

# Oracle Kafka Adapter

Click Through Presentation

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## OIC Kafka Adapter



# Connection Overview



# Search for Apache Kafka

## Create connection

Select the adapter to use for this connection


Kafka kakao kaka

Q kafka



Apache Kafka

# Select Apache Kafka Adapter

 Apache Kafka adapter

Name  
KafkaStream

Identifier  
KAFKASTREAM

Role  
Trigger and invoke

Keywords  
kafka streaming ×

Description  
Test Topics Connection

Share with other projects  
☒

<

Create



# Configure and Test Connection

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**KafkaStream**  
KafkaStream

**Configured** Role Trigger and invoke Identifier KAFKASTREAM Updated on Sep 3, 2024, 03:58:01 PM CEST Used in 0 integrations Share with other projects On Project pob-KafkaStreamDemo

**CONFIRMATION**  
Connection **KafkaStream** was tested successfully.

Use a shared connection

Search

or

**Configure a connection**

**Properties**

Bootstrap Servers  
cell-1.streaming.eu-frankfurt-1.oci.oraclecloud.com:9092

**Security**

Security policy  
SASL PLAIN Over SSL

SASL Username  
oraemeaint/oracleidentitycloudservice/peter.obert@oracle.com/ocid1.streampool.oci.eu-frankfurt-1

SASL Password  
\*\*\*\*\*

> Optional security

**Access type**

☒ **Public gateway**  
Connect to endpoints using the internet.

☐ **Private endpoint**  
Connect to endpoints using your private network.

☐ **Connectivity agent**  
Connect to on-premises endpoints through the agent.

**Configuration progress**

100 %

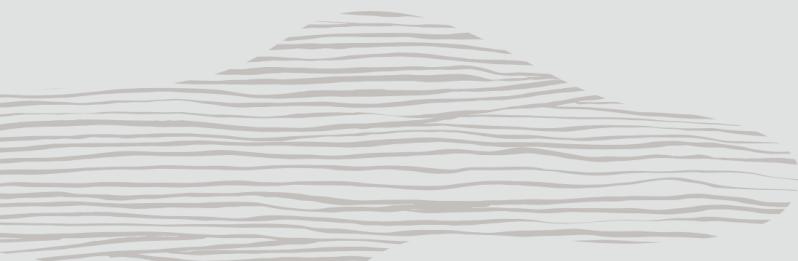
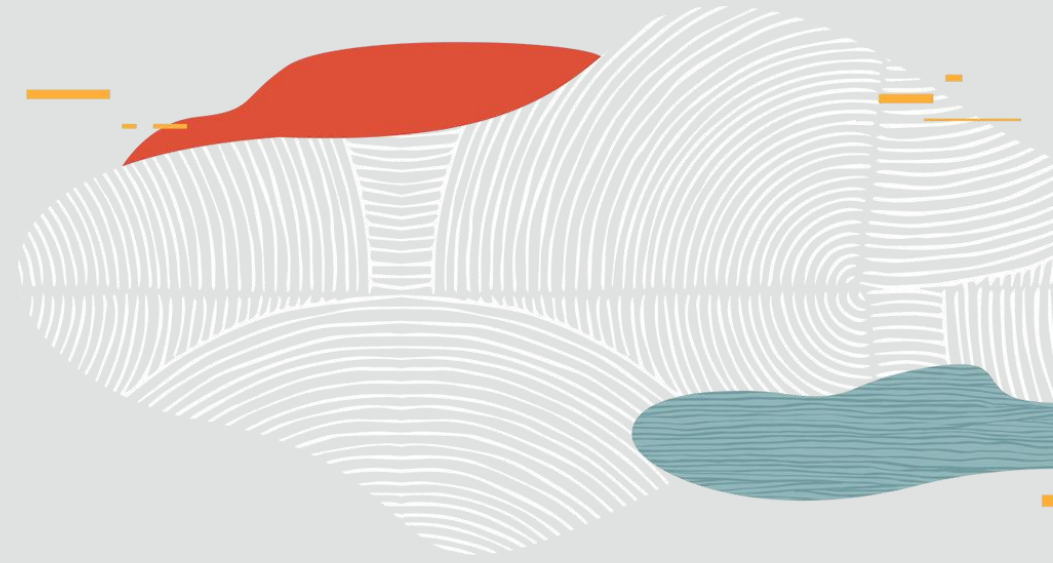
- ☒ Use shared connection or configure
- ☐ Save changes
- ☒ Test connection

