

Oracle® Financial Crime and Compliance Management Cloud Service

Using Data Transformation Pipelines



Release 26.08.01

G54371-03

August 2026

ORACLE®

G54371-03

Copyright © 2025, 2026, Oracle and/or its affiliates.

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>.

Oracle customer access to and use of Oracle support services will be pursuant to the terms and conditions specified in their Oracle order for the applicable services.

Contents

About This Content

1 About Data Transformation Platform

2 Getting Started with Data Transformation Pipelines

2.1	Downloading DTP Pipelines	1
2.2	Importing DTP Pipelines	2
2.3	Copying DTP Pipelines	2
2.4	Adding DTP Pipelines	3
2.5	Editing DTP Pipelines	4
2.5.1	Editing Pipeline Descriptions	5
2.6	Deleting DTP Pipelines	5
2.7	Widgets in Data Transformation Pipelines	6
2.7.1	Using the Calendar Widget	6
2.7.2	Using the Data Forge Widget	7
2.7.2.1	Creating Joins	9
2.7.2.2	Creating Filters	10
2.7.2.3	Creating Runtime Parameters	11
2.7.3	Using the Business Filter Widget	11
2.7.3.1	Adding New Business Filters	12
2.7.3.2	Creating Custom Filters	14
2.7.3.3	Creating Runtime Parameters	14
2.7.4	Using the Data Transformation Widget	15
2.7.4.1	Common Screen Elements in the Notebook	17
2.7.5	Using the Aggregator Widget	20
2.7.5.1	Adding and Editing Aggregators	21
2.7.5.2	Creating Custom Aggregators	22
2.7.5.3	Creating Runtime Parameters	22
2.7.5.4	Creating Aggregator Joins	23
2.7.6	Using the Evaluation Widget	24
2.7.7	Using the Create Event Widget	25
2.7.7.1	Configuring Bind IDs	26

2.7.8	Using the Additional Information Widget	27
2.7.8.1	Creating Joins	29
2.7.8.2	Creating Filters	30
2.7.8.3	Creating Runtime Parameters	31

3 Managing Data Pipelines

3.1	Widgets in Data Pipelines	1
3.1.1	Using the Persist Widget	1
3.1.1.1	Creating Joins	4
3.1.1.2	Creating Filters	5
3.1.1.3	Connecting Persist to Persist	6
3.1.1.4	Creating Runtime Parameters	7
3.1.2	Using the Data Forge Widget	7
3.1.2.1	Creating Joins	9
3.1.2.2	Creating Filters	10
3.1.2.3	Creating Runtime Parameters	11
3.1.3	Using the Data Transformation Widget	12
3.1.3.1	Common Screen Elements in the Notebook	13
3.1.4	Using External Service Widget	17
3.1.4.1	Adding an External Service Widget	17

4 About Scenario Pipelines

4.1	Pre-Configured DTP Scenario Pipelines	1
-----	---------------------------------------	---

5 Managing Threshold Sets

5.1	Accessing Threshold Sets	1
5.2	Creating a Threshold Set	1
5.3	Copying a Threshold Set	2
5.4	Editing Threshold Sets	3
5.5	Deleting Threshold Sets	4
5.6	About Threshold Simulator	4
5.6.1	View Simulator Conditions	4
5.6.2	Edit Simulator Conditions	4
5.6.3	Creating New Simulator Conditions	6
5.6.4	Running Existing Threshold Sets	6
5.6.5	Viewing Simulation Details	7
5.6.6	Running Alert Analyzer	8

6	Using Jobs	
6.1	Creating Jobs	1
6.2	Editing Jobs	2
6.3	Deleting Jobs	2
6.4	Viewing Execution Monitor	2
7	User Group and Roles Mapping	
8	Managing Batches	
8.1	Pre-Configured Batches	2
8.2	Purge Batch Details	3
9	Administrative Tasks	
9.1	Viewing Audit History	1
9.1.1	Accessing Audit History	1
9.1.2	Filtering Audit History	2
9.1.3	Exporting Audit History	3
9.2	Creating Focus Types	3
9.3	Creating Event Types	4
	Index	

Document Control

Use this section to view latest changes to the document.

Table Document Control

Revision Number	Revision Date	Change Log
1.0	August 2026	- Added Running Alert Analyzer section. - Added a new row (External Service) in Widgets in Data Pipeline table. - Added Connecting Persist to Persist section. - Added <i>Functions Required for Different Pipeline Types</i> sub section in User Group and Roles Mapping - A note is added in step-5 of Using the Data Transformation Widget section. - A note has been added in Managing Data Pipelines - Added Using External Service Widget section.

About This Content

Use this guide to understand how to use the Data Transformation Platform to quickly configure your scenarios to address changes in regulations, adapt to new product introduction, and counter more sophisticated money laundering techniques.

Audience

This guide is intended for users who are responsible for implementing the scenarios in line with the Risk analysis formulated by the compliance team and by Compliance Officers who need to understand the additional possibilities offered by scenarios based on data they are capturing, in order to make their AML program more effective and efficient. Oracle expects these users to be senior compliance officers, who have significant understanding of both their data, the specific behaviors of interest, and the logic required to generate meaningful alerts.

Documentation Accessibility

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

Access to Oracle Support

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

Related Resources

For more information, see [Oracle Financial Services Crime and Compliance Management Cloud Service Applications documentation](#).

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.
<i>italic</i>	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

About Data Transformation Platform

Data Transformation Pipelines enable organizations to quickly respond to changes in regulations, adapt to new product introduction, counter more sophisticated money laundering techniques in a quick and cost-effective manner by removing dependency on Oracle to develop the scenarios and extensions most appropriate to their business requirements.

Purpose

The purpose of the Data Transformation Platform is to provide Financial Institutions with full scenario configurability and extensibility, allowing them to quickly create scenario pipelines using complex logic, advanced configuration, leveraging extended data sources.

User Personas

This guide is intended for users who are responsible for implementing the scenarios in line with the Risk analysis formulated by the compliance team and by Compliance Officers who need to understand the additional possibilities offered by scenarios based on data they are capturing, in order to make their AML program more effective and efficient. Oracle expects these users to be senior compliance officers, who have significant understanding of their data, the specific behaviors of interest, and the logic required to generate meaningful alerts.

2

Getting Started with Data Transformation Pipelines

This section explains how to create, copy, and configure data transformation pipelines, and how to use the widgets available in the DTP Pipeline Designer.

To access the DTP Pipeline Designer, follow these steps:

1. In the Applications landing page, click the **Navigation Menu**  to access the Navigation List. The Navigation List displays the list of modules.
2. Expand **Business Processes** and then **Data Transformation Pipeline** in the Navigation List to view DTP menu options.
 - [DTP Pipeline Designer](#)
 - [DTP Threshold Manager](#)
 - [DTP Jobs](#)
 - [DTP Audit History](#)

To access Administrator functionalities, expand **Application Administration** and then [Data Transformation Pipeline Admin](#).

These features are described in this guide.

2.1 Downloading DTP Pipelines

The Download Pipelines feature enables you to download a version of an existing pipeline. The pipelines are saved in JSON format which can be imported into the application.

This is frequently used to download a pipeline from a non-production environment and then import the pipeline into a production environment.

1. Navigate to the DTP Pipeline Designer page.
2. Click the **Action** button  corresponding to the pipeline that you want to download.
3. Click **Download** .
4. Select **JSON**. The Download Pipeline pane displays.
5. Enter the version of the pipeline to download in the **Pipeline Version** field. You can only enter numerals here.

Note

This should be the same as the current version of the pipeline you are downloading.

6. Click **Download**.

7. Select a folder to save the pipeline.
8. Enter a file name, using the following naming convention: fileName . filenameformat : pipelineName_versionNumber.json
9. Click **Save**. The pipeline JSON is downloaded.

2.2 Importing DTP Pipelines

You can import a new JSON version of an existing Data Transformation pipeline. This is frequently done to import a pipeline from a non-production environment into a production environment.

Before importing a pipeline, you must first download the pipeline using the steps in [Downloading DTP Pipelines](#).

Note

You cannot import a pipeline that already exists in the environment. Before importing a pipeline, verify that this pipeline does not already exist in the environment. If so, [delete the pipeline](#) before importing the new version.

To import a pipeline, follow these steps:

1. Navigate to the DTP Pipeline Designer page.
2. Click **Import**. The Import pane opens.
3. Enter the required version of the pipeline to import in the **Version** field. You can also use the arrows to select the version number.

The Version number provided should be the same as that in the downloaded .JSON file.

4. Drag and Drop the .JSON file of the pipeline to import into the box. You can also click the **Drag and Drop** box to browse to the location of the .JSON file. The pipeline should have the following naming convention: fileName . filenameformat : pipelineName_versionNumber.json

Note

You can only import the .JSON file of a DTP pipeline.

5. Click **Import**. The pipeline is imported and added to the My Pipelines list.

2.3 Copying DTP Pipelines

You can copy an existing pre-configured or user-configured pipeline and then configure it to meet your specific business requirements. This reduces the effort of creating and configuring a new pipeline when you only need to modify a few components of the pipeline.

Pre-configured pipelines that are included out-of the box cannot be modified. In order to customize these pipelines, you must first create a copy of those pipelines and save it as a new pipeline. You can then configure the newly copied pipeline according to your requirements. To copy a pipeline, follow these steps.

1. Navigate to the DTP Pipeline Designer page.

- Click the **Action** button  corresponding to the pipeline that you want to copy.



- Click **Copy**. The Copy Pipeline pane displays.
- Provide the details as described in the following table.

Table 2-1 Fields for Copying Pipelines and their Descriptions

Field	Description
Name	Displays the name of the pipeline that you want to copy. You cannot modify this field.
Copy As	Enter the name for the new pipeline that you want to create by copying the existing pipeline. This field allows only the following characters: A-Z a-z 0-9 '-' For example, Abc-123 or Abc123.
Pipeline Focus	Displays the focus for the pipeline that you want to copy. This will be the focus for the new pipeline. You cannot modify this field.
Search Tags	Enter the keywords for the pipeline. These keywords can be used as search tags while searching for a pipeline. Search tags are also used to group pipelines of the same type. These search tags appear as filters in the dashboard.
Description	Enter the description for the pipeline.

- Click **Save**. The pipeline is copied with all widgets and values provided in the original pipeline.

You can now modify these components, if desired. See [Editing DTP Pipelines](#) for more information.

Note

When editing a pipeline, consider the impact your changes may have on subsequent widgets in the pipeline. For example, removing a mapped table or column in the Data Forge may impact how an existing Aggregator functions.

2.4 Adding DTP Pipelines

You can add a new pipeline.

To add a new pipeline, follow these steps:

- Navigate to the DTP Pipeline Designer page.
- Click **Add Pipeline**. The Add Pipeline pane opens.
- Provide the details as described in the following table.

Table 2-2 Fields for Creating Pipelines and their Descriptions

Field	Description
Name	Enter the name for the pipeline. This field allows only the following characters: A-Z a-z 0-9 '-' For example, Abc-123 or Abc123.
Pipeline Type	Select Data Transformation from the Pipeline Type drop-down list.
Focus	Select the Focus for your pipeline from the drop-down list. For more information about Focuses, see Creating Focus Types .
Add Search Tags	Enter the keywords for the pipeline. These keywords can be used as search tags while searching for a pipeline. Search tags are also used to group pipelines of the same type. These search tags appear as filters in the Pipeline page.
Description	Enter the description for the pipeline.

- Click **Create**. A new pipeline is created and displayed in the Pipeline page. You can perform the required configurations in the newly created pipeline using the Hamburger menu or by right-clicking on the canvas to view available widgets.

For more information about widgets available in DTP pipelines, see [Widgets in Data Transformation Pipelines](#).

- Click **Save** to save the pipeline.

2.5 Editing DTP Pipelines

You can configure user-defined pipelines to better address your business needs as requirements change.

Note

Pre-configured pipelines cannot be edited. You can only edit user-defined pipelines.

To edit pipelines, follow these steps:

- Navigate to the DTP Pipeline Designer page.
- Click the pipeline name of the pipeline you want to edit. The DTP Pipeline Designer displays the widgets used in this pipeline.
- Perform the required configurations using the Hamburger menu or by right-clicking on the canvas to view available widgets.

For more information about widgets available in DTP pipelines, see [Widgets in Data Transformation Pipelines](#).

Note

When editing a pipeline, consider the impact your changes may have on subsequent widgets in the pipeline. For example, removing a mapped table or column in the Data Forge may impact how an existing Aggregator functions.

4. Click **Save** to save the pipeline.

2.5.1 Editing Pipeline Descriptions

You can edit the description and search tags for user-created pipelines.

① Note

Pre-configured pipelines cannot be edited. You can only edit user-configure pipelines

To edit the description and search tags, follow these steps:

1. Navigate to the DTP Pipeline Designer page.
2. Click the Action button  corresponding to the pipeline that you want to copy.
3. Click **Edit** . The Edit Pipeline pane displays.
4. Modify the required details.

Table 2-3 Fields for Editing Pipelines and their Descriptions

Field	Description
Name	Displays the name of the pipeline that you want to edit. You cannot modify this field.
Pipeline Focus	Displays the focus for the pipeline that you want to edit. This will be the focus for the new pipeline. You cannot modify this field.
Search Tags	Add or remove keywords for the pipeline. These keywords can be used as search tags while searching for a pipeline. Search tags are also used to group pipelines of the same type. These search tags appear as filters in the dashboard.
Description	Edit the description for the pipeline.

5. Click **Save**.

2.6 Deleting DTP Pipelines

You can delete a pipeline, if required for your implementation.

To delete a pipeline, follow these steps:

1. Navigate to the DTP Pipeline Designer page.
2. Click the **Action** button  corresponding to the pipeline that you want to delete.
3. Click **Delete** corresponding to the pipeline that you want to delete. A dialog box opens.
4. Enter a comment explaining why you are deleting the pipeline.
5. Click **Delete**. The selected pipeline is deleted.

2.7 Widgets in Data Transformation Pipelines

Depending on the pipeline type, specific widgets are available in the widgets pane of the pipeline. This topic describes the widgets in Data Transformation pipelines.

The following table describes the widgets available in Data Transformation pipelines.

Table 2-4 Data Transformation Pipeline – Widgets and Descriptions

Widget	Name	Description
	Calendar	Use this widget to add a Calendar, which allows you to designate and configure the schedule the scenario pipeline should be run according to.
	Data Forge	Use this widget to select the source(s) (Tables) which form the dataset to be further used in the pipeline.
	Business Filter	Use this widget to filter the data in the pipeline to create a subset of the data records which are available by applying the business filters. This allows you to search and analyze behaviors of interest.
	Data Transformation	Use this widget to write complex expressions and transformation in Python.
	Aggregator	Use this widget to define aggregators using available aggregations in the widget.
	Evaluation	Use this widget to configure an evaluation. Evaluations are used to define conditions for the aggregations that are defined in the aggregator. Relevant data (aggregators) is compared against these conditions using logical comparisons to identify the early signals of increasing risk exposures in various areas of an enterprise, resulting in event generation.
	Create Event	Use this widget to produce an event. This widget accepts inputs from evaluation and generates events based on evaluated output data from the evaluation widget.
	Using the Additional Information Widget	Use this widget to provide specific types of information related to entities involved in an event, which can help investigators by displaying relevant information about the entities involved, offering a more comprehensive view of the event.

