# Oracle® Banking Microservices Architecture

# Events Delivery Configuration User Guide

Release 14.7.4.0.0

F98127-01

June 2024

**ORACLE**®

# Contents

# Preface

## Purpose

This guide provides an overview to the events delivery module and takes you through the various steps involved in setting up and using the features offered by this module.

## Audience

This document is primarily intended for IT department or partners deploying Oracle Banking Microservices Architecture products. Some information may be relevant to IT decision makers and users of the application are also included. Readers are assumed to possess basic awareness and knowledge of Oracle Banking Microservices Architecture products.

## 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

For more information on any related features, refer to the following documents

- *Oracle Banking Common Core User Guide*
- *Oracle Banking Getting Started User Guide*
- *Routing Hub Configuration User Guide*

## 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. |

# Screenshot Disclaimer

Personal information used in the interface or documents is dummy and does not exist in the real world. It is only for reference purposes.

# Acronyms and Abbreviations

The list of the acronyms and abbreviations that you are likely to find in the guide are as follows:

**Table    Acronyms and Abbreviations**

| Abbreviation | Description |
|---|---|
| OBRH | Oracle Banking Routing Hub |
| EDP | Events Delivery Platform |
| OBMA | Oracle Banking Microservice Architecture |
| API | Application Programming Interface |

# Basic Actions

**Table    List of Basic Actions**

| Action | Description |
|---|---|
| **Approve** | Used to approve the initiated report. This button is displayed, once the user click **Authorize**. |
| **Audit** | Used to view the maker details, checker details, and report status. |
| **Authorize** | Used to authorize the report created. A maker of the screen is not allowed to authorize the report. Only a checker can authorize a report, created by a maker. |
| **Close** | Used to close a record. This action is available only when a record is created. |
| **Confirm** | Used to confirm the performed action. |
| **Cancel** | Used to cancel the performed action. |
| **Compare** | Used to view the comparison through the field values of old record and the current record. This button is displayed in the widget, once the user click **Authorize**. |
| **Collapse All** | Used to hide the details in the sections. This button is displayed, once the user click **Compare**. |

**Table    (Cont.) List of Basic Actions**

| Action | Description |
|---|---|
| Expand All | Used to expand and view all the details in the sections.<br>This button is displayed, once the user click **Compare**. |
| New | Used to add a new record.<br>When the user click **New**, the system displays a new record enabling to specify the required data.<br><br>✎ **Note:**<br>The fields which are marked with asterisk are mandatory. |
| OK | Used to confirm the details in the screen. |
| Save | Used to save the details entered or selected in the screen. |
| View | Used to view the report details in a particular modification stage.<br>This button is displayed in the widget, once the user click **Authorize**. |
| View Difference only | Used to view a comparison through the field element values of old record and the current record, which has undergone changes.<br>This button is displayed, once the user click **Compare**. |
| Unlock | Used to update the details of an existing record.<br>System displays an existing record in editable mode. |

# Symbols and Icons

The following symbols and icons are used in the screens.

**Table    Symbols and Icons - Common**

| Symbol/Icon | Function |
|---|---|
| ⌟ ⌞<br>⌝ ⌜ | Minimize |
| ⌜ ⌝<br>⌞ ⌟ | Maximize |
| ✕ | Close |

**Table    (Cont.) Symbols and Icons - Common**

| Symbol/Icon | Function |
|---|---|
| ⊗ | Delete |
| ✎ | Edit |
| 🔍 | Perform Search |
| ▼ | Open a list |
| ＋ | Add a new record |
| ⏮ | Navigate to the first record |
| ⏭ | Navigate to the last record |
| ◀ | Navigate to the previous record |
| ▶ | Navigate to the next record |

**Table    (Cont.) Symbols and Icons - Common**

| Symbol/Icon | Function |
|---|---|
| | Grid view |
| | List view |
| | Refresh |
| + | Click this icon to add a new row. |
| - | Click this icon to delete an existing row. |
| | Click to view the created record. |
| | Click to modify the fields. |
| | Click to unlock, delete, authorize or view the created record. |

# 1
# Overview

Events Delivery Platform or EDP is an events subscription and routing platform. Any product which publishes events on the configured kafka topics used by Oracle Banking products can onboard itself to the EDP platform and publish the list of events it wants other products to consume.