[apache-kafka-adapter-create-connection](#)



## OIC Kafka Adapter

# Invoke Operations



# Name Invoke Action

The screenshot displays the Oracle APEX interface for a workflow named "pob-Publish-Order". The workflow diagram consists of the following steps:

- Trigger**: nikesk-order-post-to-...
- Map**: publishOrderToStream
- Invoke**: Apache Kafka (highlighted with a dashed border)
- Invoke**: publishOrderToStream
- Map**: nikesk-order-post-to-...

The right-hand panel, titled "Configure Basic Info", is for the "Apache Kafka invoke" action. It contains the following configuration fields:

- What do you want to call your endpoint?**: publishOrder
- What does this endpoint do?**: publishOrder

At the bottom right of the interface, there are "Cancel" and "Continue" buttons.

# Select an Operation

The screenshot displays the Oracle APEX interface for a project named "pob-Publish-Order". The workflow diagram consists of the following steps:

- Trigger**: nikesk-order-post-to-...
- Map**: publishOrderToStream
- Invoke**: Apache Kafka (highlighted with a dashed border, indicating it is the selected operation)
- Invoke**: publishOrderToStream
- Map**: nikesk-order-post-to-...

The "Configure Operation" dialog for "Apache Kafka Invoke" is open on the right side of the screen. It prompts the user to "Specify the operation you want to perform on the Kafka Topic" and asks "What operation do you want to perform on the kafka?". The available options are:

- ☒ Publish records to a Kafka topic
- ☐ Consume records from a Kafka topic
- ☐ Consume records from a Kafka topic by specifying offset

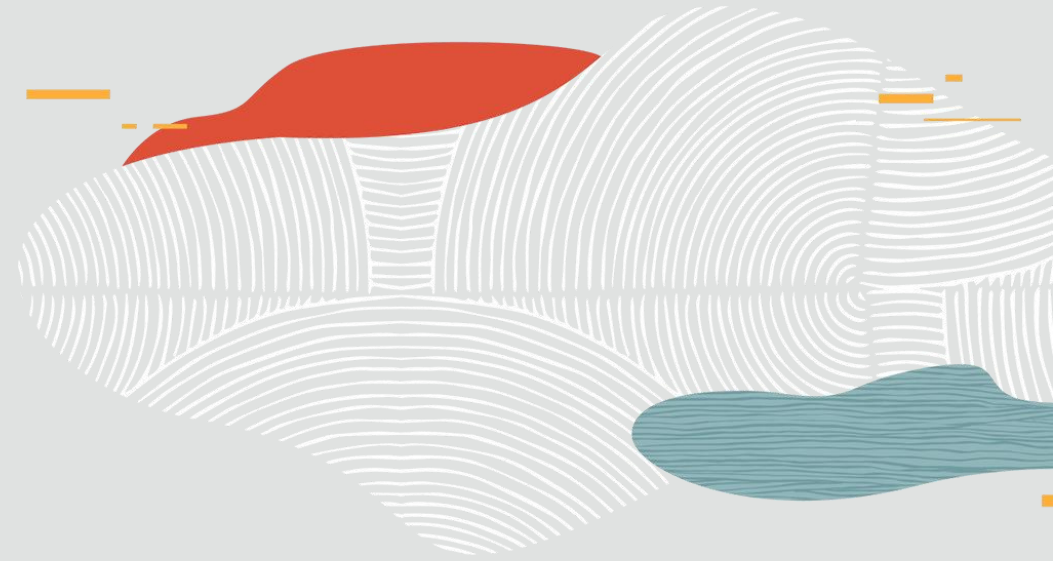
At the bottom of the dialog, there are buttons for "Cancel", "Go back", and "Continue".



## OIC Kafka Adapter



# Publish Records to Kafka Topics



# Filter and Select Topic and Partition

The screenshot displays the Oracle APEX interface for a workflow titled "pob-Publish-Order". The workflow diagram consists of the following steps:

- Trigger**: nixes-order-post-to-...
- Invoke**: Apache Kafka
- Map**: publishOrderToStream
- Invoke**: publishOrderToStream
- Map**: nixes-order-post-to-...