2.7.1 Using the Calendar Widget

The Calendar widget allows you to designate and configure the calendar for the scenario's look back and frequency periods.

Before adding or configuring a calendar, you must first have created the pipeline.

1. In the Pipeline Designer page, select the pipeline you want to add or modify the calendar for. The Pipeline Canvas displays.

2. Right-click on the Canvas to display the list of widgets. Select **Calendar** . The Calendar widget is added to the pipeline Canvas. You can drag and drop the widget within the Canvas as needed.
3. Click **Options**  then click **Edit** . The Calendar pane displays.
4. Provide the details as described in the following table.

Table 2-5 Fields for Creating Calendars and their Descriptions

Field	Description
Name	Enter the name for the calendar. This field allows only the following characters: A-Z a-z 0-9 ' _ ' For example, Abc_123 or Abc 123
Lookback Type	Select the Lookback Type used in this pipeline using the drop-down list. This is the range of days of data monitored in each run of the detection process. Options include Days or Months. This controls the unit in which both the lookback period and frequency period are expressed.
Days	Select either Calendar Days or Business Days from the drop-down list.
Weekdays	Select all the days which should be considered Week Days from the list.
Holiday Master	Select the applicable holidays which should be considered in this calendar. This section is populated by the data provided in the FCC_AM_HOLIDAY_MASTER table. For more about how this table is populated, see AMLHolidayMasterDataLoad Batch Details.

5. Click **Save**. A confirmation message displays.

2.7.2 Using the Data Forge Widget

The Data Forge widget allows you to select the source(s) (Tables) which form the dataset to be further used in the pipeline.

Before adding or configuring a Data Forge, you must first have created the pipeline.

1. In the Pipeline Designer page, select the pipeline where you want to add or modify the Data Forge. The Pipeline Canvas displays.
2. To add a Data Forge to a Calendar, click **Add To** , and then select **Data Forge** .
 - Alternately, you can right-click on the Canvas to display the list of widgets, select **Data Forge** and associate the Data Forge with the Calendar.
 - You can also use the hamburger menu on the left side to display the Node Picker, which lists any externalized data forges already created. Drag and drop the data forge to the pipeline as desired.
3. Click **Options**  then click **Edit** . The Data Forge pane displays.
4. Under **Basic Configuration**, provide the following details:

- a. Enter the **Name** for the Data Forge. This field allows only the following characters: A-Z a-z 0-9 ' _ ' For example, Abc_123 or Abc 123
- b. Select the **Type** from the drop-down list.
- c. The **Externalize** selector allows you to externalize this data forge so that it can be used in additional pipelines. To access all externalized data forges, click the hamburger menu on the left side to display the Node Picker, which lists any externalized data forges already created.
- d. Select one or more **Source Tables** using the drop-down list. Use the search bar in the list to find specific tables easily.

To remove a source table from the Data Forge, click **Remove**  beside the table name in the Source Tables field.

- e. The **Connected Data Forges** lists any data forges which are associated with this data forge.
- f. You can add a Runtime Parameter to the Data Forge by clicking **Add Run Time**

 **Run Time Parameter**

Parameter . For more information about how to create run time parameters, see [Creating Runtime Parameters](#).

5. The **Advanced Configuration** tab displays any Joins and Filters associated with this Data Forge.

Note

At least two sources (tables/dataforges) must be selected or connected for the join section to be enabled in the **Advance Configuration** tab.

- Expand **Joins** to view or create Joins associated with this Data Forge. The Output box provides a summary of all current Joins, with the Join configurations listed in detail below. You can add new Joins using the steps in [Creating Joins](#).
 - Expand **Filters** to view or create Filters associated with this Data Forge. The Output box provides a summary of all current Filters, with the Filter configurations listed in detail below. You can add new Filters using the steps in [Creating Filters](#).
6. Use the **Mapped Columns** tab to view and map columns within the Data Forge. To map additional columns, follow these steps:
 - a. In the Mapped Columns tab, select a Source Table/Dataforge from the drop-down list. The available columns in this table display.
 - b. Select a Column from the list. Use the search bar in the list to find specific tables easily.



- c. Click **Map**  to map the column. The column displays in the Mapped Columns list. You can edit the Mapped Column Name, if desired.



- d. Alternately, click **Add Expression**  to open the Expression Builder. The Expression Builder is used to define free flow text filter conditions. To use the Expression Builder, follow these steps:

- a. Select the required Dataset, Attribute and Runtime Parameters and operators. The resulting condition is displayed in the Condition field.

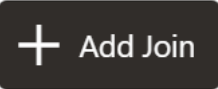


- b. Click **Save** to save the changes.

7. When you have finished configuring your Data Forge, click **Save**.

2.7.2.1 Creating Joins

Joins allow you to combine or group multiple tables using various join operators.



1. In the Advanced Configuration tab, click **Add Join**. A new Join row is added to the list.
2. Use the **Include** selector to indicate whether or not this Join should be included.
3. Select a **Join Operator** from the drop-down list.

The following types of join operators are available:

- **Inner Join:** The Inner Join selects all rows from both participating tables as long as there is a match between the columns.
 - **Left Join:** The Left Join returns all rows from the left table, with the matching rows in the right table.
 - **Right Join:** The Right Join returns all rows from the right table, with the matching rows in the left table.
 - **Full Join:** The Full Join combines the results of both the left and right outer joins and returns all rows from the tables on both sides
4. Add a Join condition to the Join table by following these steps. You can add multiple groups and multiple conditions under each group.



- a. Click **Add Group** and then **Add Condition**.
- b. Specify rules for the condition. You can define the conditions using one of the following:
 - **Expression Builder:** You can form conditions using all the operators given in the Expression Builder. The Expression Builder is used to define free flow text filter conditions. To define a filter condition using the Expression Builder, follow these steps:
 - i. Click **Exp**. The Expression Builder dialog box is displayed.
 - ii. Select the required Dataset, Attribute and Runtime Parameters and operators. The resulting condition is displayed in the Condition field.



- iii. Click **Save** to save the changes.

- **Tables:** You can define conditions using the various columns of tables. The columns of the two tables are compared with each other using the required operators. To define conditions using tables, follow these steps:

- i. Select a Table or Data Forge for the left-hand side from the drop-down list.
- ii. Select a Column for the left-hand side from the drop-down list.
- iii. Select an Operator from the drop-down list.
- iv. Select a Table or Data Forge for the right-hand side from the drop-down list.
- v. Select a Column for the right-hand side from the drop-down list.
- **Text:** You can define filter conditions using text. A particular column in a table is compared with the input text using the required operators. To define filter conditions using text, follow these steps:
 - i. Click **Text**.
 - ii. Select a Table or Data Forge for the left-hand side from the drop-down list.
 - iii. Select a Column for the left-hand side from the drop-down list.
 - iv. Select an Operator from the drop-down list.
 - v. Enter the text in the field on the right-hand side.

2.7.2.2 Creating Filters

You can configure a filter by defining various filter conditions.

1. In the Advanced Configuration tab, click **Add Group** . A new Filter Group row is added to the list.
2. Use the **Include** selector to indicate whether or not this Filter should be included.
3. Add a Filter condition by following these steps. You can add multiple groups and multiple conditions under each group.

- a. Click **Add Condition** .

- b. Specify rules for the condition. You can define the conditions using one of the following:
 - **Expression Builder:** You can form conditions using all the operators given in the Expression Builder. The Expression Builder is used to define free flow text filter conditions. To define a filter condition using the Expression Builder, follow these steps:
 - i. Click **Exp**. The Expression Builder dialog box is displayed.
 - ii. Select the required Dataset, Attribute and Runtime Parameters and operators. The resulting condition is displayed in the Condition field.

- iii. Click **Save**  to save the changes.

- **Tables:** You can define conditions using the various columns of tables. The columns of the two tables are compared with each other using the required operators. To define conditions using tables, follow these steps:
 - i. Select a Table or Data Forge for the left-hand side from the drop-down list.
 - ii. Select a Column for the left-hand side from the drop-down list.

- iii. Select an Operator from the drop-down list.
- iv. Select a Table or Data Forge for the right-hand side from the drop-down list.
- v. Select a Column for the right-hand side from the drop-down list.
- **Text:** You can define filter conditions using text. A particular column in a table is compared with the input text using the required operators. To define filter conditions using text, follow these steps:
 - i. Click **Text**.
 - ii. Select a Table or Data Forge for the left-hand side from the drop-down list.
 - iii. Select a Column for the left-hand side from the drop-down list.
 - iv. Select an Operator from the drop-down list.
 - v. Enter the text in the field on the right-hand side.

2.7.2.3 Creating Runtime Parameters

A Runtime parameter is a variable whose value can be defined and then called from within that same pipeline.

When you define a runtime parameter, you enter the default value to use. When you create or edit a job that includes a pipeline with runtime parameters, you can specify another value to override the default.

To create a runtime parameter, follow these steps:

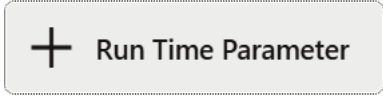
1. Click **Add Runtime Parameter** . The New Runtime Parameter dialog box displays.
2. Provide the details as described in the following table:

Table 2-6 Fields in New Runtime Parameter and their Descriptions

Field	Description
Name	Enter the name for the runtime parameter. Any spaces () given in the Name field will be replaced with underscore (_) while saving the runtime parameter.
Description	Enter the description for the runtime parameter.
Datatype	Select the datatype for the runtime parameter from the drop-down list.
Default Value	Provide the default values for the runtime parameter.

3. Click **OK**. The runtime parameter is created.

2.7.3 Using the Business Filter Widget

The Business Filter widget to filter the data in the pipeline to create a subset of the data records which are available by applying the business filters. This allows you to search and analyze behaviors of interest

Before adding or configuring a Business Filter, you must first have created the pipeline and added either a Data Forge or Data Transformation.

1. In the Pipeline Designer page, select the pipeline where you want to add or modify the Business Filter. The Pipeline Canvas displays.
2. To add a Business Filter to a Data Forge, click **Add To** , and then select **Business Filter** . Alternately, you can right-click on the Canvas to display the list of widgets, select **Business Filter** and associate the Business Filter with the Data Forge.

 Note

Business Filters must be associated with a Data Forge.

3. Click **Options**  then click **Edit** . The Business Filter pane displays.
4. Under **Basic Configuration**, provide the following details:
 - a. Enter the **Name** for the business filter. This field allows only the following characters: A-Z a-z 0-9 ' _ ' For example, Abc_123 or Abc 123
 - b. **Connected Sources** lists the name of the connected Data Forge or Data Transformation.
5. Click **List of Filters** to add a Business Filter which has already been created for columns in your data set. Use the selectors to select one or more filters as needed.

You can delete Business Filters from the List of Filters tab. Click **Delete** corresponding to the business filter that you want to delete. A dialog box opens. Click **Delete**.

The system verifies that this business filter is not in use by any pipeline. If this filter is enabled in any pipeline, an error message displays and the business filter can not be deleted. Otherwise, the selected filter is deleted.
6. The **Questionnaire** tab lists the mapped filters, which are the filters you selected in the previous step. Based on the Filter Type, you can further refine the filter.
 - a. For Include-Exclude types, use **Include** and **Exclude** to include or exclude one or more specific fields. For example, Include Retail Banking.
 - b. For Yes-No types, use **Yes** and **No** to choose whether to enable this filter.
 - c. For Filter types, use the drop-down lists to select the operators and code values. Select **Parameter** if you want to filter based on one or more specific fields.
 - d. Use **Add Filter** to add a new business filter to the List of Filters.. For more information about how to add a filter, see [Adding New Business Filters](#)
 - e. You can add additional conditions.
 - f. You can add a Runtime Parameter to the Business Filter by clicking **Add Run Time**

 **Run Time Parameter**

Parameter . For more information about how to create run time parameters, see [Creating Runtime Parameters](#).

7. Click **Save**. A confirmation message displays.

2.7.3.1 Adding New Business Filters

You can create new business filters as needed to meet your business requirements.

1. In the Business Filter pane, click **Add Filter**.
2. Provide the details as described in the following table.

Table 2-7 Fields for Creating Business Filters and their Descriptions

Field	Description
Name	Enter the Name for the business filter. This field allows only the following characters: A-Z a-z 0-9 ' _ ' For example, Abc_123 or Abc 123
Entities	Select which data set to create the filter from using the Entities drop-down list.
Attribute	Select the column on which you will be filtering the data from the Attribute drop-down list. All columns that were mapped in the Data Forge or Columns resulting from the connected Data Transformation widget will be displayed.
Filter Type	Select from the following options: • Include-Exclude: Use the Input Codes section to select the input which should be included or excluded. Use the Input Codes section to feed the inputs in the form of CODES and logical Names. (for example, IND-Individual). • Yes-No • Filter

3. Add the filter, using one of the following options. A confirmation message displays.
 - Click **Add** to add this Business Filter to the List of Filters.
 - Click **Add & Attach** to add this Business Filter to the List of Filters and attach it to the current data set.
4. When you have finished creating filter, click **Save**.

Note

Oracle recommends creating the following commonly used Business Filters in order to simplify future pipeline configuration.

Table 2-8 Common Business Filters

Business Filter	Purpose
Account Business Type	Indicates which types of functional areas in which the account does business should be included when detecting behaviors of interest.
Account Holder Type	Indicates which types of internal or external customers should be included when detecting behaviors of interest.
Transaction Type	Indicates which transaction types are included when detecting behaviors of interest.
Transaction Purpose	Indicates which transaction purposes should be included when detecting behaviors of interest.
Party Role	Indicates which party roles are included when detecting behaviors of interest.

2.7.3.2 Creating Custom Filters

The Custom Filter allows you to create business filters using the Expression Builder.

You can form filter conditions using all the operators given in the Expression Builder. The Expression Builder is used to define free flow text filter conditions. To define a filter condition using the Expression Builder, follow these steps:

1. In the Business Filter pane, click **Custom Filter**.
2. Select the required Dataset, Attribute, and operators to create the filter. The resulting condition is displayed in the **Condition Value** box.
3. Click **Save**  to create this filter
4. Create additional filters, as desired. When you have finished creating all the filters needed for this pipeline, click **Save** to save the changes.

2.7.3.3 Creating Runtime Parameters

A Runtime parameter is a variable whose value can be defined and then called from within that same pipeline.

When you define a runtime parameter, you enter the default value to use. When you create or edit a job that includes a pipeline with runtime parameters, you can specify another value to override the default.

