII armor is a binary-to-textual encoding converter. ASCII armor formats encrypted messaging in ASCII. This enables messages to be sent in a standard messaging format. This selection impacts the visibility of message content. **No** causes the message to be sent in binary format.
      iii. From the **Cipher Algorithm** list, select the algorithm to use. Symmetric-key algorithms for cryptography use the same cryptographic keys for both encryption of plain text and decryption of cipher text.
   c. Click **Upload**.

3

Add the Oracle WebLogic JMS Adapter Connection to an Integration

When you drag the Oracle WebLogic JMS Adapter into the trigger or invoke area of an integration, the Adapter Endpoint Configuration Wizard appears. This wizard guides you through the configuration of Oracle WebLogic JMS Adapter endpoint properties.

These topics describe the wizard pages that guide you through configuration of the Oracle WebLogic JMS Adapter as an trigger and invoke in an integration.

Topics:

- Basic Information Page
- Configuration Page
- Headers Page
- Summary Page

Basic Information Page

The Basic Info page appears when you drag an adapter to the trigger or invoke area. Review these topics to learn more about Oracle WebLogic JMS Adapter basic information settings.

Element	Description
What do you want to call your endpoint?	Specifies a meaningful name so that others can understand the connection. For example, if you are creating a database connection for adding new employee data, you may want to name it `CreateEmployeeInDB`. You can include English alphabetic characters, numbers, underscores, and dashes in the name. You cannot include the following: • Blank spaces (for example, `My DB Connection`) • Special characters (for example, `#;83&` or `righ(t)now4`) • Multibyte characters
Description	Specifies an optional description so that others can quickly understand the purpose of the connection.
JMS Component	Select the component type: • **Queue** • **Topic**

Configuration Page

Specify the Oracle WebLogic JMS Adapter queue or topic values.

Configuring Oracle WebLogic JMS Adapter Produce Message (Invoke/ Outbound) Configuration Properties

Element	Description
Schema Location	Select an existing XML schema or schema archive. A schema archive can have a single top-level schema with nested imports and includes that contain absolute or relative paths. You can upload ZIP files for complex schemas with imports. If no XSD is selected, an opaque is assumed.
Schema Element	Select the schema element.
Destination Name	Identify the Java Naming and Directory Interface (JNDI) destination name.
Connection Factory JNDI	Identify the JNDI connection factory. A connection factory defines configuration parameters for client connections, and must be hosted on the same server or cluster as the client's destinations. Select one of the following options: • Use the default (in which case, the default connection factory provided by the JMS provider is used). • Use a user-defined connection factory.
Message Type	Specify the message type.
Delivery Mode	Specify the delivery mode. Two values are available: **Persistent** and **Nonpersistent**.
Priority	Specify the message priority from zero (lowest priority) to nine (highest priority).
Time to Live	Specify the time to live (the amount of time before a message expires and is no longer available for consumption).
Do you want to define a Schema for this endpoint?	• **Yes**: Provide the XSD file for the request payload. • **No**: The payload type defaults to an opaque schema.

Configuring Oracle WebLogic JMS Adapter Consume Message (Trigger/Inbound) Configuration Properties

Element	Description
Schema Location	Select an existing XML schema or schema archive. A schema archive can have a single top-level schema with nested imports and includes that contain absolute or relative paths. You can upload ZIP files for complex schemas with imports. If no XSD is selected, an opaque is assumed.
Schema Element	Select the schema element.
Destination Name	Identify the JNDI destination name.
Connection Factory JNDI	Identify the JNDI connection factory. A connection factory defines configuration parameters for client connections, and must be hosted on the same server or cluster as the client's destinations. Select one of the following options: • Use the default (in which case, the default connection factory provided by the JMS provider is used). • Use a user-defined connection factory.

Element	Description
Message Type	Specify the message type.
Durable Subscriber	Select **Yes** or **No**. This option ensures that consumers receive published messages even when the subscribers are not up and running. The durable subscription involves registering the consumer with a unique ID for retrieving messages sent when the consumer was inactive. These messages are persisted by the JMS provider and are either sent to the consumer when it becomes active again or purged from storage if the message expires. This field is displayed when you select **Topic** as the **Component Type** on the Basic Info page. This field is not available when the destination (topic) is targeted to a cluster.
Subscription Name	Specify the durable subscription name. This field is displayed when you select **Topic** as the **Component Type** on the Basic Info page.
Message Selector	Specify the message selector.
Do you want to define a Schema for this endpoint?	• **Yes**: Provide the XSD file for the request payload. • **No**: The payload type defaults to an opaque schema.

Headers Page

Specify the JMS headers to use in messages. You can set message headers to dequeue messages from queues and set message headers to enqueue messages into queues.

Element	Description
Headers	Select a predefined or custom header for the endpoint. The predefined headers available for selection are based on whether you are configuring the Oracle WebLogic JMS Adapter in the trigger or invoke direction.
Selected Headers	Displays the selected predefined and custom headers.

The following headers are supported when configuring the Oracle WebLogic JMS Adapter as a trigger or invoke.