The "Configure Topic & Partition" dialog is open on the right side of the screen. It contains the following configuration options:

- Select a Topic**: A dropdown menu with "erp-bicc-extract" and "pob-orders" (selected).
- Specify the Partition**: A dropdown menu with "--Default--" and "0" (selected).
- Do you want to specify the message structure?**: Radio buttons for "Yes" (selected) and "No".
- Do you want to specify the headers for the message?**: Radio buttons for "Yes" (selected) and "No".
- Review and update advanced configurations**: A section for editing advanced configurations.

At the bottom of the dialog, there are buttons for "Cancel", "Go back", and "Continue".

# Define Message Structure

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pob-Publish-Order 1.0.0 Draft - Unsaved changes

Share Save

Configure Message Structure  
Apache Kafka Invoke

Define the message structure. You can select a XML Schema or XML Schema archive or a sample XML or JSON document or Avro document for specifying the message structure.

How would you like to specify the message structure?  
Sample JSON document

--Select--

Avro Schema (AVSC) document

Sample JSON document

XML Schema (XSD) document

Sample XML document

Trigger  
nikesk-order-post-to-...

Invoke  
Apache Kafka1

Map  
publishOrderToStream

Invoke  
publishOrderToStream

Map  
nikesk-order-post-to-...

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Cancel Go back Continue

# Upload Schema/Sample

The screenshot displays the Oracle APEX interface for a project named "pob-Publish-Order" (pob-KafkaStreamDemo). The workflow diagram consists of the following steps:

- Trigger**: nikesl-order-post-to-...
- Invoke**: Apache Kafka1
- Map**: publishOrderToStream
- Invoke**: publishOrderToStream
- Map**: nikesl-order-post-to-...

The "Configure Message Structure" dialog for "Apache Kafka invoke" is open on the right. It prompts the user to define the message structure by selecting a file or dropping one. The "How would you like to specify the message structure?" dropdown is set to "Sample JSON document".

**Drag and Drop**  
Select a file or drop one here.

Selected files: order.json

| File Name  |
|------------|
| order.json |

| Element |
|---------|
| content |

At the bottom of the dialog are buttons for "Cancel", "Go back", and "Continue".

# Define Custom Message Headers (optional)

The screenshot displays the Oracle APEX interface for a project named "pob-Publish-Order". The workflow diagram consists of the following steps:

- Trigger**: `missin-order-post-to-...`
- Invoke**: `Apache Kafka`
- Map**: `publishOrderToStream`
- Invoke**: `publishOrderToStream`
- Map**: `missin-order-post-to-...`

The "Configure Headers" dialog box for "Apache Kafka invoke" is open on the right. It contains the following options:

- ☐ **Enable dynamic headers**: Use the option if you would like to configure headers during mapping.
- ☐ **Specify custom headers**: Use the option if you would like to specify custom headers.
- | Name                |
|---------------------|
| No data to display. |

\* Double click to edit table cells and hit Enter/Return key to commit changes
- ☐ **Use Opaque (Base64binary) format for header value**

At the bottom of the dialog are buttons for "Cancel", "Go back", and "Continue".

# Finish Invoke Configuration

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pob-Publish-Order 1.0.0 Draft - Unsaved changes