Any product interested in consuming the events from any published topic can subscribe to that event. Once the subscription is done, a consumer is registered dynamically and starts listening to that topic.

The Publisher products are Oracle Banking products and are called Internal Products while the products which subscribe to the published events are called External Products. A topic can be subscribed to by multiple external products.

An event when produced by a publisher is consumed by the EDP service and passed on to the OBRH (Oracle Banking Routing Hub) via dispatch API for further routing to all the consumers who have subscribed to that event. To enable routing through OBRH a 'Service Consumers' named EDP is provided out of the box in OBRH. The external product which needs to subscribe to the events published by internal products should configure its 'Consumer Service' has the host API details under the EDP 'Service Consumer'. The list of all the services configured under EDP will come as dropdown values while subscribing for an event. After the successful subscription, the external products start listening to the events published on that topic.

There is also the Audits screen where we can see the events consumed by the external products. There is a whole range of filters to narrow down the search to messages of interest.

**Figure 1-1    Architectural Diagram**
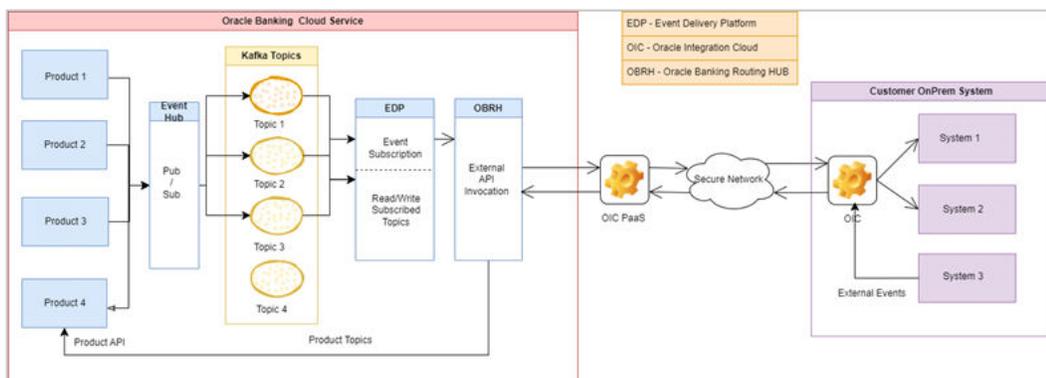
# 2

# Maintenance

This topic describes the systematic instructions to configure the events.

The products can be Internal or External. The internal products can publish the events. The external products can subscribe to the events published by the internal products.

The Maintenance screen displays the list of internal products added as a part of the Day 0 master script.

External Product can be added from the maintenance screen through the user interface provided. In additional, external products can also be imported. The option to export the external products is also provided to help moving the configurations from one environment to other.

Specify **User ID** and **Password**, and login to **Home** screen.

1. From **Home** screen, click **Event Delivery**. Under **Event Delivery**, click **Maintenance**.

   The **Maintenance** screen displays the products related to events publishing and subscriptions.

