Oracle® Cloud

Using the Azure Event Grid Adapter with Oracle Integration 3

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4 Implement Common Patterns Using the Azure Event Grid Adapter

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

This guide is intended for developers who want to use this adapter in integrations in Oracle Integration.

Documentation Accessibility

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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 at `http://cloud.oracle.com`
- *Using Integrations in Oracle Integration 3*
- *Using the Oracle Mapper with Oracle Integration 3*
- Oracle Integration documentation on the Oracle Help Center.

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.

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Understand the Azure Event Grid Adapter

Review the following topics to learn about the Azure Event Grid 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:

Azure Event Grid Adapter Capabilities

The Azure Event Grid Adapter enables you to create an integration in Oracle Integration that connects to an Azure Event Grid messaging system. The Azure Event Grid Adapter connects to the Azure Event Grid distributed publish-subscribe messaging system from Oracle Integration and allows for the publishing and subscribing of events from an Azure Event Grid topic/domain. You can configure the Azure Event Grid Adapter as a trigger connection and an invoke connection in an integration in Oracle Integration.

The Azure Event Grid Adapter provides the following capabilities:

- Establishes a connection to the Azure Event Grid messaging system to enable events to be published and subscribed. It provides support for publishing and subscribing events.
- Supports JSON sample, Avro schema, XML payload message structure, and opaque (stream reference) formats for publishing the events.
- Supports JSON sample, Avro schema, and XML payload message structures.
- Supports delivery properties (custom headers) for event data control.
- Supports bulk operations only for a JSON sample to manage multiple events simultaneously.
- Provides subscription options for event grid, system, partner topics, and domains with event grid, custom, and cloud schema.
- Supports dead lettering, subject filtering, advanced filtering, retry policies, and decoding and encoding of events.
- Provides connectivity to the Azure Event Grid messaging system with both public and private access through the connectivity agent for publishing events.
- Supports the Azure Event Grid Composite Security Policy: Bearer Token (JWT) Authentication for incoming requests and OAuth 2.0 Client Credentials for outgoing calls.
- Supports OAuth 2.0 Client Credentials authentication for invoke connections.

The Azure Event Grid Adapter is one of many predefined adapters included with Oracle Integration. See the Adapters page in the Oracle Help Center.

Azure Event Grid Adapter Restrictions

Note the following Azure Event Grid Adapter restrictions.

- When publishing events to an event grid topic, each event in the array is limited to up to 1 MB in size. This is because the array can have a total size of up to 1 MB. There are other limitations. See Custom Topic Resource Limits
- The Avro schema and XML payload are not supported for the **Subscribe to a System Topic** and **Subscribe to a Partner Topic** operations.
- The Avro schema, XML payload, and opaque (stream reference) format do not support bulk operations.
- The Avro schema, XML payload, and opaque (stream reference) format do not support encoding and decoding of data.
- The Avro schema, XML payload, and opaque (stream reference) format do not support dynamic headers in the delivery properties.
- The opaque (stream reference) format does not support subject and advance filters.

> **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.

Workflow to Create and Add an Azure Event Grid 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.

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

Step	Description	More Information
1	Create the adapter connections for the applications you want to integrate. The connections can be reused in multiple integrations and are typically created by the administrator.	Create an Azure Event Grid Adapter Connection
2	Create the integration. When you do this, you add trigger (source) and invoke (target) connections to the integration.	Understand Integration Creation and Best Practices in *Using Integrations in Oracle Integration 3* and Add the Azure Event Grid Adapter Connection to an Integration

Step	Description	More Information
3	Map data between the trigger connection data structure and the invoke connection data structure.	Map Data in *Using Integrations in Oracle Integration 3*
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 3*
5	Activate the integration.	Activate an Integration in *Using Integrations in Oracle Integration 3*
6	Monitor the integration on the dashboard.	Monitor Integrations During Runtime in *Using Integrations in Oracle Integration 3*
7	Track payload fields in messages during runtime.	Assign Business Identifiers for Tracking Fields in Messages and Track Integration Instances in *Using Integrations in Oracle Integration 3*
8	Manage errors at the integration level, connection level, or specific integration instance level.	Manage Errors in *Using Integrations in Oracle Integration 3*

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Create an Azure Event Grid Adapter Connection

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

Topics:

Prerequisites for Creating a Connection

You must satisfy the following prerequisites to create a connection with the Azure Event Grid Adapter:

- Have an Azure subscription.
- Know the ID for a subscription in the Azure portal. To retrieve the subscription ID, see Find your Azure subscription ID.
- Create a resource group in the Azure portal. See Create resource groups.
- For authorizing access to the Azure Resource Group, Azure provides built-in roles for Event Grid. For more details about the roles, see Azure Built-in roles for Azure Event Grid.
- Register an application in the Azure portal and obtain the client ID, client secret, and tenant ID. A new application registration is required to obtain the client ID, client secret, and tenant ID. See Register a new application.