To create a runtime parameter, follow these steps:



1. Click **Add Runtime Parameter** . The New Runtime Parameter dialog box displays.
2. Provide the details as described in the following table:

Table 2-9 Fields in New Runtime Parameter and their Descriptions

Field	Description
Name	Enter the name for the runtime parameter. Any spaces () given in the Name field will be replaced with underscore (_) while saving the runtime parameter.
Description	Enter the description for the runtime parameter.
Datatype	Select the datatype for the runtime parameter from the drop-down list.
Default Value	Provide the default values for the runtime parameter.

3. Click **OK**. The runtime parameter is created.

2.7.4 Using the Data Transformation Widget

The Data Transformation widget allows you to write and import complex expression and transformation in Python and Java.

To use this widget effectively, you must have a working knowledge of scripting and Java or Python.

1. Create a pipeline, as shown in [Adding DTP Pipelines](#).
2. Add a Data Transformation widget to the pipeline by right-clicking the Canvas to display

the list of widgets and selecting **Data Transformation**  .

The Data Transformation widget can be stand-alone or associated with another widget, such as Business Filter, Evaluation, or Aggregator.

3. Click **Options**  then click **Edit**  . The Data Transformation pane displays.
4. In Basic Configuration, provide the following details:
 - a. Enter a **Name** for this Data Transformation.
 - b. Select a **Runtime Parameter** from the drop-down list. To add a new Runtime Parameter, see [Creating Runtime Parameters](#).
 - c. For Data Transformations associated with another widget, map the columns in **Column Definition** using **Add Columns**. The **View Input Table Columns** shows which columns were mapped in the connected Data Forge.
5. The **Define Transformation** tab displays the script options.
 - **Standard**
 - a. Select the **Type** from the drop-down list.
 - b. Select the **Transform** from the drop-down list.

- c. Select **Interpreters** from the drop-down list. Python allows you call a custom python script.
 - i. In the **Script** section, provide a description.
 - ii. Enter or paste the python script you want to execute.

Note

If this is a script you intend to reuse, you can create a template by clicking **Templates**, then **Add**. Enter the pertinent details about the script, enter or paste the script into the box, and click **Save**. Existing templates can be modified by clicking **Edit**. Editing a template updates the script in every pipeline which uses this template.

To use an existing template, select **Use Template** and select the desired template from the **Script** drop-down list.

- iii. Click **Save**.
- Selecting **Custom** allows you to create a notebook. Notebooks allow you to add and run paragraphs, invalidate session, edit, add, export the notebook, and so on. To understand the icons which display in the Notebook, see [Common Screen Elements](#).
- a. Click **Add Python Paragraph** to add a paragraph in the notebook and fetch the runtime parameters. This is available for all the interpreters.

Note

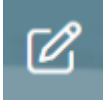
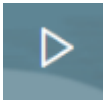
Use the default paragraph template as provided. Do not delete or replace it with a custom paragraph, as this may cause execution to fail.

- b. Add paragraphs to the Notebook as desired.
 - c. Click **Play** to run the script and display the label.
6. You can import an existing notebook by selecting **Import Notebook**.
- Click **Import Archive File** to select the .dsnb file from the file selector dialog and select a file. Click **Open**.
 - OR
 - Drag and drop the file into the **Import Archive File** field.

2.7.4.1 Common Screen Elements in the Notebook

This topic describes common screen elements in the notebook that can be used to perform quick actions when preparing and executing the notebooks.

Elements in the Notebook

Icon Name	Action/Description
Modify Notebook 	Modifies the details of a notebook, such as a name, description, and (or) tags.
Hide Code 	Hides or shows the Code Section in all the paragraphs in a notebook.
Hide Result 	Hides or shows the Results Section in all the paragraphs in a notebook.
Re-initialize session 	Re-initialize the paragraph in a notebook. Note: By default, the Start Widget gets executed automatically on clicking the Re-initialize icon. All other paragraphs need to be executed manually.
Read-Only 	Sets the notebook to read-only mode. Note: The notebook is protected from edit, clear result, delete, share, reset session, and run paragraphs in Read-only mode.
Write 	Set the notebook to write mode.
Run Paragraphs 	Executes all the paragraphs in a notebook in sequential order.

Icon Name	Action/Description
Invalidate Session 	Resets any connection or code executed in a notebook.
Delete Notebook 	To delete the selected notebook.
Clear Result 	Clears results for all the paragraphs in a notebook. Note: This action clears all the results. You must rerun the paragraphs to view the results.
Clear Paragraph Dependencies 	Remove all defined paragraph dependencies.
Open as an iframe 	Opens a notebook in an Iframe. This allows a notebook to be embedded inside another webpage.
Share Notebook 	Share the notebook with another user, user group, or role.
Clone Notebook 	Creates a copy of a notebook. All paragraphs in the current notebook are replicated in the new notebook. The cloned notebook is created with the default name, Copy of <Current Notebook Name>.
Export Notebook 	Export the notebook to your computer as a DNSB file.

Icon Name	Action/Description
Print Notebook 	To print a notebook in the PDF format and save it in your local machine.
Default Template 	To apply the overall look and feel of the notebook using the default template.
Layout 	Sets the preferred layout. The available layouts are Zeppelin and Jupyter.
Default Template 	Applies the overall look and feel of the notebook using the default template.
Show Panel 	Shows or hides the Paragraph Settings Bar Commands, Results Toolbar, and Settings Dialog for a selected paragraph in a panel to the notebook's right.
Attach Credentials 	You can use this option to attach credentials (wallet and password) to the notebook to enable secure data access.
Versioning 	You can use this option to create versions for your notebook, which helps you analyze the changes based on the version control.
Run Paragraph 	To execute the code or query in a paragraph.

Icon Name	Action/Description
Enter Dependency Mode 	To add or remove dependent paragraphs. Paragraphs with dependent paragraphs are executed in the dependency order.
Comments 	To add comments to a paragraph.
Expand 	To expand a paragraph and view the paragraph in full-screen mode.
Show/Hide Line Numbers 	To show or hide line numbers in the code in a paragraph. Note: This button is applicable only to the code section.
Visibility 	To manage the visibility settings in a paragraph. It controls how a paragraph may be viewed by the author and other users who have access to the notebook.
Settings 	Users can perform the following actions: • Resize the width of a paragraph • Change the order of placement of the paragraphs by moving them up or down • Run the all above or all below paragraph from the selected paragraph. • Clear the paragraph result • Open the notebook in Embedded window • Disable the run action • Clone the paragraph • Delete a paragraph

2.7.5 Using the Aggregator Widget

Relevant data is compared against aggregators to identify the early signals of increasing risk exposures in various areas of an enterprise.

Before adding or configuring an Aggregator, you must first have created the pipeline, data forge, and business filter.

1. In the Pipeline Designer page, select the pipeline where you want to add or modify the Aggregator. The Pipeline Canvas displays.
2. To add an Aggregator to a Business Filter, click **Add To** , and then select **Aggregator**.
 Alternately, you can right-click on the Canvas to display the list of widgets, select **Aggregator** and associate the Aggregator with the Business Filter.
 An aggregator can be associated to another aggregator, if desired, to further refine the aggregated data. The fields will be populated only by data provided in the parent aggregator. When two aggregators are linked to another aggregator a new tab, **Aggregator Joins**, displays. For information on how to create aggregator joins, see [Creating Aggregator Joins](#).
3. Click **Options**  then click **Edit** . The Aggregator pane displays.
4. Under **Basic Configuration**, enter the **Name** for the aggregator. This field allows only the following characters: A-Z a-z 0-9 ' _ ' For example, Abc_123 or Abc 123s:
5. Click **List of Aggregators** to add an Aggregator which has already been created in your data set. Use the selectors to select one or more filters as needed. Use **View** to view the Aggregator Details.
6. The **Aggregators** tab lists the mapped aggregators, which are the aggregators you selected in the previous step. Click **Edit** to further define the aggregator.
 - Clicking **Edit** on a standard aggregator displays the add/edit aggregator tab, and the aggregator can be edited.
 - Clicking **Edit** on a custom aggregator opens the **Custom Aggregator**, which allows you to form aggregator conditions using all the operators given in the Expression Builder. The Expression Builder is used to define free flow text conditions. To define a condition using the Expression Builder, see [Creating Custom Aggregators](#).
7. Click **Save**. A confirmation message displays.

2.7.5.1 Adding and Editing Aggregators

You can create new aggregators or edit existing aggregators as needed to meet your business requirements.

1. Select the **Aggregator** from the drop-down list. This list contains the types of aggregation which are available for this Business Filter, such as Sum, Count or Average Monthly.
2. Enter a **Group By** clause. This allows you to group aggregators by the specified attribute across the pipeline. Grouping by a certain attribute will be applied to all aggregators used in the pipeline.
3. Select the **Attribute** from the drop-down list. This list contains the data forge tables and mapped columns.
4. Select the required **Look Back** option and provide the required Value details. You can further configure the Look Back period for the aggregator when building the expression.
5. Select the **Filter Attribute**.
6. Select the **Filter Operator**.
7. Select the required **Filter Value** option and provide the required details.
8. Add the aggregator using one of the following options. A confirmation message displays.
 - Click **Add** to add this aggregator to the List of Aggregators.

- Click **Add & Attach** to add this aggregator to the List of Aggregators and attach it to the current data set.
9. When you have finished creating aggregators, click **Save**.

2.7.5.2 Creating Custom Aggregators

The Custom Aggregator option allows you to create aggregators using the Expression Builder.

You can form aggregator conditions using all the operators given in the Expression Builder. The Expression Builder is used to define free flow text aggregator conditions. To define an aggregator condition using the Expression Builder, follow these steps:

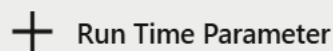
1. In the Aggregator pane, click **Custom Aggregator**.
2. Enter the **Name** for the Aggregator. This field allows only the following characters: A-Z a-z 0-9 ' _ ' For example, Abc_123 or Abc 123.
3. Select the required Attributes and Operators to create the Aggregator. The resulting condition is displayed in the **Condition Value** box.
4. Select the required **Look Back** option and provide the required Value details. You can further configure the Look Back period for the aggregator when building the expression.
5. Add the aggregator using one of the following options. A confirmation message displays.
 - Click **Add** to add this aggregator to the List of Aggregators.
 - Click **Add & Attach** to add this aggregator to the List of Aggregators and attach it to the current data set.
6. When you have finished creating aggregators, click **Save**.

2.7.5.3 Creating Runtime Parameters

A Runtime parameter is a variable whose value can be defined and then called from within that same pipeline.

When you define a runtime parameter, you enter the default value to use. When you create or edit a job that includes a pipeline with runtime parameters, you can specify another value to override the default.

To create a runtime parameter, follow these steps:



1. Click **Add Runtime Parameter** . The New Runtime Parameter dialog box displays.
2. Provide the details as described in the following table:

Table 2-10 Fields in New Runtime Parameter and their Descriptions

Field	Description
Name	Enter the name for the runtime parameter. Any spaces () given in the Name field will be replaced with underscore (_) while saving the runtime parameter.
Description	Enter the description for the runtime parameter.
Datatype	Select the datatype for the runtime parameter from the drop-down list.

Table 2-10 (Cont.) Fields in New Runtime Parameter and their Descriptions

Field	Description
Default Value	Provide the default values for the runtime parameter.

3. Click **OK**. The runtime parameter is created.

2.7.5.4 Creating Aggregator Joins

When two aggregators are linked to another aggregator you should create Aggregator Joins.

This tab will only display when two parent aggregators are associated with a child aggregator.



1. In the Aggregator Joins tab of the Aggregator pane, click **Add Join**. A new Join row is added to the list.
2. Use the **Include** selector to indicate whether or not this Join should be included in this aggregator.
3. Select a **Join Operator** from the drop-down list.

The following types of join operators are available:

- **Inner Join:** The Inner Join selects all rows from both participating tables as long as there is a match between the columns.
 - **Left Join:** The Left Join returns all rows from the left table, with the matching rows in the right table.
 - **Right Join:** The Right Join returns all rows from the right table, with the matching rows in the left table.
 - **Full Join:** The Full Join combines the results of both the left and right outer joins and returns all rows from the tables on both sides
4. Add a Join condition to the Join table by following these steps. You can add multiple groups and multiple conditions under each group.



- a. Click **Add Group** and then **Add Condition**.
- b. Specify rules for the condition. You can define the conditions using one of the following:
 - **Expression Builder:** You can form conditions using all the operators given in the Expression Builder. The Expression Builder is used to define free flow text filter conditions. To define a filter condition using the Expression Builder, follow these steps:
 - i. Click **Exp**. The Expression Builder dialog box is displayed.
 - ii. Select the required Dataset, Attribute and Runtime Parameters and operators. The resulting condition is displayed in the Condition field.



- iii. Click **Save** to save the changes.

- **Tables:** You can define conditions using the various columns of tables. The columns of the two tables are compared with each other using the required operators. To define conditions using tables, follow these steps:
 - i. Select a Table or Data Forge for the left-hand side from the drop-down list.
 - ii. Select a Column for the left-hand side from the drop-down list.
 - iii. Select an Operator from the drop-down list.
 - iv. Select a Table or Data Forge for the right-hand side from the drop-down list.
 - v. Select a Column for the right-hand side from the drop-down list.
- **Text:** You can define filter conditions using text. A particular column in a table is compared with the input text using the required operators. To define filter conditions using text, follow these steps:
 - i. Click **Text**.
 - ii. Select a Table or Data Forge for the left-hand side from the drop-down list.
 - iii. Select a Column for the left-hand side from the drop-down list.
 - iv. Select an Operator from the drop-down list.
 - v. Enter the text in the field on the right-hand side.

2.7.6 Using the Evaluation Widget

Evaluations are used to define conditions for the measures that are defined in the aggregator. Evaluations perform logical comparisons against these conditions to generate events.

Before adding or configuring an Evaluation, you must first have created the pipeline, data forge, business filter, and aggregator.

1. In the Pipeline Designer page, select the pipeline where you want to add or modify the Evaluation. The Pipeline Canvas displays.
2. To add an Evaluation to an Aggregator, click **Add To** , and then select **Evaluation** . Alternately, you can right-click on the Canvas to display the list of widgets, select **Evaluation** and associate the Evaluation with the Aggregator.
3. Click **Options**  then click **Edit** . The Evaluation pane displays.
4. Under **Basic Configuration**, enter the **Name** for the Evaluation. This field allows only the following characters: A-Z a-z 0-9 ' _ ' For example, Abc_123 or Abc 123s:
5. The **Advanced Configuration** tab displays the detection logic and event generation criteria. Event generation criteria are shown in formula-style expressions in the Output box.
6. You can add multiple groups and multiple conditions under each group. Add conditions to the Group by clicking **Add Group** and then **Add Condition** .
7. Select the required Aggregator, operators, and conditions to build the evaluation. You can define the evaluation conditions using one of the following:
 - **Expression Builder:** You can form filter conditions using all the operators given in the Expression Builder. The Expression Builder is used to define free flow text conditions. To define a condition using the Expression Builder, follow these steps:

- a. Click **Exp**. The Expression Builder dialog box is displayed.
 - b. Select the required Attribute and Runtime Parameters and operators. The resulting condition is displayed in the Condition Value field.
 - c. Click **Save** to save the changes.
- Text: You can define filter conditions using text. A particular column in a table is compared with the input text using the required operators. To define filter conditions using text, follow these steps:
 - a. Click **Text**.
 - b. Select an aggregator and operator, and then enter the text in the field on the right-hand side.
 - c. Click **Save** to save the changes.
8. Use the Include selector to choose whether to include the condition group in this Evaluation.
9. Click **Save**. A confirmation message displays.