   **Figure 2-1    Maintenance**
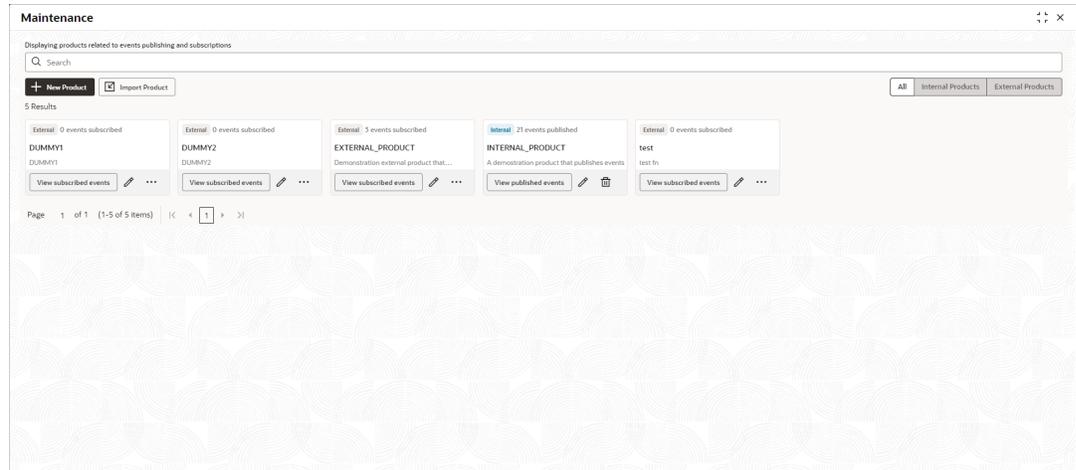
   

   For more information on fields, refer to the field description table.

   **Table 2-1    Maintenance - Field Description**

   | Field | Description |
   |---|---|
   | **Product Type** | Displays the type of the product.<br>The available options are:<br>• **Internal**<br>• **External** |

**Table 2-1    (Cont.) Maintenance - Field Description**

| Field | Description |
|---|---|
| **Event Subscribed in Number** | Displays the number of events subscribed for an external product. |
| **Event Published in Number** | Displays the number of events published for an internal product. |
| **Product Name** | Displays the name of the product. |
| **Product Description** | Displays the description about the product. |

2. Click **+ New Product** to add a new external product.

   The **New Product** overlays screen displays.

**Figure 2-2    New Product**
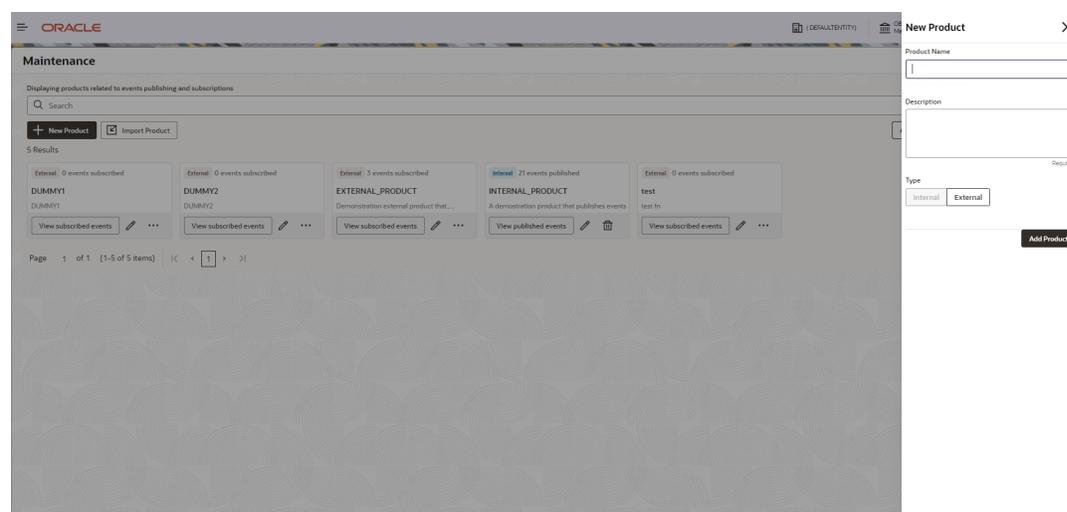


**Table 2-2    New Product - Field Description**

| Field | Description |
|---|---|
| **Product Name** | Specify the name of the new product. |
| **Description** | Specify the description of the new product |
| **Product Type** | Select the type of the product. <br> The available options are: <br> • **External** <br> • **Internal** (Disabled |

3. Click **Import Product** button to import a new product

4. Click on the **View Subscribed events** button to view the subscribed events for an external product.

5. click on the **View Published events** button to view the subscribed events for an internal product.