Share Save

Summary  
Apache Kafka Invoke

Success! Your Apache Kafka Adapter endpoint configuration is complete

Topic :  
pob-orders

Partition :  
--Default--

Structure for the payload defined :  
Yes

Message Structure:  
Sample JSON document

Headers defined for Message :  
Yes

Cancel Go back Finish

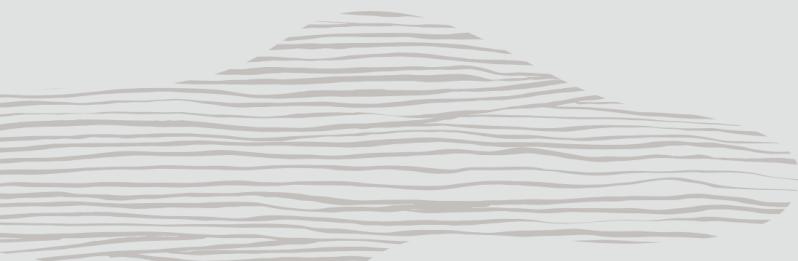
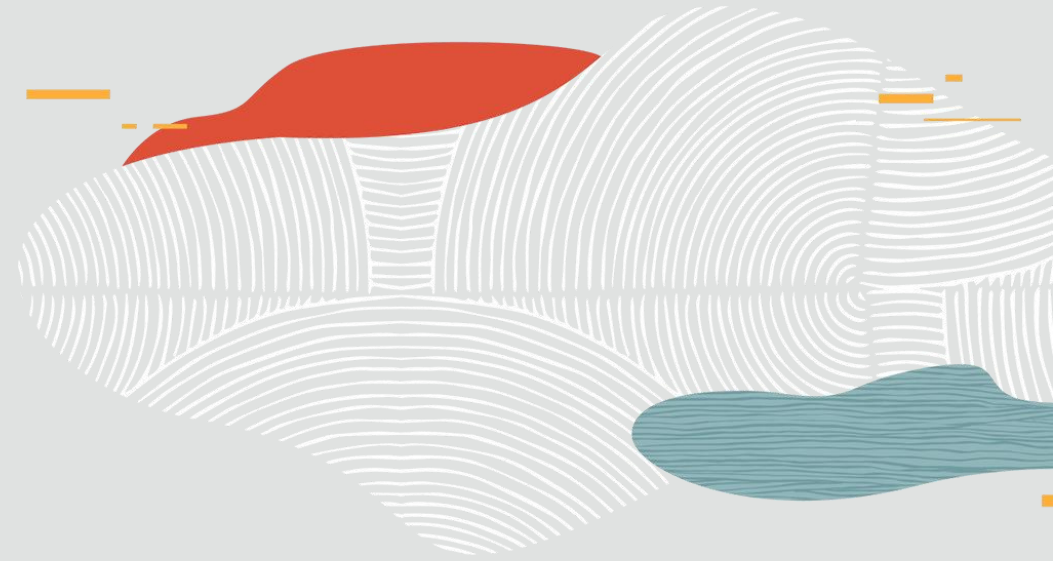
```
graph TD; Trigger[Trigger  
nikesi-order-post-to-...] --> Invoke1[Invoke  
Apache Kafka]; Invoke1 --> Map1[Map  
publianOrderToStream]; Map1 --> Invoke2[Invoke  
publianOrderToStream]; Invoke2 --> Map2[Map  
nikesi-order-post-to-...]; Map2 --> End(( ))
```