> **Note:**
>
> You use the client ID, client secret, and tenant ID later when configuring security for your Azure Event Grid Adapter connection. See Configure Connection Security.

- (Required only for trigger connections) Create a user in the Oracle Cloud Infrastructure identity domain that has the same user name as the client ID of the Azure-registered application and assign it the ServiceInvoker role. See Manage Access and Assign Roles in *Provisioning and Administering Oracle Integration 3*.

Create a Connection

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

To create a connection in Oracle Integration:

1. In the navigation pane, click **Design**, then **Connections**.

2. Click **Create**.

> **Note:**
>
> You can also create a connection in the integration canvas. See Define Inbound Triggers and Outbound Invokes.

3. In the Create connection panel, 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.
4. Enter the information that describes this connection.

Element	Description
Name	Enter a meaningful name to help others find your connection when they begin to create their own integrations.
Identifier	Automatically displays the name in capital letters that you entered in the **Name** field. If you modify the identifier name, don't include blank spaces (for example, `SALES OPPORTUNITY`).
Role	Select the role (direction) in which to use this connection. **Note**: *Only* the roles supported by the adapter you selected are displayed for selection. Some adapters support all role combinations (trigger, invoke, or trigger and invoke). Other adapters support fewer role combinations. 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, assume 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.
Keywords	Enter optional keywords (tags). You can search on the connection keywords on the Connections page.
Description	Enter an optional description of the connection.

Element	Description
Share with other projects	**Note**: This field only appears if you are creating a connection in a project. Select to make this connection publicly available in other projects. Connection sharing eliminates the need to create and maintain separate connections in different projects. When you configure an adapter connection in a different project, the **Use a shared connection** field is displayed at the top of the Connections page. If the connection you are configuring matches the same type and role as the publicly available connection, you can select that connection to reference (inherit) its resources. See Add and Share a Connection Across a Project.

5. Click **Create**.

   Your connection is created. You're now ready to configure the connection properties, security policies, and (for some connections) access type.

Configure Connection Properties

Enter connection information so your application can process requests.

1. Go to the **Properties** section.
2. In the **Subscription ID** field, enter the subscription ID. See Prerequisites for Creating a Connection.
3. In the **Resource Group Name** field, enter the resource group name. See Prerequisites for Creating a Connection.
4. In the **API version** field, enter the API version.

Configure Connection Security

Configure security for your Azure Event Grid Adapter connection.

1. Go to the **Security** section.
2. In the **Client Id** field, enter the client ID that you obtained after performing the prerequisite steps. See Prerequisites for Creating a Connection.
3. In the **Client Secret** field, enter the client secret that you obtained after performing the prerequisite steps. See Prerequisites for Creating a Connection.
4. In the **Tenant ID** field, enter the tenant ID that you obtained after performing the prerequisite steps. See Prerequisites for Creating a Connection.

Understand How the Azure Event Grid Adapter Works with the Connectivity Agent

Understand how the Azure Event Grid Adapter works with the connectivity agent.

- The Azure Event Grid Adapter provides private access through the connectivity agent for publishing events (invoke connections).

- The Azure Event Grid Adapter does *not* support the connectivity agent for trigger connections.

Configure the Endpoint Access Type

Configure access to your endpoint. Depending on the capabilities of the adapter you are configuring, options may appear to configure access to the public internet, to a private endpoint, or to an on-premises service hosted behind a fire wall.

Select the Endpoint Access Type

Select the option for accessing your endpoint.

Option	This Option Appears If Your Adapter Supports ...
Public gateway	Connections to endpoints using the public internet.
Connectivity agent	Connections to on-premises endpoints through the connectivity agent. 1. Click **Associate agent group**. The Associate agent group panel appears. 2. Select the agent group, and 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 Creating Hybrid Integrations Using Oracle Integration in *Using Integrations in Oracle Integration 3*.

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 adapter connection uses a Web Services Description Language (WSDL) file. Only some adapter connections use WSDLs.

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 and verify URLs and credentials. Continue to test until the connection is successful.

3. When complete, click **Save**.

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Add the Azure Event Grid Adapter Connection to an Integration

When you drag the Azure Event Grid Adapter into the trigger or invoke area of an integration, the Adapter Endpoint Configuration Wizard is invoked. This wizard guides you through configuration of the Azure Event Grid Adapter endpoint properties.