# 3

# Published Events screen

This topic describes the systematic instructions to publish the events.

The user can view all the events published by an internal product by clicking on it (The events here refer to the Topics in terms of Kafka). These events are added as a part of Day 0 master script.

> **✎ Note:**
>
> User can also add new event from the screen. Events can be of two types – String or Avro. In case of Avro events, you also need to add the Avro Schema file as well.

Specify **User ID** and **Password**, and login to **Home** screen.

1. From **Home** screen, click **Event Delivery**. Under **Event Delivery**, click **Maintenance**.

   The **Maintenance** screen displays the products related to events publishing and subscriptions.

   **Figure 3-1    Maintenance**
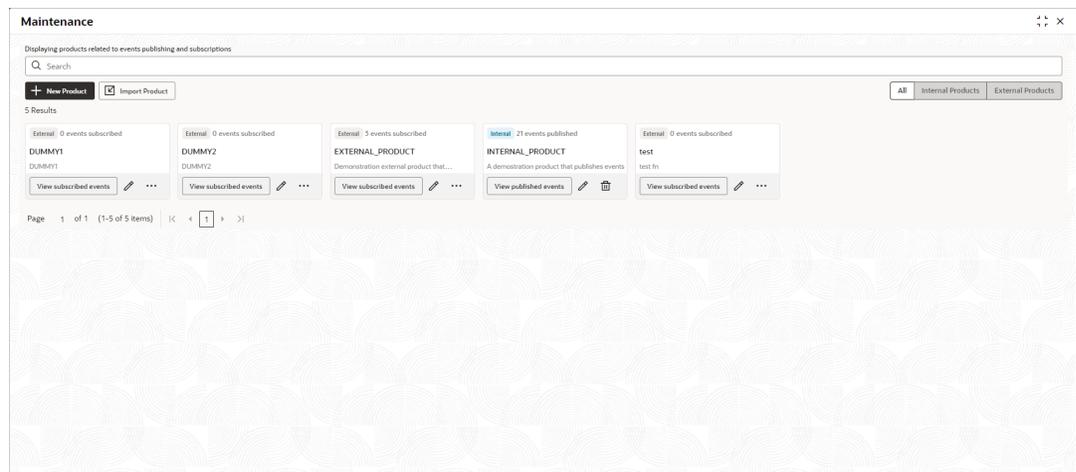
   

   For more information on fields, refer to the field description table.

**Table 3-1    Maintenance - Field Description**

| Field | Description |
|---|---|
| Product Type | Displays the type of the product.<br>The available options are:<br>• **Internal**<br>• **External** |
| Event Subscribed in Number | Displays the number of events subscribed for an external product. |
| Event Published in Number | Displays the number of events published for an internal product. |
| Product Name | Displays the name of the product. |
| Product Description | Displays the description about the product. |