2.7.7 Using the Create Event Widget

This widget accepts inputs from evaluation and generates events based on evaluated output data from the evaluation widget

In Scenario Pipelines, the Create Event widget is the final part of the pipeline and is used to produce an event. An event is a record of one or more pattern matches in a detection run, which is a signal for further investigation.

The Create Event widget can only be attached to an Evaluation widget. Multiple Evaluation widgets can be connected to one Create Event widget.

To create an event, follow these steps:

1. In the Pipeline Designer page, select the pipeline where you want to add or modify the Create Event widget. The Pipeline Canvas displays.
2. To add Create Event to an Evaluation, click **Add To** , and then select **Create Event** . Alternately, you can right-click on the Canvas to display the list of widgets, select **Create Event** and associate the Create Event widget with the Evaluation.
3. Click **Options**  then click **Edit** . The Create Event pane displays.
4. Under **Basic Configuration**, select the **Event Type** from the drop-down list.

You can add additional Event Types, using the steps in [Creating Event Types](#).

You must define the Focus associated with events generated from this widget.

- Select the required **Data Forge** from the drop-down list. The values which display are based on the tables you mapped in the Data Forge widget.
- Select the required **Focus Column** from the drop-down list. The values which display are based on the columns you mapped in the Data Forge widget.

Note

You can only select one value in each drop-down list. The column selected should be a column which is unique to the table.

- Use the **Bind IDs Configuration** tab to choose which types of information you want to display in the generated events. For more information about this tab, see [Configuring Bind IDs](#).
5. Click **List of Highlights** to add Highlights which have already been created in your data set. This tab displays all relevant highlights from the aggregator. Use the selectors to select one or more highlights as needed.
 6. The **Highlights** tab displays any Highlights associated with this pipeline.
Highlights include the most salient facts associated with a match or alert, and are intended to aid with the understanding and possible disposition of an event. This tab includes the following details:
 - Highlight Name: This name will remain constant across the application.
 - New Highlight Name: A unique name for the highlight which will be used in the UI. This name can be changed as needed to meet your business requirements.
 - Column : The name of the column used to aggregate the highlight.You can add a new highlight by clicking **Add**, and following these steps:
 - a. Select the **Attribute** from the drop-down list.
 - b. Enter a **Name** for this highlight.
 - c. Click **Save**.
 7. The **Bind IDs Configuration** tab displays the tables and columns which you have mapped in the Data Forge widget. Use the selector to choose the Bind IDs you are associating with the Focus of the events generated by this widget.
 8. When you have finished configuring the Create Event widget, click **Save**.

2.7.7.1 Configuring Bind IDs

Bind IDs are used to define the focal entity by selecting the data on which the analysis is centered.

These bindings determine the types of information which display in the generated events. To configure Bind IDs, follow these steps:

1. Click to open the **Bind IDs Configuration** tab in the Create Event pane of the Create Event widget. The Bind IDs Configuration tab displays all tables and columns which were mapped in the data forge for this pipeline.
2. Use the Bind ID selector to choose which types of information you want to display in the generated events. For example, to display Customer information in your events, select the **Customer Internal ID** column from the Customer Dimension table as your Bind ID.

Note

Bind IDs selected should be a column which is unique to the table.

The following table provides examples of some commonly selected Bind IDs.

Table 2-11 Bind ID Examples

Focal Entity	Table Name	Column Name
Account	Account Dimension	Account Internal Identifier
Customer	Customer Dimension	Customer Internal Identifier
Transaction	Transactions	Transaction Internal ID
Account Profile	Account Summary	

3. Click **Save**.

2.7.8 Using the Additional Information Widget

The Additional Information widget allows you to provide additional context not considered by the scenario that will aid in investigating events generated by the Create Event widget in DTP scenario pipelines.

Oracle FCCM clients provide many types of data in Business tables which may not be required for a particular scenario pipeline to successfully generate an event. This information can provide essential context which will assist investigators as they disposition the events and cases. By adding one or more Additional Information widget, you can include this information in the event, so that it is available for compliance officers and investigators to consider.

The Additional Information widget can only be attached to a Create Event widget. Multiple Additional Information widgets can be connected to one Create Event widget.

To add an Additional Information widget, follow these steps:

1. In the Pipeline Designer page, select the pipeline where you want to add or modify the Additional Information widget. The Pipeline Canvas displays.
2. To add Additional Information to a Create Event widget, click **Add To**, and then select **Additional Information**.

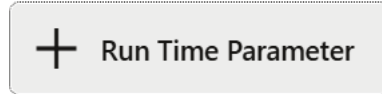
Alternately, you can right-click on the Canvas to display the list of widgets, select **Additional Information** and associate the widget with the Create Event widget.

3. Click **Options** then click **Edit**. The Additional Information pane displays.
4. Under **Basic Configuration**, provide the following details:
 - a. Enter the **Name** for the Additional Information widget. This field allows only the following characters: A-Z a-z 0-9 ' _ ' For example, Abc_123 or Abc 123
 - b. Select the **Source Entity Type** from the drop-down list.
 - c. Select the **Target Entity Type** such as Customer, External Entity, Account Summary, and so on, from the drop-down list.
 - d. Select one or more **Source Tables** using the drop-down list. Use the search bar in the list to find specific tables easily.

The values which display in the Source Tables box are based on the tables you mapped in the Data Forge widget.

To remove a source table, click **Remove**  beside the table name in the Source Tables field.

- e. You can add a Runtime Parameter by clicking **Add Run Time Parameter**



. For more information about how to create run time parameters, see [Creating Runtime Parameters](#).

5. The **Advanced Configuration** tab displays any Joins and Filters associated with this widget

Note

At least two sources (tables/data forges) must be selected or connected for the join section to be enabled in the **Advance Configuration** tab.

- Expand **Joins** to view or create Joins associated with this widget. The Output box provides a summary of all current Joins, with the Join configurations listed in detail below. You can add new Joins using the steps in [Creating Joins](#).
 - Expand **Filters** to view or create Filters associated with this widget. The Output box provides a summary of all current Filters, with the Filter configurations listed in detail below. You can add new Filters using the steps in [Creating Filters](#).
6. Use the **Mapped Columns** tab to view and map columns within the widget. To map additional columns, follow these steps:

Note

Mapped columns must be relevant from both the Source and Target tables.

- a. In the Mapped Columns tab, select a Source Table/Data forge from the drop-down list. The available columns in this table display.
- b. Select a Column from the list. Use the search bar in the list to find specific tables easily.



- c. Click **Map** to map the column. The column displays in the Mapped Columns list. You can edit the Mapped Column Name, if desired.



- d. Alternately, click **Add Expression** to open the Expression Builder. The Expression Builder is used to define free flow text filter conditions. To use the Expression Builder, follow these steps:

- a. Select the required Dataset, Attribute and Runtime Parameters and operators. The resulting condition is displayed in the Condition field.



- b. Click **Save** to save the changes.

7. When you have finished configuring your widget, click **Save**

2.7.8.1 Creating Joins

Joins allow you to combine or group multiple tables using various join operators.



1. In the Advanced Configuration tab, click **Add Join**. A new Join row is added to the list.
2. Use the **Include** selector to indicate whether or not this Join should be included.
3. Select a **Join Operator** from the drop-down list.

The following types of join operators are available:

- **Inner Join:** The Inner Join selects all rows from both participating tables as long as there is a match between the columns.
 - **Left Join:** The Left Join returns all rows from the left table, with the matching rows in the right table.
 - **Right Join:** The Right Join returns all rows from the right table, with the matching rows in the left table.
 - **Full Join:** The Full Join combines the results of both the left and right outer joins and returns all rows from the tables on both sides
4. Add a Join condition to the Join table by following these steps. You can add multiple groups and multiple conditions under each group.



- a. Click **Add Group** and then **Add Condition**.
- b. Specify rules for the condition. You can define the conditions using one of the following:
 - **Expression Builder:** You can form conditions using all the operators given in the Expression Builder. The Expression Builder is used to define free flow text filter conditions. To define a filter condition using the Expression Builder, follow these steps:
 - i. Click **Exp.** The Expression Builder dialog box is displayed.
 - ii. Select the required Dataset, Attribute and Runtime Parameters and operators. The resulting condition is displayed in the Condition field.



- iii. Click **Save** to save the changes.
- **Tables:** You can define conditions using the various columns of tables. The columns of the two tables are compared with each other using the required operators. To define conditions using tables, follow these steps:
 - i. Select a Table or Data Forge for the left-hand side from the drop-down list.
 - ii. Select a Column for the left-hand side from the drop-down list.
 - iii. Select an Operator from the drop-down list.
 - iv. Select a Table or Data Forge for the right-hand side from the drop-down list.
 - v. Select a Column for the right-hand side from the drop-down list.

- **Text:** You can define filter conditions using text. A particular column in a table is compared with the input text using the required operators. To define filter conditions using text, follow these steps:
 - i. Click **Text**.
 - ii. Select a Table or Data Forge for the left-hand side from the drop-down list.
 - iii. Select a Column for the left-hand side from the drop-down list.
 - iv. Select an Operator from the drop-down list.
 - v. Enter the text in the field on the right-hand side.

2.7.8.2 Creating Filters

You can configure a filter by defining various filter conditions.

1. In the Advanced Configuration tab, click **Add Group** . A new Filter Group row is added to the list.
2. Use the **Include** selector to indicate whether or not this Filter should be included.
3. Add a Filter condition by following these steps. You can add multiple groups and multiple conditions under each group.

- a. Click **Add Condition** .

- b. Specify rules for the condition. You can define the conditions using one of the following:

- **Expression Builder:** You can form conditions using all the operators given in the Expression Builder. The Expression Builder is used to define free flow text filter conditions. To define a filter condition using the Expression Builder, follow these steps:
 - i. Click **Exp**. The Expression Builder dialog box is displayed.
 - ii. Select the required Dataset, Attribute and Runtime Parameters and operators. The resulting condition is displayed in the Condition field.

- iii. Click **Save**  to save the changes.

- **Tables:** You can define conditions using the various columns of tables. The columns of the two tables are compared with each other using the required operators. To define conditions using tables, follow these steps:
 - i. Select a Table or Data Forge for the left-hand side from the drop-down list.
 - ii. Select a Column for the left-hand side from the drop-down list.
 - iii. Select an Operator from the drop-down list.
 - iv. Select a Table or Data Forge for the right-hand side from the drop-down list.
 - v. Select a Column for the right-hand side from the drop-down list.
- **Text:** You can define filter conditions using text. A particular column in a table is compared with the input text using the required operators. To define filter conditions using text, follow these steps:

- i. Click **Text**.
- ii. Select a Table or Data Forge for the left-hand side from the drop-down list.
- iii. Select a Column for the left-hand side from the drop-down list.
- iv. Select an Operator from the drop-down list.
- v. Enter the text in the field on the right-hand side.

2.7.8.3 Creating Runtime Parameters

A Runtime parameter is a variable whose value can be defined and then called from within that same pipeline.

When you define a runtime parameter, you enter the default value to use. When you create or edit a job that includes a pipeline with runtime parameters, you can specify another value to override the default.

To create a runtime parameter, follow these steps:

1. Click **Add Runtime Parameter** . The New Runtime Parameter dialog box displays.
2. Provide the details as described in the following table:

Table 2-12 Fields in New Runtime Parameter and their Descriptions

Field	Description
Name	Enter the name for the runtime parameter. Any spaces () given in the Name field will be replaced with underscore (_) while saving the runtime parameter.
Description	Enter the description for the runtime parameter.
Datatype	Select the datatype for the runtime parameter from the drop-down list.
Default Value	Provide the default values for the runtime parameter.

3. Click **OK**.The runtime parameter is created.

3

Managing Data Pipelines

Data pipelines prepare filtered data which can be used to create and run scenarios.

Data pipelines prepare data by selecting and joining data sources to create virtual tables of data, adding derived attributes to data, running derivations on the data to determine the risk associated with the entity, and so on.

Note

You can extend the data model in DTP, for more information, see - Extending the Data Model in [Pipeline Designer Guide](#).

3.1 Widgets in Data Pipelines

The following table describes the widgets available in Data pipelines.

Table 3-1 Data Pipeline – Widgets and Descriptions

Widget	Name	Description
Figure 3-1 Persist Widget 	Using the Persist Widget	Use this widget to write data to database tables so that it can be used in other pipelines.
	Using the Data Forge Widget	Use this widget to select the source(s) (Tables) which form the dataset to be further used in the pipeline.
	Using the Data Transformation Widget	Use this widget to write complex expressions and transformation in Python.
-	External Service	Use this widget to add an external service. External Services perform actions on the data, such as loading or moving the data.

3.1.1 Using the Persist Widget

Use this widget to write data to database tables so that it can be used in other pipelines.

Before adding or configuring Persist, ensure that the Persist widget is properly connected to a Data Forge on the Pipeline Canvas; otherwise, it will not function as expected.

1. In the Pipeline Designer page, select the pipeline where you want to add or modify the Persist. The Pipeline Canvas displays.

2. To add a Persist to a Data Forge, click **Add To** , and then select **Persist**. 
 - Alternately, you can right-click on the Canvas to display the list of widgets, select **Persist**, and associate the Persist with the Data Forge.
 - You can also use the hamburger menu on the left side to display the Node Picker, which lists any externalized data forges already created. Drag and drop the data forge to the pipeline as desired.

3. Click **Options**  then click **Edit** . The Data Forge pane displays.

4. Under **Basic Configuration**, provide the following details:

Ensure that the Persist widget is connected to a Data Forge on the Pipeline Canvas. The Persist widget will not function unless it is associated with a Data Forge.

- a. In the **Name** field, enter a user-defined name for the Persist widget. (This field is not auto-populated.)
- b. Select the **Target Table** from the drop-down list.
- c. The **Source Data Forges** field displays the Data Forge selected in the Data Forge widget. This field is system-generated and disabled.

Note

This value is inherited from the associated Data Forge and cannot be modified in the Persist widget.

- d. You can add a Runtime Parameter to the Data Forge by clicking **Add Run Time**

 **Run Time Parameter**

Parameter . For more information about how to create run time parameters, see [Creating Runtime Parameters](#).