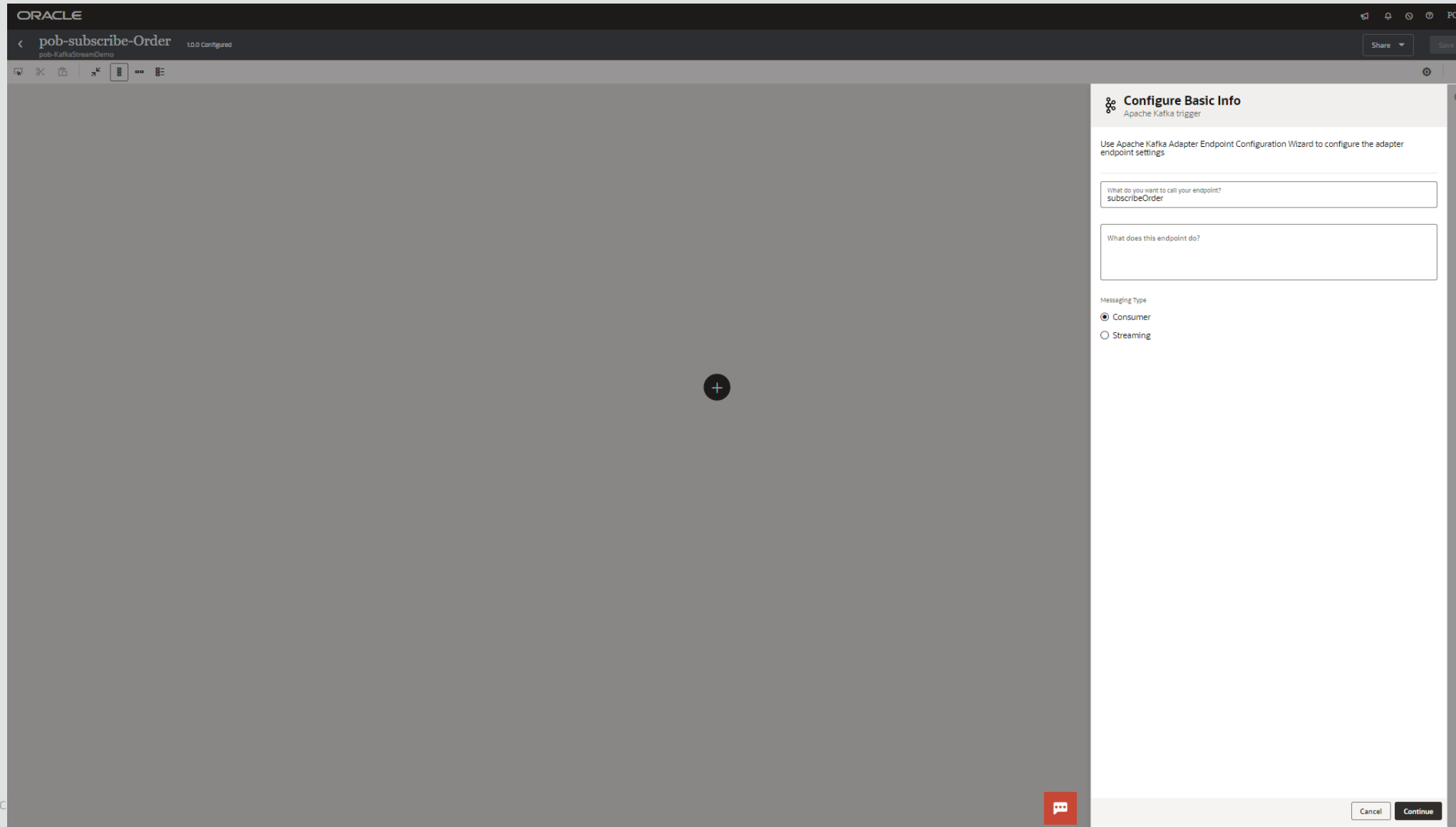
## OIC Kafka Adapter



# Subscribe to Kafka Topics



# Name and Chose Trigger Role



The screenshot shows the Oracle APEX configuration interface for a project named "pob-subscribe-Order" (version 1.0.0 Configured). The main workspace is a large grey area with a central "+" icon. On the right, a "Configure Basic Info" panel is open for an "Apache Kafka trigger".

**Configure Basic Info**  
Apache Kafka trigger

Use Apache Kafka Adapter Endpoint Configuration Wizard to configure the adapter endpoint settings

What do you want to call your endpoint?  
subscribeOrder

What does this endpoint do?

Messaging Type

- ☒ Consumer
- ☐ Streaming

At the bottom right, there are "Cancel" and "Continue" buttons.

# Enter Kafka Topic Consumer Group

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< pob-subscribe-Order

1.0.0 Configured

Share

Save

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🔗

Configure Topic & Partition

Apache Kafka trigger

Define the parameters for the operation. You could select the Topic, partitions and could also optionally specify the data structure for the message.

Select a Topic

nike.sk.orders

orderTopic

outlookStream

nike.sk.tickets

Specify the Partition

--Default--

0

Consumer Group

Required

Polling Frequency (Sec)

10

Maximum Number of Records to be fetched

Configure the following options if you would like to define the message structure. You can select a XML Schema or XML Schema archive or a sample XML or JSON document or Avro Schema document for specifying the message structure.

Do you want to specify the message structure ?

☒ Yes

☐ No

Cancel

Go back

Continue

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# 5. Specify Message Consumption Options

The screenshot shows the Oracle APEX interface for configuring an Apache Kafka trigger. The main workspace is a large grey area with a central plus icon. On the right, a sidebar titled 'Configure Topic & Partition' contains the following configuration options:

- Specify the Partition:** A dropdown menu with '--Default--' selected and '0' listed below it.
- Consumer Group:** A text field containing 'orderConsumer'.
- Polling Frequency (Sec):** A text field containing '10'.
- Maximum Number of Records to be fetched:** A text field containing '1'.
- Do you want to specify the message structure ?** Radio buttons for 'Yes' (selected) and 'No'.
- Do you want to specify the headers for the message ?** Radio buttons for 'Yes' and 'No' (selected).
- Review and update advanced configurations:** A link labeled 'Edit'.
- Review and update rejected message configurations:** A link labeled 'Edit'.