2. Select the Internal Products tab located in the upper right corner of the screen to filter internal products. You can click on the desired internal product directly by paginating through the list of the products displayed.
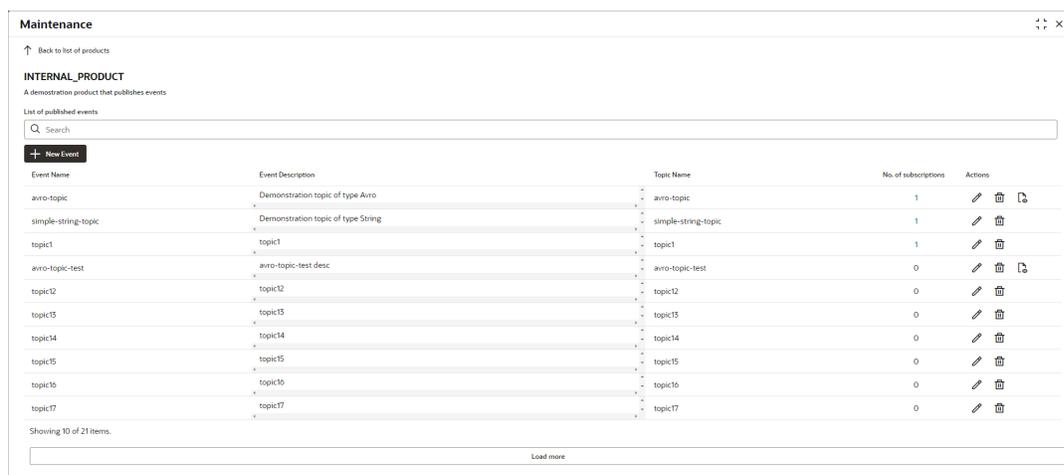
> **✎ Note:**
>
> This is not a mandatory step.

3. click on the **View Published Events** to view the subscribed events for an internal product.

The **View Published Events** screen displays.

**Figure 3-2    View Published Events**



For more information on fields, refer to the field description table.

**Table 3-2    View Published Events - Field Description**

| Field | Description |
|---|---|
| Product Name | Displays the name of the product. |
| Description | Displays the description of the product. |

**Table 3-2    (Cont.) View Published Events - Field Description**

| Field | Description |
|---|---|
| Event Name | Displays name of the event published under the selected internal product. |
| Event Description | Displays description of the event published under the selected internal product. |
| Topic Name | Displays name of the topic for the event published under the selected internal product. |
| No. of subscriptions | Displays the number of subscriptions already done for the selected published event. |

4. Perform the following actions for the events published.

   a. Click [pencil icon] icon to edit the event.

   b. Click [delete icon] icon to delete the event.

   c. Click [search icon] icon to search the existing events under the internal product.

   d. Click **No of Subscription** link to external products who have subscribed to the selected event.

# 4

# Subscribed Events Screen

This topic describes the systematic instructions to subscribe the events.

The user can view all the events subscribed by an external product by clicking on it. The user can also subscribe new event from this option.

While subscribing to a new Event, you need to map the Endpoints configured in OBRH. For that a Service Consumer named **EDP** is provided out of the box in 'OBRH' Day 0 script. You can go to the **OBRH** maintenance screen and your corresponding Service providers and Consumer Service. Once that is done, you can see the added Consumer Service as dropdown value in **Map Endpoints** screen of new subscription.

Once you subscribed, the **External Product** will start consuming all the messages published by the Publisher product on that event which you can check in the **Audit** screen.

Specify **User ID** and **Password**, and login to **Home** screen.

1. From **Home** screen, click **Event Delivery**. Under **Event Delivery**, click **Maintenance**.

   The **Maintenance** screen displays the products related to events publishing and subscriptions.