5. The **Advanced Configuration** tab displays any Joins and Filters associated with this Data Forge.

Note

At least two sources (dataforges) must be selected or connected for the join section to be enabled in the **Advance Configuration** tab.

- Expand **Joins** to view or create Joins associated with this Data Forge. The Output box provides a summary of all current Joins, with the Join configurations listed in detail below. You can add new Joins using the steps in [Creating Joins](#).
 - Expand **Filters** to view or create Filters associated with this Data Forge. The Output box provides a summary of all current Filters, with the Filter configurations listed in detail below. You can add new Filters using the steps in [Creating Filters](#).
6. Use the **Map** tab to view and map columns within the Persist widget. To map columns, follow these steps:

- a. Click the **Map** tab.
- b. Under **Type**, select one of the following options:
 - **Incremental**: Maps data from the source dataset to the target table incrementally. Only new records are inserted during each run. For example, if 100 records are loaded on Day 1 and 110 records exist on Day 2, only the additional 10 new records are inserted into the target table.
 - **Full Load**: Inserts all filtered data into the target table along with Processing Date and Data Origin values during each run.
 - **SCD**: This option represents a slowly changing dimension. This option is used to map data from source datasets to the target table with both current and historical data stored in the target table. You can select the following options:
 - **Surrogate**: Values of this type are typically generated incremental keys. For example, Sequence IDs. You must provide at least one column of this type.
 - **Unique**: Use this type for values which are unique across the dataset. For example, Customer Identifiers. You must provide at least one column of this type.
 - **Type 2**: Use this type for values which may be changed or added to. For example, Customer Names. Values of this type compare both current and historical data to provide the latest record as active. Historical values will be marked inactive. You must provide at least one column of this type.
 - **Direct**: Use this type for values which should consider only the current data for this record. For example, Data Origin.
- c. The **Select a Data Forge** field displays a drop-down list of the Data Forges connected to the Persist widget. Select the required Data Forge from the list to define the source dataset for column mapping.
- d. The **Target Table** field displays the target table selected under Basic Configuration.
- e. Do either of the following:
 - If you select **Incremental** as Type, do the following:
 - i. From the **Source Column** list, select the required column. Use the search bar to locate specific columns.
 - ii. Select the corresponding Target Column.
 - iii. In the **Selected Type** dialog box, select either Unique or Direct.
 - iv. Click **Map**  to map the column. The column displays in the Mapped Columns list. You can edit the Mapped Column Name, if desired.
 - v. The mapped column is displayed in the mapped columns list.
 - vi. Repeat the steps to map additional columns, if required.
 - If you select **Full Load** as Type, do the following:
 - i. From the Source Column list, select the required column.
 - ii. Select the corresponding Target Column.



- iii. Click **Map** to map the column. The column displays in the Mapped Columns list. You can edit the Mapped Column Name, if desired.

Note

In Full Load, all filtered data is inserted into the target table during each run along with Processing Date and Data Origin.



- f. Alternately, click **Add Expression** to open the Expression Builder. The Expression Builder is used to define free flow text filter conditions. To use the Expression Builder, follow these steps:
 - a. Select the required Data Forge, Attribute and Runtime Parameters and operators. The resulting condition is displayed in the Condition field.



- b. Click **Save** to save the changes.
7. When you have finished configuring your Persist, click **Save**.

Note

If a batch fails or gets stuck, run the PurgeAMIngestion batch. While running the batch, edit the BatchRunId and pass the corresponding DTPIngestion batch run ID.

3.1.1.1 Creating Joins

Joins allow you to combine or group multiple tables using various join operators.



1. In the Advanced Configuration tab, click **Add Join**. A new Join row is added to the list.
2. Use the **Include** selector to indicate whether or not this Join should be included.
3. Select a **Join Operator** from the drop-down list.

The following types of join operators are available:

- **Inner Join:** The Inner Join selects all rows from both participating tables as long as there is a match between the columns.
- **Left Join:** The Left Join returns all rows from the left table, with the matching rows in the right table.
- **Right Join:** The Right Join returns all rows from the right table, with the matching rows in the left table.
- **Full Join:** The Full Join combines the results of both the left and right outer joins and returns all rows from the tables on both sides

4. Add a Join condition to the Join table by following these steps. You can add multiple groups and multiple conditions under each group.



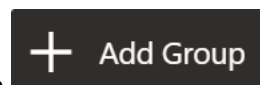
- a. Click **Add Group** and then **Add Condition**.
- b. Specify rules for the condition. You can define the conditions using one of the following:
 - **Expression Builder:** You can form conditions using all the operators given in the Expression Builder. The Expression Builder is used to define free flow text filter conditions. To define a filter condition using the Expression Builder, follow these steps:
 - i. Click **Exp**. The Expression Builder dialog box is displayed.
 - ii. Select the required Dataset, Attribute and Runtime Parameters and operators. The resulting condition is displayed in the Condition field.



- iii. Click **Save** to save the changes.
- **Tables:** You can define conditions using the various columns of tables. The columns of the two tables are compared with each other using the required operators. To define conditions using tables, follow these steps:
 - i. Select a Table or Data Forge for the left-hand side from the drop-down list.
 - ii. Select a Column for the left-hand side from the drop-down list.
 - iii. Select an Operator from the drop-down list.
 - iv. Select a Table or Data Forge for the right-hand side from the drop-down list.
 - v. Select a Column for the right-hand side from the drop-down list.
- **Text:** You can define filter conditions using text. A particular column in a table is compared with the input text using the required operators. To define filter conditions using text, follow these steps:
 - i. Click **Text**.
 - ii. Select a Table or Data Forge for the left-hand side from the drop-down list.
 - iii. Select a Column for the left-hand side from the drop-down list.
 - iv. Select an Operator from the drop-down list.
 - v. Enter the text in the field on the right-hand side.

3.1.1.2 Creating Filters

You can configure a filter by defining various filter conditions.



1. In the Advanced Configuration tab, click **Add Group**. A new Filter Group row is added to the list.
2. Use the **Include** selector to indicate whether or not this Filter should be included.
3. Add a Filter condition by following these steps. You can add multiple groups and multiple conditions under each group.



- a. Click **Add Condition**.
- b. Specify rules for the condition. You can define the conditions using one of the following:
 - **Expression Builder:** You can form conditions using all the operators given in the Expression Builder. The Expression Builder is used to define free flow text filter conditions. To define a filter condition using the Expression Builder, follow these steps:
 - i. Click **Exp**. The Expression Builder dialog box is displayed.
 - ii. Select the required Dataset, Attribute and Runtime Parameters and operators. The resulting condition is displayed in the Condition field.



- iii. Click **Save** to save the changes.
- **Tables:** You can define conditions using the various columns of tables. The columns of the two tables are compared with each other using the required operators. To define conditions using tables, follow these steps:
 - i. Select a Table or Data Forge for the left-hand side from the drop-down list.
 - ii. Select a Column for the left-hand side from the drop-down list.
 - iii. Select an Operator from the drop-down list.
 - iv. Select a Table or Data Forge for the right-hand side from the drop-down list.
 - v. Select a Column for the right-hand side from the drop-down list.
- **Text:** You can define filter conditions using text. A particular column in a table is compared with the input text using the required operators. To define filter conditions using text, follow these steps:
 - i. Click **Text**.
 - ii. Select a Table or Data Forge for the left-hand side from the drop-down list.
 - iii. Select a Column for the left-hand side from the drop-down list.
 - iv. Select an Operator from the drop-down list.
 - v. Enter the text in the field on the right-hand side.

3.1.1.3 Connecting Persist to Persist

After the initial configuration data has been moved using a Persist widget, the output can be connected to another Persist widget for additional data movement or processing.

This enables multi-stage data movement workflows where configuration data is transferred across multiple Persist instances.

The downstream Persist can be connected:

- Through a Data Forge widget, or
- Directly to another Persist widget, depending on the workflow requirements.

This approach is useful when configuration data needs to be propagated or processed across multiple stages.

Note

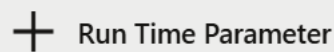
A Persist widget can accept the output of another Persist widget as its input. For detailed instructions on configuring a Persist widget, see [Using the Persist Widget](#).

3.1.1.4 Creating Runtime Parameters

A Runtime parameter is a variable whose value can be defined and then called from within that same pipeline.

When you define a runtime parameter, you enter the default value to use. When you create or edit a job that includes a pipeline with runtime parameters, you can specify another value to override the default.

To create a runtime parameter, follow these steps:



1. Click **Add Runtime Parameter**. The New Runtime Parameter dialog box displays.
2. Provide the details as described in the following table:

Table 3-2 Fields in New Runtime Parameter and their Descriptions

Field	Description
Name	Enter the name for the runtime parameter. Any spaces () given in the Name field will be replaced with underscore (_) while saving the runtime parameter.
Description	Enter the description for the runtime parameter.
Datatype	Select the datatype for the runtime parameter from the drop-down list.
Default Value	Provide the default values for the runtime parameter.

3. Click **OK**. The runtime parameter is created.

3.1.2 Using the Data Forge Widget

The Data Forge widget allows you to select the source(s) (Tables) which form the dataset to be further used in the pipeline.

Before adding or configuring a Data Forge, you must first have created the pipeline.

1. In the Pipeline Designer page, select the pipeline where you want to add or modify the Data Forge. The Pipeline Canvas displays.
2. Click **Add To** and then select **Data Forge** , and then select **Data Forge** .
 - Alternately, you can right-click on the Canvas to display the list of widgets, and then select Data Forge.
 - You can also use the hamburger menu on the left side to display the Node Picker, which lists any externalized data forges already created. Drag and drop the data forge to the pipeline as desired.

3. Click **Options**  then click **Edit** . The Data Forge pane displays.
4. Under **Basic Configuration**, provide the following details:
 - a. Enter the **Name** for the Data Forge. This field allows only the following characters: A-Z a-z 0-9 ' _ ' For example, Abc_123 or Abc 123
 - b. Select the **Type** from the drop-down list.
 - c. The **Externalize** selector allows you to externalize this data forge so that it can be used in additional pipelines. To access all externalized data forges, click the hamburger menu on the left side to display the Node Picker, which lists any externalized data forges already created.
 - d. Select one or more **Source Tables** using the drop-down list. Use the search bar in the list to find specific tables easily.

To remove a source table from the Data Forge, click **Remove**  beside the table name in the Source Tables field.

- e. The **Connected Data Forges** lists any data forges which are associated with this data forge.
- f. You can add a Runtime Parameter to the Data Forge by clicking **Add Run Time**

 **Run Time Parameter**

Parameter . For more information about how to create run time parameters, see [Creating Runtime Parameters](#).

5. The **Advanced Configuration** tab displays any Joins and Filters associated with this Data Forge.

Note

At least two sources (tables/dataforges) must be selected or connected for the join section to be enabled in the **Advance Configuration** tab.

- Expand **Joins** to view or create Joins associated with this Data Forge. The Output box provides a summary of all current Joins, with the Join configurations listed in detail below. You can add new Joins using the steps in [Creating Joins](#).
 - Expand **Filters** to view or create Filters associated with this Data Forge. The Output box provides a summary of all current Filters, with the Filter configurations listed in detail below. You can add new Filters using the steps in [Creating Filters](#).
6. Use the **Mapped Columns** tab to view and map columns within the Data Forge. To map additional columns, follow these steps:
 - a. In the Mapped Columns tab, select a Source Table/Dataforge from the drop-down list. The available columns in this table display.
 - b. Select a Column from the list. Use the search bar in the list to find specific tables easily.

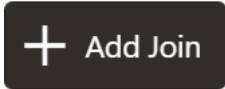


- c. Click **Map**  to map the column. The column displays in the Mapped Columns list. You can edit the Mapped Column Name, if desired.

- d. Alternately, click **Add Expression**  to open the Expression Builder. The Expression Builder is used to define free flow text filter conditions. To use the Expression Builder, follow these steps:
 - a. Select the required Dataset, Attribute and Runtime Parameters and operators. The resulting condition is displayed in the Condition field.
 - b. Click **Save**  to save the changes.
7. When you have finished configuring your Data Forge, click **Save**.

3.1.2.1 Creating Joins

Joins allow you to combine or group multiple tables using various join operators.

1. In the Advanced Configuration tab, click **Add Join** . A new Join row is added to the list.
2. Use the **Include** selector to indicate whether or not this Join should be included.
3. Select a **Join Operator** from the drop-down list.

The following types of join operators are available:

- **Inner Join:** The Inner Join selects all rows from both participating tables as long as there is a match between the columns.
 - **Left Join:** The Left Join returns all rows from the left table, with the matching rows in the right table.
 - **Right Join:** The Right Join returns all rows from the right table, with the matching rows in the left table.
 - **Full Join:** The Full Join combines the results of both the left and right outer joins and returns all rows from the tables on both sides
4. Add a Join condition to the Join table by following these steps. You can add multiple groups and multiple conditions under each group.

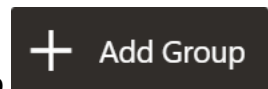
- a. Click **Add Group** and then **Add Condition** .
- b. Specify rules for the condition. You can define the conditions using one of the following:
 - **Expression Builder:** You can form conditions using all the operators given in the Expression Builder. The Expression Builder is used to define free flow text filter conditions. To define a filter condition using the Expression Builder, follow these steps:
 - i. Click **Exp**. The Expression Builder dialog box is displayed.
 - ii. Select the required Dataset, Attribute and Runtime Parameters and operators. The resulting condition is displayed in the Condition field.



- iii. Click **Save** to save the changes.
- **Tables:** You can define conditions using the various columns of tables. The columns of the two tables are compared with each other using the required operators. To define conditions using tables, follow these steps:
 - i. Select a Table or Data Forge for the left-hand side from the drop-down list.
 - ii. Select a Column for the left-hand side from the drop-down list.
 - iii. Select an Operator from the drop-down list.
 - iv. Select a Table or Data Forge for the right-hand side from the drop-down list.
 - v. Select a Column for the right-hand side from the drop-down list.
 - **Text:** You can define filter conditions using text. A particular column in a table is compared with the input text using the required operators. To define filter conditions using text, follow these steps:
 - i. Click **Text**.
 - ii. Select a Table or Data Forge for the left-hand side from the drop-down list.
 - iii. Select a Column for the left-hand side from the drop-down list.
 - iv. Select an Operator from the drop-down list.
 - v. Enter the text in the field on the right-hand side.

3.1.2.2 Creating Filters

You can configure a filter by defining various filter conditions.



1. In the Advanced Configuration tab, click **Add Group**. A new Filter Group row is added to the list.
2. Use the **Include** selector to indicate whether or not this Filter should be included.
3. Add a Filter condition by following these steps. You can add multiple groups and multiple conditions under each group.