The following wizard pages guide you through configuration of the Azure Event Grid Adapter as a trigger or an invoke in an integration.

Topics:

Trigger Basic Info Page

Specify a name, description, and subscription type on the Basic Info page of each trigger connection in your integration.

Element	Description
What do you want to call your endpoint?	Provide 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`) except underscores and hyphens • Multibyte characters
What does this endpoint do?	Enter an optional description of the connection's responsibilities.
Select a trigger	Select the type of operation for this connection to perform: • **Subscribe to a Topic** • **Subscribe to a Domain or Domain Topic with Event Grid schema** • **Subscribe to a Domain or Domain Topic with Custom schema** • **Subscribe to a Domain or Domain Topic with Cloud schema** • **Subscribe to a System Topic** • **Subscribe to a Partner Topic**

Trigger Configuration Page

Enter the configuration values for your integration.

- Subscribe to a Topic
- Subscribe to a Domain or Domain Topic with Event Grid schema
- Subscribe to a Domain or Domain Topic with Custom schema
- Subscribe to a Domain or Domain Topic with Cloud schema
- Subscribe to a System Topic
- Subscribe to a Partner Topic

> **Note:**
>
> The **Is Secret** column is not applicable for a dynamic header type.

Subscribe to a Topic

If you selected **Subscribe to a Topic** on the Basic Info page, the following options are displayed.

Element	Description
Select a Topic	Select a topic name to which to subscribe.
Event Schema for Subscription	Select an event schema for subscription. Do not edit it. **Note**: Event grid schema-based topics do not support a custom input schema for creating a subscription. See Event Schema Compatibility.
Enable payload fields	Select the check box to enable payload fields. Click **Add** to specify the static fields to be mapped.
Select the request payload format	Select the payload format. • **Enter JSON Sample** • **Enter AVRO Schema** • **Enter XML Payload** **Note**: Upon selecting **Enter AVRO Schema** or **Enter XML Payload**, note that the **Enable decoding** option is not applicable.
Enable decoding	Select the check box to enable decoding data of the JSON payload received. **Note**: If you want to use the dynamic custom headers, deselect the **Enable decoding** check box.
Provide XML namespace	Select the check box and enter the XML namespace. **Note**: Only a single namespace is supported.
Enter data fields for request payload	Enter a sample request payload to describe the structure of data.
Subject Filter - Begins with	Enter the initial words of the subject.
Subject Filter – Ends with	Enter the ending words of the subject.

Element	Description
Case-sensitive subject matching	Select the check box. This option ensures event filtering based on letter casing in subjects.
Enable advanced filter	Select the check box. Click **Add** to add a new filter. Double-click to edit/select/enter the following: • **Key**: Enter a key value. • **Operator**: Select an operator from the list. • **Value**: Enter a value.
Enable dead-lettering	Select the check box. Enter a supported API version for the Azure Storage Account (for example, `2023-01-01`).
Retry Policies - Max Event Delivery Attempts	Enter a number between `1` and `30`. The maximum limit for attempts is `30`.
Retry Policies - Event Time to Live in Minutes	Enter a number between `1` and `1440`. The maximum time limit is `1440` minutes.
Delivery Policies	• **Header name**: Enter a name for the header. • **Type**: Select **Dynamic** or **Static**. • **Value**: Enter a value. • **Is Secret**: Select **True** or **False**. **Note**: Upon selecting **Enter AVRO Schema** or **Enter XML Payload**, the **Dynamic** type of custom headers are not supported.

Subscribe to a Domain or Domain Topic with Event Grid schema

If you selected **Subscribe to a Domain or Domain Topic with Event Grid schema** on the Basic Info page, the following options are displayed.

Element	Description
Select a Domain	Select a domain name to which to subscribe.
Select a Topic (Displayed if you select a domain topic operation on the Basic Info page.)	Select a domain topic to which to subscribe.
Event Schema for Subscription	Displays an event schema for subscription. Do not edit it. **Note**: Event grid schema-based topics do not support a custom input schema for creating a subscription. See Event schema compatibility.
Enable payload fields	Select the check box to enable payload fields. Click **Add** to specify the static fields to be mapped.
Select the request payload format	Select the payload format. • **Enter JSON Sample** • **Enter AVRO Schema** • **Enter XML Payload** **Note**: Upon selecting **Enter AVRO Schema** or **Enter XML Payload**, note that the **Enable decoding** option is not applicable.
Enable decoding	Select the check box to enable decoding data of the JSON payload received. **Note**: If you want to use the dynamic custom headers, deselect the **Enable decoding** check box.