   **Figure 4-1    Maintenance**
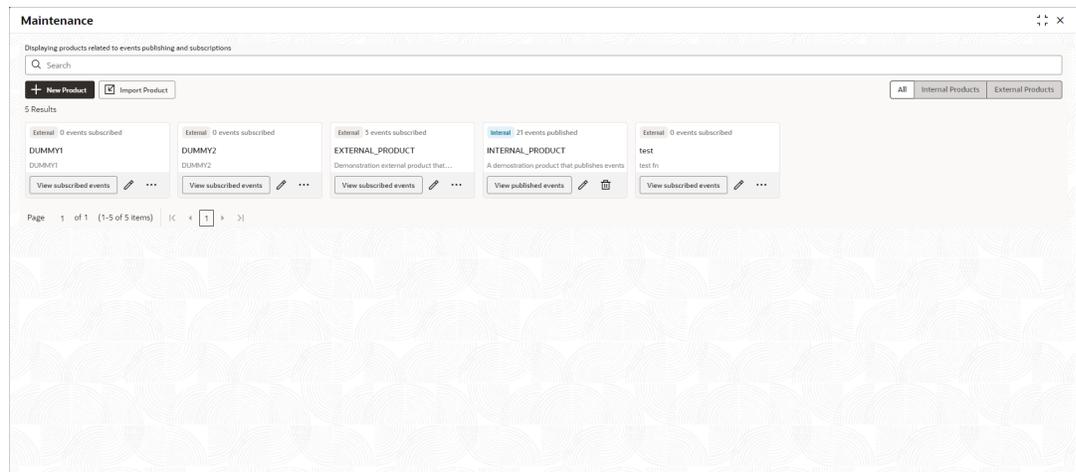
   

   For more information on fields, refer to the field description table.

**Table 4-1    Maintenance - Field Description**

| Field | Description |
|---|---|
| Product Type | Displays the type of the product.<br>The available options are:<br>• **Internal**<br>• **External** |
| Event Subscribed in Number | Displays the number of events subscribed for an external product. |
| Event Published in Number | Displays the number of events published for an internal product. |
| Product Name | Displays the name of the product. |
| Product Description | Displays the description about the product. |

2. Select the **External Products** tab located in the upper right corner of the screen.

   The list of all the external product cards appears.

3. click on the **View Subscribed Events** to view the subscribed events for an external product.

   The **View Subscribed Events** screen displays.

**Figure 4-2    View Subscribed Events**



For more information on fields, refer to the field description table.

**Table 4-2    View Subscribed Events - Field Description**

| Field | Description |
|---|---|
| Product Name | Displays the name of the product. |
| Description | Displays the description of the product. |
| Event Name | Displays name of the event published under the selected internal product. |
| Event Description | Displays description of the event published under the selected internal product. |

**Table 4-2    (Cont.) View Subscribed Events - Field Description**

| Field | Description |
|---|---|
| Service Consumer | Displays name of the service consumer for the selected subscribed event. |
| Consumer Service | Displays the consumer service details for the selected subscribed event. |

4.  Perform the following actions for the events published.

    a.  Click ✏️ icon to edit the event.

    b.  Click ⊗ icon to delete the event.

    c.  Click 🔍 icon to search the existing subscribed events under the external product.

# 4.1 Adding a new Subscription

This topic describes the systematic instructions to add a new subscription.

Specify **User ID** and **Password**, and login to **Home** screen.

1.  From **Home** screen, click **Event Delivery**. Under **Event Delivery**, click **Maintenance**.

2.  Click **+ New Subscription** to add a new subscription. The Maintenance screen with added subscription appears.

    The **Maintenance** screen displays the products related to events publishing and subscriptions.