Header	Description	Trigger Direction Support?	Invoke Direction Support?
JMSCorrelationID	Links one message with another. A typical use is to link a response message with its request message.	Yes	Yes
JMSDeliveryMode	Set to `persistent` or `nonpersistent` mode by the JMS client.	Yes	Yes
JMSExpiration	Specifies the duration of the message before the expiration.	Yes	Yes
JMSMessageID	Contains a value that uniquely identifies each message sent by a provider.	Yes	No

Header	Description	Trigger Direction Support?	Invoke Direction Support?
JMSPriority	Defines ten levels of priority value, with `0` as the lowest priority and `9` as the highest.	Yes	Yes
JMSProperty	Represents any custom (application-specific) properties of the message.	Yes	Yes
JMSRedelivered	Indicates whether a message is being redelivered.	Yes	No
JMSTimestamp	Contains the time a message was handed off to the JMS provider to be sent.	Yes	Yes
JMStype	Specifies the JMS message type.	Yes	Yes

Summary Page

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

Element	Description
Summary	Displays a summary of the configuration values you defined on previous pages of the wizard. The information that is 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**. To cancel your configuration details, click **Cancel**.

4

Troubleshoot the Oracle WebLogic JMS Adapter

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

Topics:

- Troubleshoot Connection Issues
- Restart the Agent or Reactivate JMS Inbound Integrations If No Messages Are Received

Additional integration troubleshooting information is provided. See Troubleshoot Oracle Integration in *Using Integrations in Oracle Integration Generation 2* and the Oracle Integration Troubleshooting page in the Oracle Help Center.

Troubleshoot Connection Issues

Note the following errors and troubleshooting actions when using the Oracle WebLogic JMS Adapter.

When Do You Get This Error?	Message	What to Check
While testing the JMS connection on the Connections page.	`Error: Unable to test connection "JMSCONN". [Cause: CASDK-0005]CASDK-0005: A connector specific exception was raised by the application.No response received within response time out window of 140 seconds. Agent may not be running, or temporarily facing connectivity issues to Oracle Integration. Please check the health of the Agent in Agent Monitoring page.`	Check whether the agent is up and running and the agent host is reachable.

When Do You Get This Error?	Message	What to Check
While testing the JMS connection on the Connections page after providing the wrong JMS host credentials.	`Error: Unable to test connection "JMSCONN". [Cause: CASDK-0005] CASDK-0005: A connector specific exception was raised by the application. Test connection failed. Please ensure you are providing correct Weblogic JMS Admin host and port. Error Details : User: weblogic, failed to be authenticated.`	Check whether the username and password used to connect to the JMS server are correct.
When selecting a ZIP file that contains a complex schema.	`Error: CASDK-0003: Unable to parse the resource`	Select a valid ZIP file (in the case of complex schema support) that is not corrupt.
While getting the list of destination names (queue/topic) from the JMS server on the JMS Adapter Configuration page of the Adapter Endpoint Configuration Wizard.	`Error: JMS001: Failed to update config page: Error while fetching JNDI destination details. Error while fetching data. No response received within response time out window of 290 seconds`	You tested the JMS connection when both the agent and JMS servers were up. However, when you go to the JMS Configuration page of the Adapter Endpoint Configuration Wizard, one of them is down or unreachable. Ensure that both the agent and the JMS server are up and running and reachable.

When Do You Get This Error?	Message	What to Check
When the JMS connection uses a distributed JMS server.	`Error: CASDK-0005 : A connector specific exception was raised by the application. Test connection failed. Please ensure you are providing correct Weblogic JMS Admin host and port. Error Details : While trying to lookup 'weblogic.management.mbeanservers. domainruntime' didn't find subcontext 'management'. Resolved 'weblogic'`	The port specified on the Connections page for the distributed JMS server is the admin server port of the JMS server and not the port of the cluster member.
When the destination (queue/ topic) that existed at the time of designing the application may have been deleted or does not exist at the time of activation.	`Error: Integration <Integration_name> cannot be activated. Incident has been created with ID <Integration_ID> [Cause: ICS-20575] com.oracle.ics.activation.IntegrationFlowProcessingException: CASDK-0005 : A connector specific exception was raised by the application.`	Verify whether the queue/topic used at the time of designing the integration still exist or have been deleted.

When Do You Get This Error?	Message	What to Check
While testing the JMS connection on the Connections page.	`Error: Unable to test connection <JMS_CONNECTION_NAME>. [Cause: CASDK-0005]: A connector specific exception was raised by the application. Test connection failed. Please ensure you are providing correct Weblogic JMS Admin host and port. Error Details : t3://<jmshost>:<jmsport>: Destination <jmshost>, <jmsport> unreachable; nested exception is: java.net.ConnectException: Connection refused; No available router to destination`	Ensure the following are correct: • The hostname and port of the JMS server entered are correct. • The JMS server is up and running and is reachable.

Restart the Agent or Reactivate JMS Inbound Integrations If No Messages Are Received

If Oracle Integration is not accessible for a certain period of time, it can cause JMS inbound polling to stop. Logs indicate if polling has stopped. If this occurs, you must either restart the connectivity agent or reactivate the integrations.

In addition, if the runtime request fails with the following error sometime after a connectivity agent upgrade, a connectivity agent restart is required for message processing to correctly resume.

```
Provider for class javax.xml.parsers.DocumentBuilderFactory cannot be created.
```