- a. Click **Add Condition**.
- b. Specify rules for the condition. You can define the conditions using one of the following:
 - **Expression Builder:** You can form conditions using all the operators given in the Expression Builder. The Expression Builder is used to define free flow text filter conditions. To define a filter condition using the Expression Builder, follow these steps:
 - i. Click **Exp**. The Expression Builder dialog box is displayed.
 - ii. Select the required Dataset, Attribute and Runtime Parameters and operators. The resulting condition is displayed in the Condition field.



- iii. Click **Save** to save the changes.

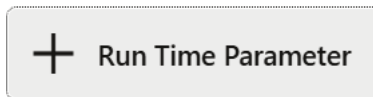
- **Tables:** You can define conditions using the various columns of tables. The columns of the two tables are compared with each other using the required operators. To define conditions using tables, follow these steps:
 - i. Select a Table or Data Forge for the left-hand side from the drop-down list.
 - ii. Select a Column for the left-hand side from the drop-down list.
 - iii. Select an Operator from the drop-down list.
 - iv. Select a Table or Data Forge for the right-hand side from the drop-down list.
 - v. Select a Column for the right-hand side from the drop-down list.
- **Text:** You can define filter conditions using text. A particular column in a table is compared with the input text using the required operators. To define filter conditions using text, follow these steps:
 - i. Click **Text**.
 - ii. Select a Table or Data Forge for the left-hand side from the drop-down list.
 - iii. Select a Column for the left-hand side from the drop-down list.
 - iv. Select an Operator from the drop-down list.
 - v. Enter the text in the field on the right-hand side.

3.1.2.3 Creating Runtime Parameters

A Runtime parameter is a variable whose value can be defined and then called from within that same pipeline.

When you define a runtime parameter, you enter the default value to use. When you create or edit a job that includes a pipeline with runtime parameters, you can specify another value to override the default.

To create a runtime parameter, follow these steps:



1. Click **Add Runtime Parameter** . The New Runtime Parameter dialog box displays.
2. Provide the details as described in the following table:

Table 3-3 Fields in New Runtime Parameter and their Descriptions

Field	Description
Name	Enter the name for the runtime parameter. Any spaces () given in the Name field will be replaced with underscore (_) while saving the runtime parameter.
Description	Enter the description for the runtime parameter.
Datatype	Select the datatype for the runtime parameter from the drop-down list.
Default Value	Provide the default values for the runtime parameter.

3. Click **OK**. The runtime parameter is created.

3.1.3 Using the Data Transformation Widget

The Data Transformation widget allows you to write and import complex expression and transformation in Python and Java.

To use this widget effectively, you must have a working knowledge of scripting and Java or Python.

1. Create a pipeline, as shown in [Adding DTP Pipelines](#).
2. Add a Data Transformation widget to the pipeline by right-clicking the Canvas to display

the list of widgets and selecting **Data Transformation** .

The Data Transformation widget can be stand-alone or associated with another widget, such as Business Filter, Evaluation, or Aggregator.

3. Click **Options**  then click **Edit** . The Data Transformation pane displays.
4. In Basic Configuration, provide the following details:
 - a. Enter a **Name** for this Data Transformation.
 - b. Select a **Runtime Parameter** from the drop-down list. To add a new Runtime Parameter, see [Creating Runtime Parameters](#).
 - c. For Data Transformations associated with another widget, map the columns in **Column Definition** using **Add Columns**. The **View Input Table Columns** shows which columns were mapped in the connected Data Forge.
5. The **Define Transformation** tab displays the script options.
 - **Standard**
 - a. Select the **Type** from the drop-down list.
 - b. Select the **Transform** from the drop-down list.
 - c. Select **Interpreters** from the drop-down list. Python allows you call a custom python script.
 - i. In the **Script** section, provide a description.
 - ii. Enter or paste the python script you want to execute.

Note

If this is a script you intend to reuse, you can create a template by clicking **Templates**, then **Add**. Enter the pertinent details about the script, enter or paste the script into the box, and click **Save**. Existing templates can be modified by clicking **Edit**. Editing a template updates the script in every pipeline which uses this template.

To use an existing template, select **Use Template** and select the desired template from the **Script** drop-down list.

- iii. Click **Save**.
- Selecting **Custom** allows you to create a notebook.

Notebooks allow you to add and run paragraphs, invalidate session, edit, add, export the notebook, and so on. To understand the icons which display in the Notebook, see [Common Screen Elements](#).

- a. Click **Add Python Paragraph** to add a paragraph in the notebook and fetch the runtime parameters. This is available for all the interpreters.

Note

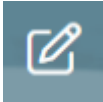
Use the default paragraph template as provided. Do not delete or replace it with a custom paragraph, as this may cause execution to fail.

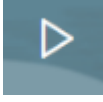
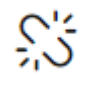
- b. Add paragraphs to the Notebook as desired.
 - c. Click **Play** to run the script and display the label.
6. You can import an existing notebook by selecting **Import Notebook**.
- Click **Import Archive File** to select the .dsnb file from the file selector dialog and select a file. Click **Open**.
 - OR
 - Drag and drop the file into the **Import Archive File** field.

3.1.3.1 Common Screen Elements in the Notebook

This topic describes common screen elements in the notebook that can be used to perform quick actions when preparing and executing the notebooks.

Elements in the Notebook

Icon Name	Action/Description
Modify Notebook 	Modifies the details of a notebook, such as a name, description, and (or) tags.
Hide Code 	Hides or shows the Code Section in all the paragraphs in a notebook.
Hide Result 	Hides or shows the Results Section in all the paragraphs in a notebook.

Icon Name	Action/Description
Re-initialize session 	Re-initialize the paragraph in a notebook. Note: By default, the Start Widget gets executed automatically on clicking the Re-initialize icon. All other paragraphs need to be executed manually.
Read-Only 	Sets the notebook to read-only mode. Note: The notebook is protected from edit, clear result, delete, share, reset session, and run paragraphs in Read-only mode.
Write 	Set the notebook to write mode.
Run Paragraphs 	Executes all the paragraphs in a notebook in sequential order.
Invalidate Session 	Resets any connection or code executed in a notebook.
Delete Notebook 	To delete the selected notebook.
Clear Result 	Clears results for all the paragraphs in a notebook. Note: This action clears all the results. You must rerun the paragraphs to view the results.
Clear Paragraph Dependencies 	Remove all defined paragraph dependencies.

Icon Name	Action/Description
Open as an iframe	Opens a notebook in an Iframe. This allows a notebook to be embedded inside another webpage.
	
Share Notebook	Share the notebook with another user, user group, or role.
	
Clone Notebook	Creates a copy of a notebook. All paragraphs in the current notebook are replicated in the new notebook. The cloned notebook is created with the default name, Copy of <Current Notebook Name>.
	
Export Notebook	Export the notebook to your computer as a DNSB file.
	
Print Notebook	To print a notebook in the PDF format and save it in your local machine.
	
Default Template	To apply the overall look and feel of the notebook using the default template.
	
Layout	Sets the preferred layout. The available layouts are Zeppelin and Jupyter.
	
Default Template	Applies the overall look and feel of the notebook using the default template.
	

Icon Name	Action/Description
Show Panel 	Shows or hides the Paragraph Settings Bar Commands, Results Toolbar, and Settings Dialog for a selected paragraph in a panel to the notebook's right.
Attach Credentials 	You can use this option to attach credentials (wallet and password) to the notebook to enable secure data access.
Versioning 	You can use this option to create versions for your notebook, which helps you analyze the changes based on the version control.
Run Paragraph 	To execute the code or query in a paragraph.
Enter Dependency Mode 	To add or remove dependent paragraphs. Paragraphs with dependent paragraphs are executed in the dependency order.
Comments 	To add comments to a paragraph.
Expand 	To expand a paragraph and view the paragraph in full-screen mode.
Show/Hide Line Numbers 	To show or hide line numbers in the code in a paragraph. Note: This button is applicable only to the code section.

Icon Name	Action/Description
Visibility 	To manage the visibility settings in a paragraph. It controls how a paragraph may be viewed by the author and other users who have access to the notebook.
Settings 	Users can perform the following actions: • Resize the width of a paragraph • Change the order of placement of the paragraphs by moving them up or down • Run the all above or all below paragraph from the selected paragraph. • Clear the paragraph result • Open the notebook in Embedded window • Disable the run action • Clone the paragraph • Delete a paragraph

3.1.4 Using External Service Widget

External Service refers to an existing set of services that the customer can use to derive the risk of certain business entities, configure data movement for case management, create events, and so on.

If an external service has already been created and configured, you do not need to create it again. Previously created external services are available for reuse in any pipeline.

3.1.4.1 Adding an External Service Widget

The External Service widget enables you to integrate external services into a pipeline. It supports both REST and PLSQL services, allowing pipelines to invoke external APIs or execute stored procedures during pipeline execution.

You can use the External Service widget either as a standalone widget or connect it to other widgets within a pipeline. Before using the widget, you can either create a new external service or select an existing one from the list of configured services. During pipeline execution, the widget invokes the configured external service and processes the response for use within the pipeline.

The following sections describe how to add an External Service widget, configure its properties, create new external services, and use existing services in a pipeline.

The External Service widget can be used independently or connected to other widgets in the pipeline, depending on the workflow requirements.

To add a new external service widget, follow these steps:

1. Go to the DTP Pipeline Designer.
2. Select External Service Widget from the list. The External Service page is displayed. The widget consists of the following tabs:

Basic Configuration

Use the Basic Configuration tab to select an external service that has already been created and configured. The selected service is associated with the External Service widget and is invoked when the pipeline is executed. Enter the following fields.

Table 3-4 Basic Configuration

Fields	Description
Name	Select an existing external service from the drop-down list. The list displays all previously created REST and PLSQL services available for use.
Description	Displays the description of the selected external service. This field is populated automatically based on the selected service and is read-only.

Note

If the required external service is not available in the Name drop-down list, create a new external service using the Add External Service tab. Once the service is saved, it becomes available for selection in the Basic Configuration tab.

Input Parameters

Use the Input Parameters tab to view and configure the parameters required by the selected external service. The values entered are passed to the service during pipeline execution.

Add External Service

Use the Add External Service tab to create a new external service. You can configure either a REST or PLSQL service by specifying the required service details, endpoint or procedure information, and input/output parameters. Once saved, the service becomes available for selection in the Basic Configuration tab.

To add a new external service, follow these steps:

- a. Select the **Add External Service** tab and enter the details in the following fields.

Table 3-5 Add External Service

Fields	Description
EE Service Name	Enter a unique name for the service.
EE Service Type	Select either REST or PLSQL from the drop-down.
EE URL/Procedure Name	Specify the REST endpoint URL or the PLSQL procedure name.
Description	Enter a brief and meaningful description of the external service. The description should clearly indicate the purpose or functionality of the service, making it easier for users to identify and select the appropriate service during pipeline configuration.
Service Name	Enter the name of the application or service that hosts the external service. NOTE: Service name is applicable only for REST.

- b. Configure the required input parameters, if applicable. Input parameters define the values that are passed to the external service when it is invoked.
 - c. To configure Input Parameters, open the Input Parameters section.
 - d. Click the + icon to add an input parameter.
 - e. Enter the Input Parameter Name, Input Parameter Value, and provide the Short Name, when required.
 - f. Repeat the process for additional parameters.
 - g. Verify the input parameters.
 - h. Click  to save the newly added external service.
3. Click **Save** to save External Service Widget. The saved service can then be selected from the Name drop-down when configuring the External Service widget.

During pipeline execution, the External Service widget invokes the configured external service based on its selected service type.

- If the external service is configured as REST, the widget sends a request to the specified REST API endpoint. The input parameters configured for the widget are passed as part of the API request, and the response is returned to the pipeline for further processing.
- If the external service is configured as PLSQL, the widget invokes the specified stored procedure in the AML DD schema. The configured input parameters are passed to the procedure, and the procedure's output is returned to the pipeline.

This enables pipelines to integrate with external applications through REST APIs or execute database business logic through PLSQL procedures during runtime.

 Note

The external service is invoked only when the pipeline is executed. Ensure that the configured REST endpoint or PLSQL procedure is accessible and correctly configured before running the pipeline.

4

About Scenario Pipelines

Scenario Pipelines enable you to create scenarios by defining behavior that consists of events in a predetermined order.

You can use these events to thread multiple data streams together. Scenarios are used to identify behaviors of interest, potentially problematic behaviors with respect to securities, regulations, and possible money-laundering activities.

These scenarios consider whether the geographical location or entities involved warrant enhanced scrutiny; monitor activity between accounts, customers, correspondents, and other entities to reveal relationships that could indicate efforts to launder funds; address sudden, significant changes in transaction activity that could indicate money laundering or fraud; and detect other types of activities that are considered potentially suspicious or indicative of money laundering.

As part of configuring a scenario pipeline, parameters are defined, which are then tuned in the Threshold Manager.

4.1 Pre-Configured DTP Scenario Pipelines

The application comes with the following ready-to-use, pre-configured scenario pipeline:

- Networks of Accounts and Entities and Customers- Account Focus
- CIB High Risk Geography Activity - Account Focus DTP
- Focal High Risk Entity - Customer Focus DTP
- Large Reportable Transaction - Customer Focus DTP
- Deviation from Peer Group - Total Activity - Account Focus
- Focal High Risk Entity - Correspondent Bank Focus - DTP
- High Risk Counter Party - Correspondent Bank Focus - DTP
- Patterns of Funds Transfers Between Sending Customers and External Entities - Customer Focus - DTP
- CIB Significant Change From Previous Average Activity - Account Focus - DTP.
- Hub and Spoke - Customer Focus - DTP
- Patterns of Funds Transfers Between Receiving Customers and External Entities - Customer Focus - DTP
- Peer Group ML Anomaly Detection One-Class SVM Supplemental Signal.

These templates are copies of existing Transaction Monitoring scenarios, included here as implementation samples demonstrating the technical capabilities of DTP pipeline widgets.

Note

Do not execute the same pipelines from **Data Transformation Pipeline** and **Scenario Pipeline** for the same MIS Date.

5

Managing Threshold Sets

FCCM Cloud Service uses tunable Thresholds to change variable values for scenarios.

When scenarios are created, thresholds are established. You can use the Threshold Editor to modify threshold values of scenarios, and create and edit threshold sets to fine-tune how that scenario finds matches, without changing the values defined at the data set or pattern level. These thresholds are applied to scenarios to find matches. Using this tool, you can enter a new value for a threshold (within a defined range) or reset the thresholds to their sample values.

Threshold sets allow you to run the same scenario multiple times against a variety of sources (for example, currencies, or jurisdictions) with separate threshold values for each source.

Note

Changing threshold values can generate significantly more or fewer alerts, depending upon the modifications made.

5.1 Accessing Threshold Sets

You can access the threshold sets through the Threshold Manager.

To access the All Threshold Sets page and view threshold sets, follow these steps:

1. In the Navigation List menu, click **Business Processes**, then click **Data Transformation Pipeline**.
2. Select **DTP Threshold Manager**. The All Threshold Sets page displays the complete list of threshold sets available in your implementation.
3. Select the check box for the threshold set you want to view, or click the threshold set name to view the threshold set details.