Element	Description
Provide XML namespace	Select the check box and enter the XML namespace. **Note**: Only a single namespace is supported.
Enter data fields for request payload	Enter a sample request payload to describe the structure of data.
Subject Filter - Begins with	Enter the initial words of the subject
Subject Filter – Ends with	Subject Filter – Ends with Enter the ending words of the subject.
Case-sensitive subject matching	Select the check box. This option ensures event filtering based on letter casing in subjects
Enable advanced filter	Select the check box. Click **Add** to add a new filter. Double-click to edit/select/enter the following: • **Key**: Enter a key value. • **Operator**: Select an operator from the list. • **Value**: Enter a value.
Enable dead-lettering	Select the check box. Enter a supported API version for the Azure Storage Account (for example, `2023-01-01`).
Retry Policies – Max Event Delivery Attempts	Enter a number between `1` and `30`. The maximum limit for attempts is `30`.
Retry Policies – Events Time to Live in Minutes	Enter a number between `1` and `1440`. The maximum time limit is `1440` minutes.
Delivery Policies	• **Header name**: Enter a name for the header. • **Type**: Select **Dynamic** or **Static**. • **Value**: Enter a value. • **Is Secret**: Select **True** or **False**. **Note**: Upon selecting **Enter AVRO Schema** or **Enter XML Payload**, the **Dynamic** type of custom headers are not supported.

Subscribe to a Domain or Domain Topic with Custom schema

If you selected **Subscribe to a Domain or Domain Topic with Custom schema** on the Basic Info page, the following options are displayed.

Element	Description
Select a Domain	Select a domain name to which to subscribe.
Select a Topic (Displayed if you select a domain topic operation on the Basic Info page.)	Select a domain topic to which to subscribe.
Event Schema for Subscription	Displays an event schema for subscription. Do not edit it. **Note**: Event grid schema-based topics do not support a custom input schema for creating a subscription. See Event schema compatibility.
Enable payload fields	Select the check box to enable payload fields. Click **Add** to specify the static fields to be mapped.

Element	Description
Select the request payload format	Select the payload format. • **Enter JSON Sample** • **Enter AVRO Schema** • **Enter XML Payload** **Note**: Upon selecting **Enter AVRO Schema** or **Enter XML Payload**, note that the **Enable decoding** option is not applicable.
Enable decoding	Select the check box to enable decoding data of the JSON payload received. **Note**: If you want to use the dynamic custom headers, deselect the **Enable decoding** check box.
Provide XML namespace	Select the check box and enter the XML namespace. **Note**: Only a single namespace is supported.
Enter data fields for request payload	Enter a sample request payload to describe the structure of data.
Subject Filter - Begins with	Enter the initial words of the subject
Subject Filter – Ends with	Subject Filter – Ends with Enter the ending words of the subject.
Case-sensitive subject matching	Select the check box. This option ensures event filtering based on letter casing in subjects
Enable advanced filter	Select the check box. Click **Add** to add a new filter. Double-click to edit/select/enter the following: • **Key**: Enter a key value. • **Operator**: Select an operator from the list. • **Value**: Enter a value.
Enable dead-lettering	Select the check box. Enter a supported API version for the Azure Storage Account (for example, `2023-01-01`).
Retry Policies – Max Event Delivery Attempts	Enter a number between `1` and `30`. The maximum limit for attempts is `30`.
Retry Policies – Events Time to Live in Minutes	Enter a number between `1` and `1440`. The maximum time limit is `1440` minutes.
Delivery Policies	• **Header name**: Enter a name for the header. • **Type**: Select **Dynamic** or **Static**. • **Value**: Enter a value. • **Is Secret**: Select **True** or **False**. **Note**: Upon selecting **Enter AVRO Schema** or **Enter XML Payload**, the **Dynamic** type of custom headers are not supported.

Subscribe to a Domain or Domain Topic with Cloud schema

If you selected **Subscribe to a Domain or Domain Topic with Cloud schema** on the Basic Info page, the following options are displayed.

Element	Description
Select a Domain	Select a domain name to which to subscribe.