At the bottom right, there are three buttons: 'Cancel', 'Go back', and 'Continue'. The Oracle logo is visible in the top left corner of the interface.

# Define Message Structure

The screenshot displays the Oracle Cloud console interface. At the top, the breadcrumb navigation shows 'pob-subscribe-Order' and '1.0.0 Configured'. Below this, a toolbar contains icons for various actions. The main workspace is a large grey area with a central plus sign icon. On the right side, a 'Configure Message Structure' dialog is open. The dialog has a title bar with the Oracle logo and the text 'Configure Message Structure' and 'Apache Kafka trigger'. The main text in the dialog reads: 'Define the message structure. You can select a XML Schema or XML Schema archive or a sample XML or JSON document or Avro document for specifying the message structure.' Below this text is a dropdown menu with the placeholder text '--Select--'. The dropdown is open, showing a list of options: '--Select--', 'Avro Schema (AVSC) document', 'Sample JSON document', 'XML Schema (XSD) document', and 'Sample XML document'. At the bottom of the dialog, there are three buttons: 'Cancel', 'Go back', and 'Continue'.

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pob-subscribe-Order 1.0.0 Configured

Share Save

How would you like to specify the message structure?

--Select--

--Select--

Avro Schema (AVSC) document

Sample JSON document

XML Schema (XSD) document

Sample XML document

Cancel Go back Continue

# Upload Sample/Schema

The screenshot shows the Oracle APEX interface with a dark header bar. The breadcrumb trail is '< pob-subscribe-Order pob-KafkaStreamDemo 1.0.0 Configured'. The main workspace is a large grey rectangle with a central '+' icon. On the right, the 'Configure Message Structure' dialog is open, titled 'Configure Message Structure' with the subtitle 'Apache Kafka trigger'. The dialog contains the following elements:

- Instructional text: 'Define the message structure. You can select a XML Schema or XML Schema archive or a sample XML or JSON document or Avro document for specifying the message structure.'
- A dropdown menu: 'How would you like to specify the message structure?' with 'Sample JSON document' selected.
- A dashed box labeled 'Drag and Drop' with the text 'Select a file or drop one here.'
- A section 'Selected files: order.json' containing two input fields:
  - 'File Name' with the value 'order.json'
  - 'Element' with the value 'content'

At the bottom of the dialog are three buttons: 'Cancel', 'Go back', and 'Continue'. The bottom of the APEX page shows a red chat icon and the text 'Copyright © 2024 Oracle'.



# Define Custom Message Headers (optional)

The screenshot shows the Oracle Cloud console interface. At the top, the breadcrumb navigation indicates the path: < pob-subscribe-Order 1.0.0 Configured. Below this, a toolbar contains icons for various actions. The main area is a large grey rectangle with a central circular button containing a plus sign. On the right side, a 'Configure Headers' dialog is open. The dialog has a title bar with the Oracle logo and the text 'Configure Headers Apache Kafka trigger'. The main content of the dialog includes a section titled 'Define message headers.' with a description: 'Use the option if you would like to configure headers during mapping.' Below this is a checkbox labeled 'Enable dynamic headers'. Another section follows with the text 'Use the option if you would like to specify custom headers.' and a table with two columns: 'Name' and 'Value'. The table is currently empty, with a message 'No data to display.' and a note '\* Double click to edit table cells and hit Enter/Return key to commit changes'. At the bottom of the dialog, there is a checkbox labeled 'Use Opaque (Base64binary) format for header value'. The bottom of the console window features a red chat icon and a navigation bar with 'Cancel', 'Go back', and 'Continue' buttons.

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< pob-subscribe-Order 1.0.0 Configured

pob-KafkaStreamDemo

Share Save

Define message headers.

Use the option if you would like to configure headers during mapping.

☐ Enable dynamic headers

Use the option if you would like to specify custom headers.