**Figure 4-3    Maintenance**
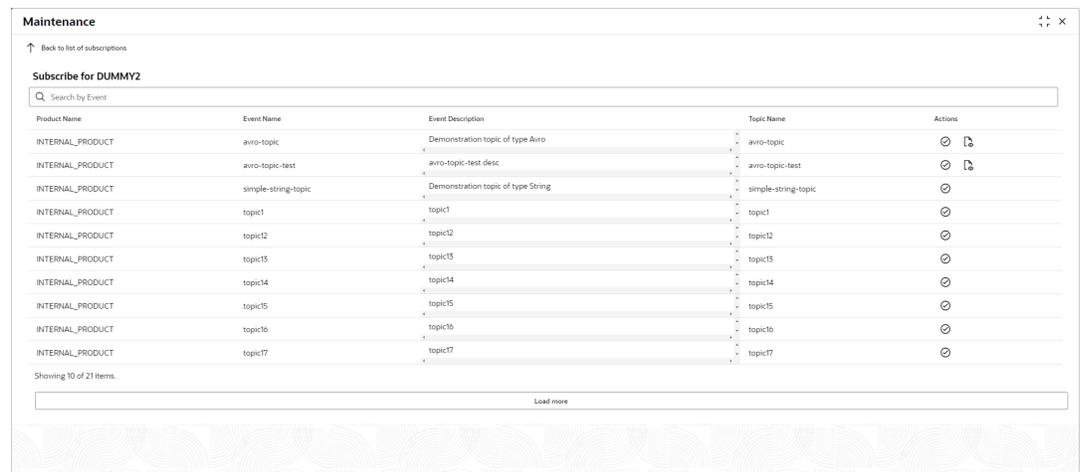


For more information on fields, refer to the field description table.

**Table 4-3    Maintenance - Field Description**

| Field | Description |
|---|---|
| Product Name | Displays the name of the product. |
| Event Name | Displays name of the event published under the selected internal product. |
| Event Description | Displays description of the event published under the selected internal product. |
| Topic Name | Displays name of the topic of the event subscribed under the selected external product. |

3. Perform the following actions for the events published.

   a. Click ✏ icon to edit the subscribed event.

   b. Click ⊗ icon to delete the subscribed event.

   c. Click

      🔍

      icon to search the existing subscribed events under the external product.

4. To map the Endpoints in **OBRH**, navigate to the **OBRH** maintenance screen, and add your corresponding Service providers and Consumer Service. The added Consumer Service is available in the 'Consumer Service' dropdown while setting up Map Endpoints screen of new subscription.

   ---
   ✎ **Note:**

   Refer to the **Routing Hub Configuration User Guide** to know more about the **Service Providers** and **Consumer Service**.
   ---

5. In the **New Subscription** screen, click on the icon to map the Endpoints in OBRH by subscribing to a new Event. The Map Endpoint overlay screen appears with the EDP is added as a Service Consumer.

   The **Map Endpoints** overlay screen appears.
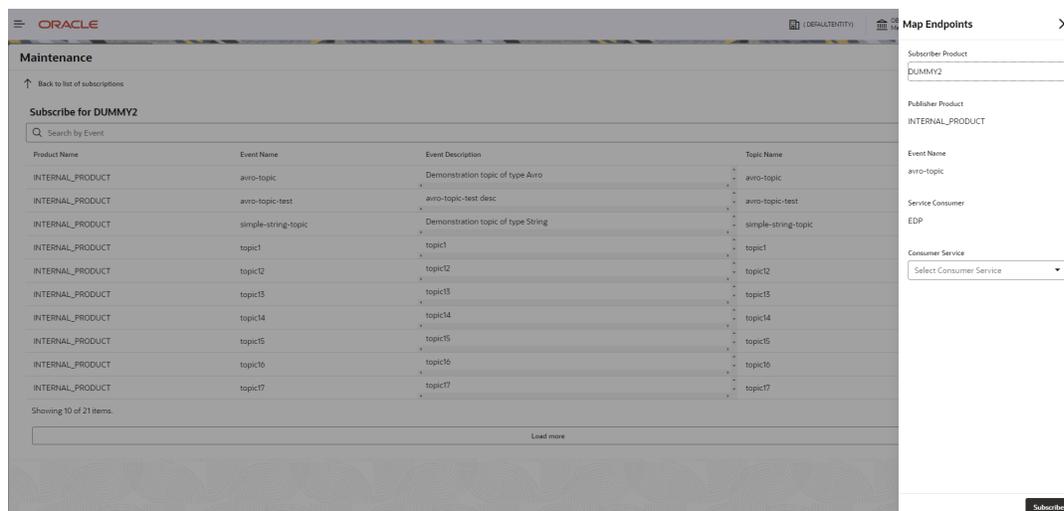
**Figure 4-4    Map Endpoints for Event Subscription**



**Table 4-4    Map Endpoints for Event Subscription - Field Description**

| Field | Description |
| --- | --- |
| **Subscriber Product Name** | Displays the name of the subscribed external product. |
| **Publisher Product Name** | Displays name of the publisher internal product. |
| **Event Name** | Displays name of the event under the product. |
| **Event Description** | Displays description of the event subscribed under the selected external product. |
| **Service Consumer** | Displays name of the service consumer. |
| **Consumer Service** | Select the consumer service as setup in the OBRH from the drop-down list. |

6. Click **Subscribe** to subscribe the event for external product.

   The success message of event subscribed appears.