Element	Description
Select a Topic (Displayed if you select a domain topic operation on the Basic Info page.)	Select a domain topic to which to subscribe.
Event Schema for Subscription	Displays an event schema for subscription. Do not edit it. **Note**: Event grid schema-based topics do not support a custom input schema for creating a subscription. See Event schema compatibility.
Enable payload fields	Select the check box to enable payload fields. Click **Add** to specify the static fields to be mapped.
Select the request payload format	Select the payload format. • **Enter JSON Sample** • **Enter AVRO Schema** • **Enter XML Payload** **Note**: Upon selecting **Enter AVRO Schema**or **Enter XML Payload**, note that the **Enable decoding** option is not applicable.
Enable decoding	Select the check box to enable decoding data of the JSON payload received. **Note**: If you want to use the dynamic custom headers, deselect the **Enable decoding** check box.
Provide XML namespace	Select the check box and enter the XML namespace. **Note**: Only a single namespace is supported.
Enter data fields for request payload	Enter a sample request payload to describe the structure of data.
Subject Filter - Begins with	Enter the initial words of the subject
Subject Filter – Ends with	Enter the ending words of the subject.
Case-sensitive subject matching	Select the check box. This option ensures event filtering based on letter casing in subjects
Enable advanced filter	Select the check box. Click **Add** to add a new filter. Double-click to edit/select/enter the following: • **Key**: Enter a key value. • **Operator**: Select an operator from the list. • **Value**: Enter a value.
Enable dead-lettering	Select the check box. Enter a supported API version for the Azure Storage Account (for example, `2023-01-01`).
Retry Policies – Max Event Delivery Attempts	Enter a number between `1` and `30`. The maximum limit for attempts is `30`.
Retry Policies – Events Time to Live in Minutes	Enter a number between `1` and `1440`. The maximum time limit is `1440` minutes.
Delivery Policies	• **Header name**: Enter a name for the header. • **Type**: Select **Dynamic** or **Static**. • **Value**: Enter a value. • **Is Secret**: Select **True** or **False**. **Note**: Upon selecting **Enter AVRO Schema** or **Enter XML Payload**, the **Dynamic** type of custom headers are not supported.

Subscribe to a System Topic

If you selected **Subscribe to a System Topic** on the Basic Info page, the following options are displayed.

> **Note:**
>
> The Avro Schema payload is not supported for the **Subscribe to a System Topic** operation.

Element	Description
Select a System Topic	Select a system topic name to which to subscribe.
Event Schema for Subscription	Displays an event schema for subscription. Do not edit it. **Note**: Event grid schema-based topics do not support a custom input schema for creating a subscription. See Event Schema Compatibility.
Enable payload fields	Select the check box to enable payload fields. Click **Add** to specify the static fields to be mapped.
Topic Type	Displays the topic type. Do not edit it.
Available Options	Displays a list of events for selection based on the system topic selected.
Selected Options	Displays the list of events you have selected.
Enter JSON request payload for data field	Enter a JSON request payload to describe the structure of data.
Subject Filter - Begins with	Enter the initial words of the subject
Subject Filter – Ends with	Enter the ending words of the subject.
Case-sensitive subject matching	Select the check box. This option ensures event filtering based on letter casing in subjects
Enable advanced filter	Select the check box. Click **Add** to add a new filter. Double-click to edit/select/enter the following: • **Key**: Enter a key value. • **Operator**: Select an operator from the list. • **Value**: Enter a value.
Enable dead-lettering	Select the check box. Enter a supported API version for the Azure Storage Account (for example, `2023-01-01`).
Retry Policies – Max Event Delivery Attempts	Enter a number between `1` and `30`. The maximum limit for attempts is `30`.
Retry Policies – Events Time to Live in Minutes	Enter a number between `1` and `1440`. The maximum time limit is `1440` minutes.
Delivery Policies	• **Header name**: Enter a name for the header. • **Type**: Select **Dynamic** or **Static**. • **Value**: Enter a value. • **Is Secret**: Select **True** or **False**. **Note**: Upon selecting **Enter AVRO Schema**, the **Dynamic** type of custom headers are not supported.

Subscribe to a Partner Topic

If you selected **Subscribe to a Partner Topic** on the Basic Info page, the following options are displayed.

> **Note:**
>
> The Avro schema payload is not supported for the **Subscribe to a Partner Topic** operation.