Add Remove

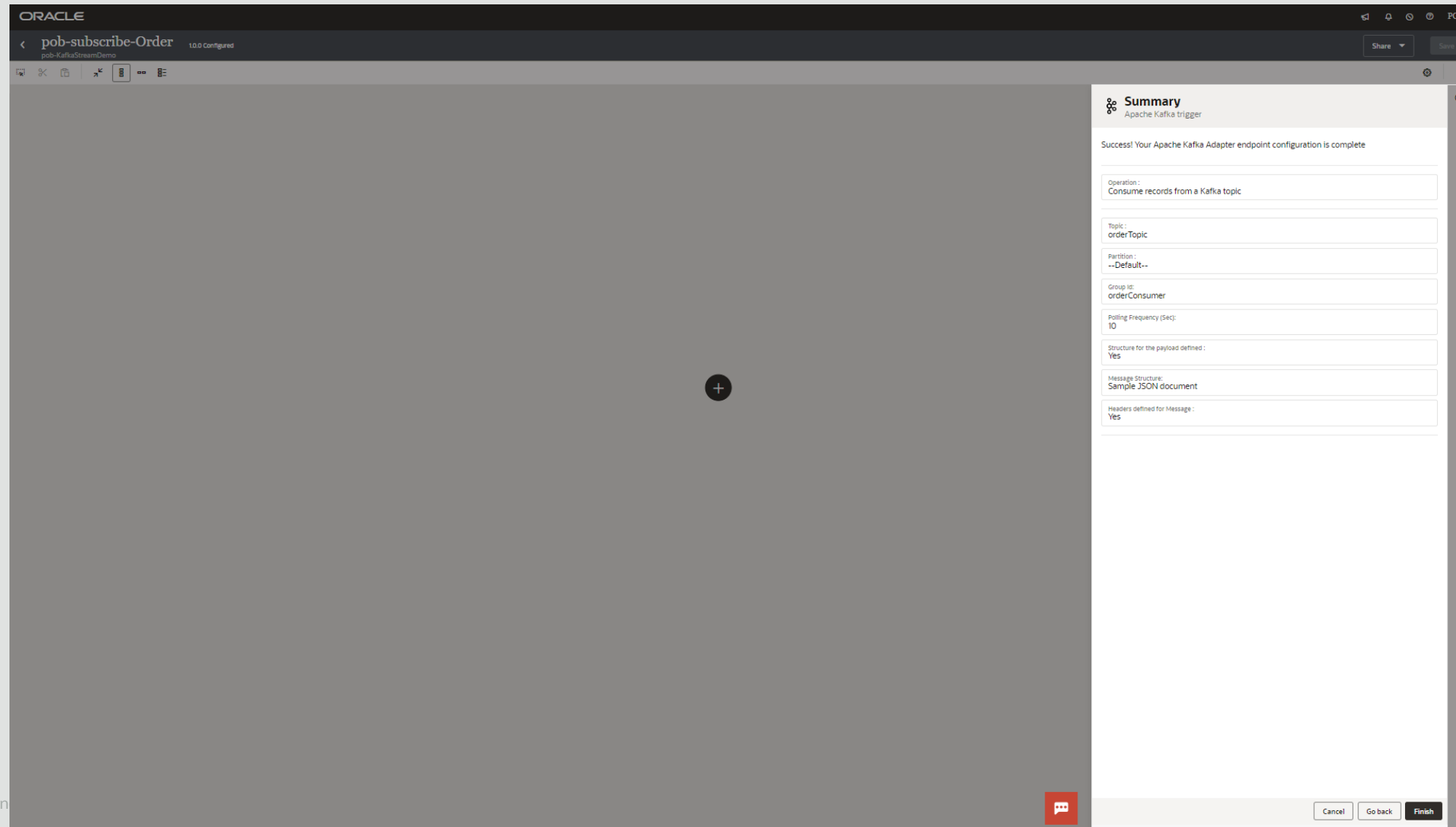
| Name                |  |
|---------------------|--|
| No data to display. |  |

\* Double click to edit table cells and hit Enter/Return key to commit changes

☐ Use Opaque (Base64binary) format for header value

Cancel Go back Continue

# Save Trigger Action



# GEN3 – What Is New in Details

[Using the Apache Kafka Adapter with Oracle Integration 3](#)

## **New Features Every Release**

- [What's New for Oracle Integration 3](#)

## **PM blogs**

- [OIC PM Oracle Blog- Niall Commiskey](#)
- [OIC PM's – How To's](#)

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