# 5

# Audit screen

This topic describes the systematic instructions to audit events.

Specify **User ID** and **Password**, and login to **Home** screen.

1. From **Home** screen, click **Event Delivery**. Under **Event Delivery**, click **Audit**.

**To view the messages of the external products:**

2. Select the search criteria to filter out the messages.

   a. From the **Select Publisher** drop-down list, select the publisher product.

   b. From the **Select Published Event** drop-down list, select the published event for the product.

   c. From the **Select Subscriber** drop-down list, select the subscriber.

   > **Note:**
   >
   > Since there can be multiple subscribers to a single event, user can select All or any Subscriber.

   d. From the **Select Status** drop-down list, select the status of the event.

   e. From the **From Date and Time** date calendar, specify the start date and time.

   f. From the **To Date and Time** date calendar, specify the end date and time.

   g. From the **Select JSON Search Key** drop-down list. select the json key.

   > **Note:**
   >
   > This field appears, when the **Select Status** is selected as **Failure** or **Unsubscribed**.

   h. From the **Enter JSON Search Value**, specify the json search value.

3. Click **Search**, based on search criteria the search result appears.

   The **Audit Search with Filters** screen appears.

**Figure 5-1    Audit**

# A
# Functional Activity Codes

**Table A-1    List of Functional Activity Codes**

| Screen Name | Functional Activity Code | Action | Description |
|---|---|---|---|
| **AUDIT** | PLATO_FA_EDP_AUDIT | VIEW | Search audit logs API for the audit screen |
| **MAINTAINANCE** | PLATO_FA_EDP_EVENT_UPDATE_ACTIONS | UPDATE | Create/Update/Delete the Events details (Internal products) |
| **MAINTAINANCE** | PLATO_FA_EDP_EVENT_VIEW_GETALL | GET | View the Events published with subscriber count |
| **MAINTAINANCE** | PLATO_FA_EDP_EVENT_GETALL | GET | View Events published by Internal product |
| **MAINTAINANCE** | PLATO_FA_EDP_PRODUCT | VIEW | View Products (Internal/ External) |
| **MAINTAINANCE** | PLATO_FA_EDP_PRODUCT_EXPORT | EXPORT | Export Product in JSON format file |
| **MAINTAINANCE** | PLATO_FA_EDP_PRODUCT_GETALL | GET | View Products(Internal/ External) |
| **MAINTAINANCE** | PLATO_FA_EDP_PRODUCT_IMPORT | IMPORT | Import Product from JSON format file |
| **MAINTAINANCE** | PLATO_FA_EDP_PRODUCT_UPDATE_ACTIONS | UPDATE | Create/Update/Delete Product details such as description |
| **MAINTAINANCE** | PLATO_FA_EDP_SUBSCRIPTION_GETALL | GET | Get/Filter subscriptions for External Product |
| **MAINTAINANCE** | PLATO_FA_EDP_SUBSCRIPTION_SEARCH | SEARCH | Search subscriptions for External Product |
| **MAINTAINANCE** | PLATO_FA_EDP_SUBSCRIPTION_UPDATE_ACTIONS | UPDATE | Create/Update/Delete subscription for External Product |

# Index

## A

Adding a new Subscription, *4-3*
Audit screen, *5-1*

## M

Maintenance, *2-1*

## P

Published Events screen, *3-1*

## S

Subscribed Events screen, *4-1*