Element	Description
Select a Partner Topic	Select a partner topic name to which to subscribe.
Event Schema for Subscription	Displays an event schema for subscription. Do not edit it. **Note**: Event grid schema-based topics do not support a custom input schema for creating a subscription. See Event Schema Compatibility.
Enable payload fields	Select the check box to enable payload fields. Click **Add** to specify the static fields to be mapped.
Enter JSON request payload for data field	Enter a JSON request payload to describe the structure of data.
Enter JSON Sample	Enter sample JSON to describe the structure of data.
Subject Filter - Begins with	Enter the initial words of the subject
Subject Filter – Ends with	Enter the ending words of the subject.
Case-sensitive subject matching	Select the check box. This option ensures event filtering based on letter casing in subjects
Enable advanced filter	Select the check box. Click **Add** to add a new filter. Double-click to edit/select/enter the following: • **Key**: Enter a key value. • **Operator**: Select an operator from the list. • **Value**: Enter a value.
Enable dead-lettering	Select the check box. Enter a supported API version for the Azure Storage Account (for example, `2023-01-01`).
Retry Policies – Max Event Delivery Attempts	Enter a number between `1` and `30`. The maximum limit for attempts is `30`.
Retry Policies – Events Time to Live in Minutes	Enter a number between `1` and `1440`. The maximum time limit is `1440` minutes.
Delivery Policies	• **Header name**: Enter a name for the header. • **Type**: Select **Dynamic** or **Static**. • **Value**: Enter a value. • **Is Secret**: Select **True** or **False**.

Invoke Basic Info Page

Specify a name, description, and action type on the Basic Info page of each invoke connection in your integration.

Element	Description
What do you want to call your endpoint?	Provide 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`) except underscores and hyphens • Multibyte characters
What does this endpoint do?	Enter an optional description of the connection's responsibilities.
Select an operation to perform	Select an operation to perform: • **Publish Events**
Action	Select the type of operation for this connection to perform: • **Publish Events To a Topic with Custom schema** • **Publish Events To a Topic with Event Grid schema** • **Publish Events To a Topic with Cloud schema** • **Publish Events To a Domain with Event Grid schema** • **Publish Events To a Domain with Custom schema** • **Publish Events To a Domain with Cloud schema**

Invoke Configuration Page

Enter the configuration values for your integration.

- Publish Events To Topic
- Publish Events To Domain

Publish Events To Topic

If you selected **Publish Events To a Topic with Custom schema**, **Publish Events To a Topic with Event Grid schema**, or **Publish Events To a Topic with Cloud schema** on the Basic Info page, the following options are displayed.

Element	Description
Select a Topic	Select a topic name to publish events.
Do you want to specify the message structure?	• Click **Yes** to provide the JSON/Avro or XML sample and publish the event in JSON/Avro or XML format. • Click **No** to publish the event in opaque (stream reference) format.

Element	Description
Enable payload fields	Select the check box to enable payload fields. Click **Add** to specify the static fields to be mapped. **Note**: The **Enable payload fields** option is not supported for the **Publish Events To a Topic with Event Grid schema** action.
Enter payload fields	If you select the check box for **Enable payload fields**, a table appears for adding payload key fields. This field is mandatory and must not remain empty.
Select the request payload format	Select the payload format. • **Sample JSON** • **AVRO Schema** • **Sample XML** **Note**: Upon selecting **AVRO Schema** or **Sample XML**, note that the **Enable encoding** option is not applicable.
Enable encoding	Select the check box to enable encoding data of the JSON payload received. **Note**: If you selected the custom headers type as dynamic on the Trigger Configuration page of the Adapter Endpoint Configuration Wizard, the **Enable encoding** check box should be deselected.
Provide XML namespace	Select the check box and enter the XML namespace. **Note**: Only a single namespace is supported.
Enter XML namespace	If you select the check box for **Provide XML namespace**, a text box appears for entering the XML namespace.
Enter data fields for request payload	Enter a sample request payload to describe the structure of data.
Opaque (Stream Reference)	Publishes the files belonging to any format through the specified topic. **Note**: The event published in the topic is Base64-encoded.

Publish Events To Domain

If you selected **Publish Events To a Domain with Event Grid schema**, **Publish Events To a Domain with Custom schema**, or **Publish Events To a Domain with Cloud schema** on the Basic Info page, the following options are displayed.

Element	Description
Select a Domain	Select a domain name to publish events.
Select a Topic	Displays a list of domain topics for selection based on the domain selected.
Do you want to specify the message structure?	• Click **Yes** to provide the JSON/Avro or XML sample and publish the event in JSON/Avro or XML format. • Click **No** to publish the event in opaque (stream reference) format.