5.2 Creating a Threshold Set

You can create new threshold sets in the Threshold Editor.

To create a new threshold set, follow these steps:

1. Navigate to the **Threshold Editor** page.
2. Click **Add**  in the top right corner. The New Threshold Set page displays.
3. Enter the following values:
 - a. Enter a **Name** for this threshold set.
 - b. The scenario associated with this threshold set displays additional configurable parameters. These parameters are specific to the selected scenario.
 - c. Select **Jurisdiction** for this threshold set using the drop-down list. Jurisdiction refers to the division of data in the database based on criteria such as geographical boundaries, legal entities, and so on.

- d. Select the **Period Type** used in this threshold set using the drop-down list. Options include Days or Months. By default, the period type is **Days**.
 - e. Enter the **Lookback Period** for this threshold set. Lookback period refers to the number of days or months to lookback from the current date or time to create a time window which is used to consider cases for correlation.
 - f. Enter the **Frequency Period** for this threshold set. Frequency period refers to how frequently the scenario should be run, by number of days or months.
 - g. Enter any **Comments** you have for this threshold set.
 - h. Enter the threshold values you want this threshold set to be updated with in the **New Value** field.
- 4.
- Click **Save**  to save the values. A new threshold set is created and a message displays: *New Threshold Set created successfully*.
 - Click **Save & Simulate**. A new threshold set is created, and the Create Simulator Conditions page displays. For more information about the Threshold Simulator, see [Threshold Simulator](#).

5.3 Copying a Threshold Set

Copy an existing threshold set before modifying the values.

To copy and modify an existing threshold set, follow these steps:

1. Navigate to the Threshold Manager page.
2. Select the check box for the threshold set you want to copy.
3. Click **Copy** . The Copy Threshold Set window displays.
4. Enter the following values:
 - a. Enter a **Name** for this threshold set.
 - b. The scenario associated with this threshold set displays additional configurable parameters. These parameters are specific to the selected scenario.
 - c. Select **Jurisdictions** for this threshold set using the drop-down list. Jurisdiction refers to the division of data in the database based on criteria such as geographical boundaries, legal entities, and so on.
 - d. Select the **Period Type** used in this threshold set using the drop-down list. Options include Days or Months. By default, the period type is **Days**.
 - e. Enter the **Lookback Period** for this threshold set. Lookback period refers to the number of days or months to lookback from the current date or time to create a time window which is used to consider cases for correlation.
 - f. Enter the **Frequency Period** for this threshold set. Frequency period refers to how frequently the scenario should be run, by number of days or months.
 - g. Enter any **Comments** you have for this threshold set.
 - h. Enter the threshold values you want this threshold set to be updated with in the **New Value** field.
5. Click **Save**  to save the values.

5.4 Editing Threshold Sets

You can modify user-defined threshold sets in the Threshold Editor.

To edit a threshold set, follow these steps:

1. Navigate to the Threshold Editor page. The existing threshold sets are displayed.
2. Select the check box corresponding to the threshold set you want to edit.



3. Click **Edit**. The Edit Threshold page is displayed.

Alternatively, you can click **Edit** when viewing a threshold set in the View Threshold Set window.

4. Modify the required details.
 - a. Select **Jurisdictions** for this threshold set using the drop-down list. Jurisdiction refers to the division of data in the database based on criteria such as geographical boundaries, legal entities, and so on.
 - b. Select the **Period Type** used in this threshold set using the drop-down list. Options include Days or Months. By default, the period type is **Days**.
 - c. Enter the **Lookback Period** for this threshold set. Lookback period refers to the number of days or months to lookback from the current date or time to create a time window which is used to consider cases for correlation.
 - d. Enter the **Frequency Period** for this threshold set. Frequency period refers to how frequently the scenario should be run, by number of days or months.
 - e. Enter any **Comments** you have for this threshold set.
 - f. Enter the threshold values you want this threshold set to be updated with in the **New Value** field.

Note

You can modify the values of the existing parameters only, you cannot add new parameters.

5.
 - Click **Save**  to save the values. A new threshold set is created and a message displays: *New Threshold Set created successfully*.
 - Click **Save as New** to save the edited threshold set as a new threshold set. The New Threshold window opens. Enter a name for the threshold set and click **Save**. A new threshold set is created and a message displays: *New Threshold Set created successfully*.
 - Click **Save & Simulate**. A new threshold set is created, and the Create Simulator Conditions page displays. For more information about the Threshold Simulator, see [Threshold Simulator](#).

5.5 Deleting Threshold Sets

You can delete user-defined threshold sets in the Threshold Editor.

To delete a threshold set, follow these steps:

1. Navigate to the Threshold Editor page. The existing threshold sets are displayed.
2. Select the check box corresponding to the threshold set you want to delete.
3. Click **Delete** . A message displays: *Are you sure you want to delete <threshold set>?*
4. Enter the reason for deletion in the **Your Comment** box. This is mandatory.
5. Click **Delete**. The threshold set is deleted.

5.6 About Threshold Simulator

The Threshold Simulator is used to run selected scenario pipelines against the selected threshold sets to find the matches obtained from these combinations.

These matches enable you to identify the events generated for the combination on a specified date. This can be helpful when you want to see which events would be generated with different threshold settings and be able to explain why your scenario is configured as it is, such as during audits.

5.6.1 View Simulator Conditions

You can view Simulator Conditions using the Threshold Manager.

To view simulator conditions for a threshold set, follow these steps:

1. In the Navigation List menu , click **Business Processes**, then **Data Transformation Pipeline**.
2. Select **DTP Threshold Manager**. The All Threshold Sets page displays.
3. In the All Thresholds page, select the check box corresponding to the threshold set you want to view simulation details for.
4. Click **Simulation History** . The Simulation Details for this threshold set opens as a new tab.
5. Click the **Simulation Run ID** for the simulation you want to view conditions for. The View Threshold Set pop-up window displays the details of this threshold set.

If you want to make modifications to these conditions, click **Edit & Simulate**. The Edit Threshold Set pop-up window displays. Follow the steps in [Edit Simulator Conditions](#) to make these changes.

5.6.2 Edit Simulator Conditions

You can edit Simulator Conditions using the Threshold Manager.

To edit existing simulator conditions for a threshold set, follow these steps:

1. In the All Thresholds page, select the check box corresponding to the threshold set you want to edit.
2. Click **Simulation History** . The Simulation Details for this threshold set opens as a new tab.
3. Select the check box corresponding to the **Simulation Run ID** for the simulation you want to edit.
4. Click **Edit** . The Edit Simulator Conditions pop-up window displays.
Alternatively, you can access the Edit Simulator Conditions window by clicking **Edit & Simulate** in the View Simulator Conditions window.
5. To make modifications to these conditions, update the following values:
 - a. Select **Jurisdictions** for this threshold set using the drop-down list. Jurisdiction refers to the division of data in the database based on criteria such as geographical boundaries, legal entities, and so on.
 - b. Enter the **Lookback Period** for this threshold set. Lookback period refers to the number of seconds, minutes, hours, or days to lookback from the current date or time to create a time window which is used to consider cases for correlation.
 - c. Enter the **Frequency Period** for this threshold set. Frequency period refers to how frequently the scenario should be run.
 - d. Enter the threshold values you want this threshold set to be updated with in the **New Value** field. Select the Batch Date as the date for the data you want to test the thresholds against. This can be the current date or a past date.
 - e. Enter the Data Origin.
6. Click **Save & Simulate** to run the modified simulation. After running a simulation, the Simulator History window displays the result with the number of event matches and details of each event. You can view the following details:
 - Simulation ID: ID for this simulation run.
 - Data Origin: Data Origin of the data set the simulated scenario conditions are run against.
 - Jurisdiction: Jurisdiction the simulated scenario conditions are run for.
 - Batch Date: Date the simulated scenario conditions are run for.
 - Results: Number of event matches generated by the simulated scenario conditions during the run.
 - Event Details: Details for each event generated by the simulated scenario conditions during the run.
 - Event ID
 - Focus Name
 - Focus Type
 - Highlights

5.6.3 Creating New Simulator Conditions

You can create new Simulator Conditions using the Threshold Manager.

To create new simulator conditions for a threshold set, follow these steps:

1. In the **All Thresholds** page, select the check box corresponding to the threshold set you want to create new simulator conditions for.
2. Click **Simulation History** . The Simulation Details for this threshold set opens as a new tab.
3. Click **Open Simulator**. The Create Simulator Condition pop-up window displays.
Alternatively, you can access the Create Simulator window by clicking **Open Simulator** in the All Thresholds page. The Create Simulator Condition pop-up window displays.
4. Create the simulator conditions by providing the following details:
 - a. Select the required scenario from the **Select Scenario** drop-down list.
 - b. Select the required threshold set from the **Select Threshold** drop-down list.
 - c. Select the **Batch Date** as the date for the data you want to test the thresholds against. This can be the current date or a past date.
 - d. Enter the **Data Origin**.
5. Click **Save**.

5.6.4 Running Existing Threshold Sets

You can run a simulation for existing scenario threshold sets.

To run the threshold simulator for an existing scenario threshold set, follow these steps:

1. In the All Thresholds page, select the check box corresponding to the threshold set you want to run the simulator for.
2. Click **Open Simulator**. The Simulator Conditions pop-up window displays.
Alternatively, you can also run existing threshold set from the Simulation Details tab by clicking Open Simulator. The Simulator Conditions pop-up window displays.
3. Provide the following details:
 - a. Select the **Batch Date** as the date for the data you want to test the thresholds against. This can be the current date or a past date.
 - b. Enter the **Data Origin**.
 - c. Select **Jurisdictions** for this threshold set using the drop-down list. Jurisdiction refers to the division of data in the database based on criteria such as geographical boundaries, legal entities, and so on.
 - d. Enter the **Lookback Period** for this threshold set. Lookback period refers to the number of seconds, minutes, hours, or days to lookback from the current date or time to create a time window which is used to consider cases for correlation.
 - e. Enter the **Frequency Period** for this threshold set. Frequency period refers to how frequently the scenario should be run.
 - f. Enter any comments you have for this threshold set.

- g. Enter the threshold values you want for this threshold set in the **New Value** field.
4. Click **Save & Simulate** to run the modified simulation. After running a simulation, the Simulator History window displays the result with the number of event matches and details of each event. You can view the following details:
 - Simulation ID: ID for this simulation run.
 - Data Origin: Data Origin of the data set the simulated scenario conditions are run against.
 - Jurisdiction: Jurisdiction the simulated scenario conditions are run for.
 - Batch Date: Date the simulated scenario conditions are run for.
 - Results: Number of event matches generated by the simulated scenario conditions during the run.
 - Event Details: Details for each event generated by the simulated scenario conditions during the run.
 - Event ID
 - Focus Name
 - Focus Type
 - Highlights

5.6.5 Viewing Simulation Details

When a threshold set simulation has completed, you can view the details of all thresholds in this simulation and their results in the Simulation Details.

This allows you to determine whether your threshold set is generating the expected detection results or if further modification is required. You can also view the Simulation Details for all runs of a threshold set which has been previously run. To open the Simulation Details, follow these steps:

1. In the All Thresholds page, select the check box corresponding to the threshold set you want to view simulation details for.
2. Click **Simulation History** . The Simulation Details for this threshold set opens as a new tab. You can view the following details:
 - Simulation Run: ID for this simulation run with the scenario name.
 - Jurisdiction: Jurisdiction the simulated scenario conditions are run for.
 - Run Date and Time: Date and time the simulation was run.
 - User ID: User who ran the simulation.

You can export the results of the threshold set simulation runs in .xlsx format by selecting the check boxes for one or more simulation runs and clicking **Export Results**.

You can delete a simulation run by selecting the check boxes for one or more simulation runs and clicking **Delete**. The Delete pop-up window displays: *Are you sure you want to delete <Simulation ID>?* Enter a comment and click **Delete**. A confirmation message displays.

To return to the All Threshold Sets tab, click the **All Thresholds List** tab.

5.6.6 Running Alert Analyzer

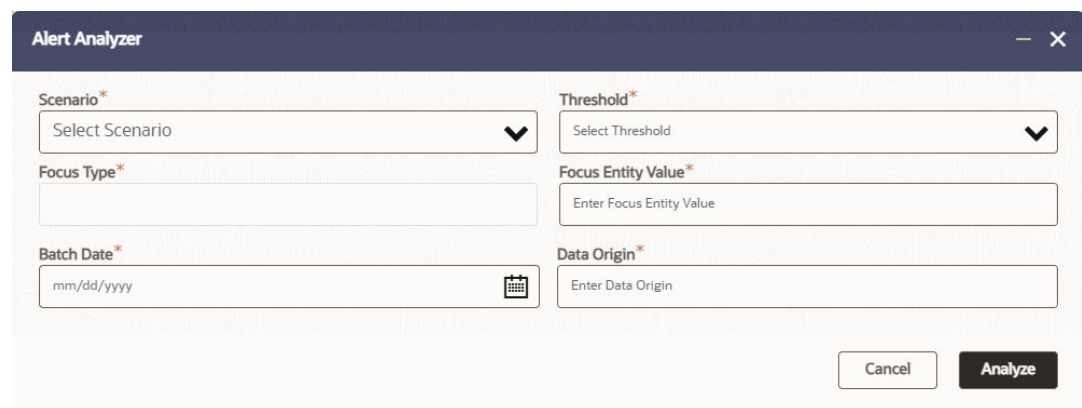
Use this section to learn how to run Alert Analyzer.

Alert Analyzer enables fast, targeted evaluation of how a scenario pipeline behaves for a specific entity, without the need to run a full batch. It verifies whether the entity would trigger an alert under current configuration and, if not, pinpoints the configuration responsible. This makes it a useful tool when assessing and validating the behavior of scenarios on selected entities.

To analyze how a scenario would behave, follow these steps:

1. On the Data Transformation Pipeline, click **DTP Threshold Manager**. The DTP Threshold page is displayed.
2. Click **Alert Analyzer**. The Alert Analyzer dialog is displayed.

Figure 5-1 Alert Analyzer



3. Enter the following fields. The fields marked with * are mandatory.

Table 5-1 Alert Analyzer

Fields	Description
Scenario	Select a scenario from the drop-down list. This option selects the pipeline to analyze.
Threshold	Select a threshold set from the drop-down list. This identifies the threshold set configuration that will be applied when running the pipeline simulation.
Focus Type	Automatically populated based on the selected pipeline. This helps user understand what business entity type the selected pipeline is designed to evaluate.

Table 5-1 (Cont.) Alert Analyzer

Fields	Description
Focus Entity Value	Enter the focus entity value. This identifies the specific entity to be analyzed. It is the unique identifier of the entity within the focus type. Examples: - For Customer focus, the user enters the unique customer identifier - For Account focus, the user enters the account identifier
Batch Date	Select a batch date from the calendar. This is the effective processing date Alert Analyzer uses to evaluate the pipeline.
Data Origin	Enter the data origin. This parameter specifies which source system or feed Alert Analyzer must use when evaluating the pipeline for the selected entity.