Element	Description
Enable payload fields	Select the check box to enable payload fields. Click **Add** to specify the static fields to be mapped. **Note**: The **Enable payload fields** option is not supported for the **Publish Events To a Domain with Event Grid schema** action.
Enter payload fields	If you select the check box for **Enable payload fields**, a table appears for adding payload key fields. This field is mandatory and must not remain empty.
Select the request payload format	Select the payload format. • **Sample JSON** • **AVRO Schema** • **Sample XML** **Note**: Upon selecting the **AVRO Schema** or **Sample XML**, note that the **Enable encoding** option is not applicable.
Enable encoding	Select the check box to enable encoding data of the JSON payload received. **Note**: If you selected the custom headers type as dynamic on the Trigger Configuration page of the Adapter Endpoint Configuration Wizard, the **Enable encoding** check box should be deselected.
Provide XML namespace	Select the check box and enter the XML namespace. **Note**: Only a single namespace is supported.
Enter XML namespace	If you check the check box for **Provide XML namespace**, a text box appears for entering the XML namespace.
Enter data fields for request payload	Enter sample request payload to describe the structure of data.
Opaque (Stream Reference)	Publishes the files in any format through the specified domain. **Note**: The event published in the domain is Base64-encoded.

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 **Go back**. To cancel your configuration details, click **Cancel**.

4

Implement Common Patterns Using the Azure Event Grid Adapter

You can use the Azure Event Grid Adapter to implement the following common pattern.

Topics:

- Use the Azure Event Grid Adapter to Receive Notifications When a New File is Created in Azure Storage

> **Note:**
>
> Oracle Integration offers a number of prebuilt integrations, known as *recipes*, that provide you with a head start in building your integrations. You can start with a recipe, and then customize it to fit your needs and requirements. Depending upon the solution provided, a variety of adapters are configured in the prebuilt integrations. See the Recipes and Accelerators page on the Oracle Help Center.

Use the Azure Event Grid Adapter to Receive Notifications When a New File is Created in Azure Storage

The Azure Event Grid Adapter supports receiving event notifications from the Azure Event Grid messaging system in Oracle Integration.

This use case describes how the Azure Event Grid Adapter is used to subscribe to and receive event notifications in Oracle Integration when a new file is created in Azure Storage. This implementation pattern provides an overview of the steps.
You must create two integrations in Oracle Integration:

- Configure an Azure Event Grid Trigger Endpoint and Select a System Topic and Filter Event Type to Receive the Event Notifications
- Configure an Azure Storage Invoke Endpoint to Upload a Blob (file) to the Azure Portal Using the Put Blob (file) Operation in Azure Storage

Configure an Azure Event Grid Trigger Endpoint and Select a System Topic and Filter Event Type to Receive the Event Notifications

1. Configure the Azure Event Grid Adapter on the Connections page. See Create a Connection.
2. Create an application integration. This is the first of two integrations you create.
3. Add the Azure Event Grid Adapter as a trigger connection in the integration.
   The Adapter Endpoint Configuration Wizard is displayed.
4. Configure the Azure Event Grid endpoint:
   a. On the Basic Info page, provide the endpoint name.

b. Select the **Subscribe to a System Topic** operation and select **Subscribe to a System Topic with Event Grid Schema**.

c. On the Configuration page, the following details are specified or selected for this use case:

i. Select **AzureEGSysTopic** in the **Select a System Topic** field.

ii. Select **EventGridSchema** for the **Event Schema for Subscription** field.

iii. Select **Microsoft.Storage.StorageAccounts** for the **Topic Type** field.

iv. Select **Blob Created** and **Blob Deleted** under **Filter Event types**.

v. Enter the JSON request payload for the data field.

d. Review your selections on the Summary page.

5. Specify the business identifier tracking variable and activate the integration.
6. Once you activate the integration, the subscription gets created under **System Topic**.

Configure an Azure Storage Invoke Endpoint to Upload a Blob (file) to the Azure Portal Using the Put Blob (file) Operation in Azure Storage

1. Create REST Adapter and Azure Storage Adapter connections.
2. Create an application integration. This is the second of two integrations that you create.
3. Drag the REST Adapter connection into the integration as a trigger connection.
4. Specify the following details in the Adapter Endpoint Configuration Wizard.

a. On the Basic Info page, provide the endpoint name.

b. On the Resource Configuration page, the following details are specified or selected for this use case:

i. Provide the endpoint's relative resource URI (for example, `/test`).

ii. Select the **PUT** action.

iii. Select the **Configure a request payload for this endpoint** check box.

iv. Select the **Configure this endpoint to receive the response** check box.

v. Select the **Custom** check box under **Configure Request Headers**.

c. On the Request page, select **Binary** in the **Select the request payload format** field.

d. On the Request Headers page, add the following custom HTTP headers:

- `version`
- `blob`
- `container`

e. On the Response page, select **JSON Sample** in the **Select the response payload format** field.

f. Click **inline** and enter a valid JSON payload.

g. Review your selections on the Summary page.

5. Drag the Azure Storage Adapter into the integration as an invoke connection.
6. Configure the Azure Storage Adapter endpoint:

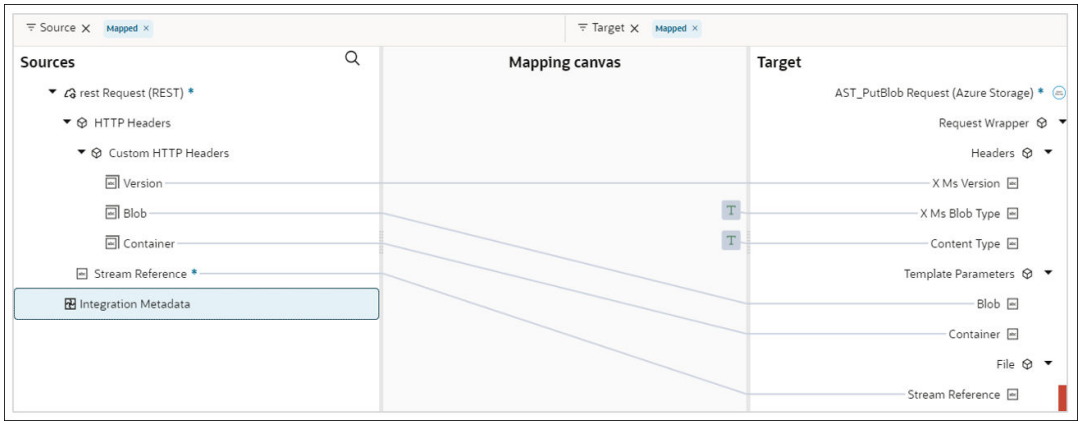
a. On the Basic info page, provide the endpoint name.

b. Select **Blobs** in the **Select Resource** field and select the **Put Blob (file)** action.

c. On the Configuration page, enter the container name and blob name.

d. Review your selections on the Summary page.

7. In the mapper, map the **Custom HTTP Headers** and **Stream Reference** elements from the REST Adapter to the equivalent fields in Azure Storage. Map the required response fields.



8. Click **X Ms Blob Type**. The Expression Builder is displayed.

9. Add a value. For this example, the following value is added to the Expression Builder:

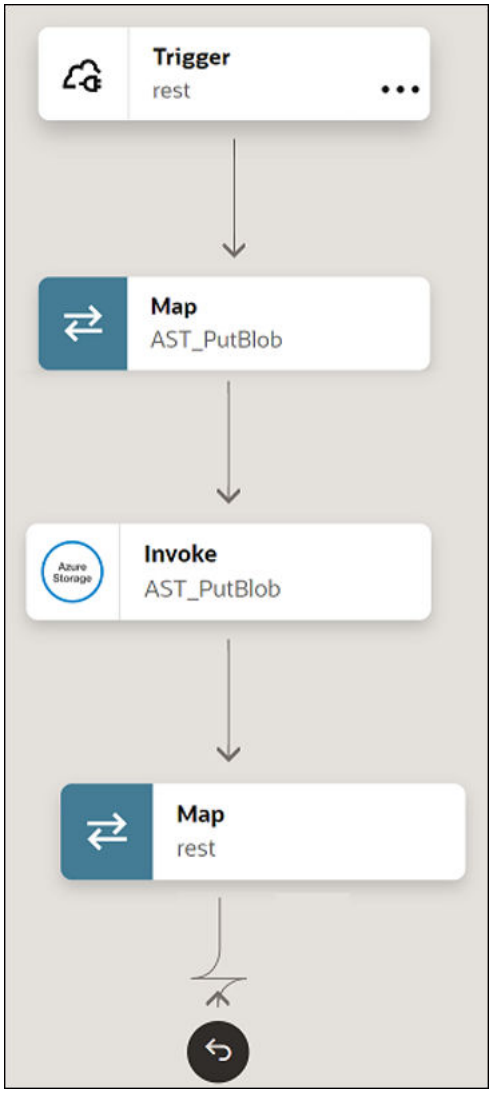
```
BlockBlob
```

10. Click **Content Type**. The Expression Builder is displayed.

11. Add a value. For this example, the following value is added to the Expression Builder:

```
application/octet-stream
```

12. Click **Validate**, and activate the integration.
The completed integration looks as follows.



13. During runtime, provide the valid values for the **container**, **blob** and **version** headers in the **Request Headers** section.
14. Select the **File** radio button and choose the required file (blob) that you want to upload.
15. Click **Run**.
16. As a result, the selected file (blob) is uploaded to the designated container and the Azure Event Grid subscription triggers an event. This event subsequently generates a notification sent from Azure Storage to the Azure Event Grid integration in Oracle Integration.