- Click **Analyze**. A status message appears, followed by the Alert Analyzer results page.

Figure 5-2 Alert Analyzer Results

Alert Analyzer Results

Scenario: CIB High Risk Geography Activity - Account Focus - DTP

Focus Type: Account

Batch Date: 2015-12-10

Analysis Date and Time: 27/07/2026, 16:20:10

Threshold: CIB High Risk Geography Activity - Account Focus - DTP

Focus Entity Value: 9999003W104

Data Origin: RDS

Widget Results

Widget Name	Widget Type	Result
Current Month Summary	DATAFORGE	Yes
Previous Months Summary	DATAFORGE	Yes
Previous Months Filter	BF	No
Current Month Filter	BF	No
Current Month Aggregator	AGGREGATOR	No
Previous Months Aggregator	AGGREGATOR	No
Peak Previous Months Aggregator	AGGREGATOR	No
Final Aggregator	AGGREGATOR	No
CIB HRG Evaluation	EVALUATION	No

Close

Export

The results list each widget present in the pipeline, in sequence, with a *Yes / No* response:

- **Yes** = the specified entity is still being processed at that stage.
 - **No** = the specified entity is not present at that stage anymore, meaning it has been filtered out by some configuration or evaluation.
5. Click **Export** to export the results to Excel. The export includes the run summary, the threshold values used, and widget-level results.

6

Using Jobs

The application uses jobs to define the instructions for executing the data pipelines or scenario pipelines against threshold sets, for example, running a scenario or loading data.

These jobs can be included in batches (groups of jobs) which run at configured intervals against the selected threshold to detect and generate events. This allows the jobs to run automatically, without requiring your involvement. Jobs can also be used to monitor the execution of jobs.

To access the DTP Jobs page, follow these steps:

1. In the Applications landing page, click the **Navigation Menu**  to access the Navigation List.
2. Click **Business Processes**, then click **Data Transformation Pipeline** in the Navigation List to view all DTP menu options.
3. Select **DTP Jobs**. The DTP Jobs page opens.

6.1 Creating Jobs

You can create new jobs to run in batches.

To create a new job, follow these steps:

1. Navigate to the **DTP Jobs** page.
2. Click **Create Job**. The Create Job pane is displayed.
3. Provide the details as described in the following table:

Table 6-1 Fields to Create Jobs

Field	Description
Job Name	Enter the name for the job.
Pipeline Type	Select the pipeline type for which you want to create the job. The available options are Data and Scenario.
Pipeline	Select the pipeline from the drop-down list for which you want to create a job.
Threshold	Select the threshold set from the drop-down list. The drop-down list displays the list of thresholds that are created for the selected scenario pipeline. The job is run against the selected threshold to detect and generate events.

4. Click **Save**  to save the changes. A new job is created and displayed in the Jobs page.

6.2 Editing Jobs

You can edit or delete user-defined jobs

To edit a job, follow these steps:

① Note

Pre-configured jobs cannot be edited or deleted. You can only edit or delete user-defined jobs.

1. Navigate to the **DTP Jobs** page.
2. Click on the Job that you want to modify and click **Options**  then click **Edit** . The Edit Job pane displays.
3. Modify the required details in the Edit Job pane on the right-hand side.
4. Click **Save** to save the changes. The job is modified.

6.3 Deleting Jobs

You can edit or delete user-defined jobs.

To delete a job, follow these steps:

① Note

Pre-configured jobs cannot be edited or deleted. You can only edit or delete user-defined jobs.

1. Navigate to the **DTP Jobs** page.
2. Click on the Job that you want to modify and click **Options**  then click **Delete**. The job is deleted.

6.4 Viewing Execution Monitor

The Execution Monitor enables you to view the complete history of job execution, including the start and end time, status, log messages generated during job execution, and so on. This will help you see how your jobs are progressing and detect any recurring issues.

To view the execution monitor, follow these steps:

1. Navigate to the Applications landing page.
2. Click the **Navigation Menu** to access the **Navigation List**. The Navigation List displays the list of modules.
3. Expand **Data Transformation Pipeline** in the Navigation List to view all DTP menu options.

4. Click **DTP Jobs** in the Navigation List. The Jobs page opens in a new window.
5. On the Jobs page, click the job for which you want to view the execution monitor.
6. The Execution History pane displays the historical information of the selected job. The details include the Batch Run ID, the date and time during which a job is executed, status of the job execution, and so on.

Use the **Task** and **Sort By** drop-down lists to manage how these details display.

7. Click **Monitor Execution** corresponding to the Batch Run ID for which you want to view more information.
8. The Execution Monitor page is displayed in a new window. The page contains details of the pipeline for which the job is created. The widgets in the pipeline are represented in different colors. Widgets are color coded to indicate the widget type and status of the job:
 - Completed
 - Failed
 - Pending
 - Not Started

9. Clicking **Log Messages**



displays the Log Messages pane which lists a complete log of messages generated during the execution of the pipeline.

10. Click each widget to view the Log Messages dialog box with detailed information about the widget.

The following information is included:

- **Log Messages:** Start and End Date
- **Query/REST Parameters:** The query that is being executed by this widget.
- **Parameters:** The relevant parameters being used in this widget.
- **Errors:** Details for any errors that occurred in this widget during Job execution.

7

User Group and Roles Mapping

This section provides the User Group, User Role mapping, and activities for Oracle FCCM Data Transformation Pipeline Cloud Service.

This table shows the User Groups and Roles required for activation of Oracle FCCM Data Transformation Pipeline Cloud Service.

Table 7-1 User Group and Roles Mapping in Oracle FCCM Data Transformation Pipeline Cloud Service

Group	User Role	Functions	Access
DTPCONFIGGRP	DTPCONFIGROLE	DTPPIPELINEACC	Oracle Data Transformation Pipeline Cloud Service

Table 7-1 (Cont.) User Group and Roles Mapping in Oracle FCCM Data Transformation Pipeline Cloud Service

Group	User Role	Functions
DTPCONFIGGRP	DTPCONFIGROLE	DTPTHRESHOLDACC

Table 7-1 (Cont.) User Group and Roles Mapping in Oracle FCCM Data Transformation Pipeline Cloud Service

Group	User Role	Functions
DTPCONFIGGRP	DTPCONFIGROLE	DTPJOBSACC

Table 7-1 (Cont.) User Group and Roles Mapping in Oracle FCCM Data Transformation Pipeline Cloud Service

Group	User Role	Functions
DTPCONFIGGRP	DTPCONFIGROLE	DTPAUDITACC

Table 7-1 (Cont.) User Group and Roles Mapping in Oracle FCCM Data Transformation Pipeline Cloud Service

Group	User Role	Functions
DTPADMNGRP	DTPADMNROLE	DTPFOCUSTYPEACC

Table 7-1 (Cont.) User Group and Roles Mapping in Oracle FCCM Data Transformation Pipeline Cloud Service

Group	User Role	Functions
DTPADMNGRP	DTPADMNROLE	DTPEVENTTYPEACC

Functions Required for Different Pipeline Types

To use different pipeline types in DTP, ensure that the appropriate function is mapped to at least one of the user's assigned roles.

- **Data Pipelines:** Map the PPLNACC_DATA function to any of the assigned roles.
- **Scenario Pipelines:** Map the PPLNACC_SCENARIO function to any of the assigned roles.

8

Managing Batches

A batch is a group of jobs that are scheduled to run at a defined interval of time, in sequence, automatically, without user involvement.

Note

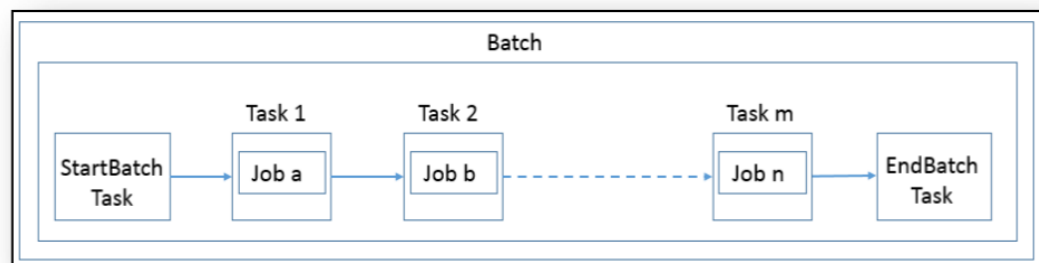
DTP does not support parallel execution. Jobs within a batch execute sequentially.

Oracle FCCM Cloud Service uses the Scheduler Service to create, schedule, execute and manage batches. A batch is a group of jobs that are scheduled to run at a defined interval of time, in sequence, automatically, without user involvement. Each batch begins with a StartBatch, includes any additional jobs that should be run in this batch, and then completes with the Endbatch.

Note

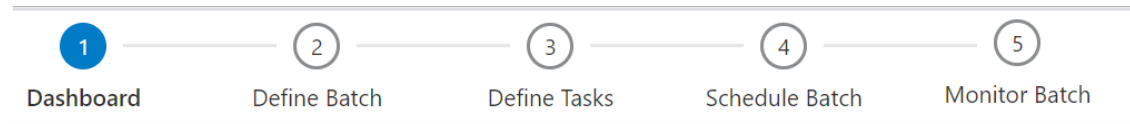
Oracle recommends that you first copy, customize, and then use the pre-configured batches as required.

Figure 8-1 Flow of Batch



To execute the batches, use the Schedule Batch feature in the Scheduler Service. For more information, see [Scheduler Service](#). You can use the Scheduler Service to first define the batch, then define which tasks should be included in this batch.

Next, you must schedule the batch. When the batch runs, you can monitor the batch to verify it is executing as intended. Click the Batch Scheduling Flow to navigate through the Scheduler Service.

Figure 8-2 Scheduler Service -- Batch Scheduling Flow

8.1 Pre-Configured Batches

The application contains certain pre-configured batches that can be used to run the default data. You must create new batches to run customer-specific data.

DTPTMScenario Batch Details

The following table provides the tasks that are configured for the DTPTMScenario batch. These tasks must be executed in the following order:

Table 8-1 DTPTMScenario Batch Details

Sequence	Tasks for DTPTMScenario Batch	Jobs for DTPTMScenario Batch	Pipelines for DTPTMScenario Batch
1	StartBatch	Not Applicable	Not Applicable
2	CIBHRGAC	CIB High Risk Geography Activity - Account Focus - DTP	CIB High Risk Geography Activity - Account Focus - DTP
3	FHRECU	Focal High Risk Entity - Customer Focus DTP	Focal High Risk Entity - Customer Focus DTP
4	LRTCUC	Large Reportable Transaction - Customer Focus DTP	Large Reportable Transaction - Customer Focus DTP
5	NOA	Networks of Accounts and Entities and Customers - Account Focus	Networks of Accounts and Entities and Customers - Account Focus
6	DPGTAAC	Deviation from Peer Group - Total Activity - Account Focus	Deviation from Peer Group - Total Activity - Account Focus
7	FHRECB	Focal High Risk Entity - Correspondent Bank Focus - DTP	Focal High Risk Entity - Correspondent Bank Focus - DTP
8	HRCPCB	High Risk Counter Party - Correspondent Bank Focus - DTP	High Risk Counter Party - Correspondent Bank Focus - DTP
9	PFTSCEE	Patterns of Funds Transfers Between Sending Customers and External Entities - Customer Focus - DTP	Patterns of Funds Transfers Between Sending Customers and External Entities - Customer Focus - DTP
10	CIBSCFPAAAF	CIB Significant Change From Previous Average Activity - Account Focus - DTP	CIB Significant Change From Previous Average Activity - Account Focus - DTP

Table 8-1 (Cont.) DTPTMScenario Batch Details

Sequence	Tasks for DTPTMScenario Batch	Jobs for DTPTMScenario Batch	Pipelines for DTPTMScenario Batch
11	PFTRCEECECF	Patterns of Funds Transfers Between Receiving Customers and External Entities - Customer Focus - DTP	Patterns of Funds Transfers Between Receiving Customers and External Entities - Customer Focus - DTP
12	HUBSPOKECU	Hub and Spoke - Customer Focus - DTP	Hub and Spoke - Customer Focus - DTP
13	CleanDPTTempData	CleanDPTTempData	CleanDPTTempData
14	EndBatch	Not Applicable	Not Applicable

Table 8-2 DTPTMScenario_Monthly

Sequence	Tasks for DTPTMScenario Batch	Jobs for DTPTMScenario Batch	Pipelines for DTPTMScenario Batch
1	StartBatch	Not Applicable	Not Applicable
2	PGADDAC	Peer Group ML Anomaly Detection One Class SVM Debit	Peer Group ML Anomaly Detection One Class SVM Debit
3	PGADCAC	Peer Group ML Anomaly Detection One Class SVM Credit	Peer Group ML Anomaly Detection One Class SVM Credit
4	EndBatch	Not Applicable	Not Applicable

8.2 Purge Batch Details

Purge batches are used when your batch has not executed successfully to purge the data and execute the batch again.

If your batch has not executed successfully, has been explicitly interrupted or canceled, or was put on hold during the execution process, then you can purge the data and execute the batch again.

Note

Purge batches are not a regular required activity. They should only be used when other methods to re-run the batches are not successful.

To purge the data which was partially processed during the interrupted or canceled batch execution, follow the steps described in the following table.

Note

Purge Batches should be run in the reverse order of batch execution.

1. Ingestion
2. DTPTMScenario
3. CMIngestion
4. AMLtoCaseManagement

Then the purge batch order should be:

1. AMLtoCaseManagement
2. CMIngestion
3. DTPTMScenario
4. Ingestion

Table 8-3 Executing Purge Batches

Failed Batch Name	Purge Batch	Steps to Purge	Additional Considerations
DTPTMScenario	PurgeDTPTMTTables	1. Run the PurgeDTPTMTTables batches by providing the failed batchrunID as input parameter in the field \$FCCBATCHRUNID\$. 2. Execute the Ingestion batch for the batch date.	—

PurgeDTPTMTTables Batch Details

The following table provides the tasks that are configured for the PurgeDTPTMTTables batch. These tasks must be executed in the following order:

Table 8-4 PurgeDTPTMTTables Batch Details

Sequence	Tasks for PurgeDTPTMTTables Batch	Jobs for PurgeDTPTMTTables Batch	Pipelines for PurgeDTPTMTTables Batch
1	StartBatch	Not Applicable	Not Applicable
2	DeleteTMAAlertsTable	Purge TM Alerts Tables	Purge TM Alerts Tables
3	EndBatch	Not Applicable	Not Applicable

PurgeAMIngestionTables Batch Details

The following table provides the tasks that are configured for the PurgeAMIngestionTables batch. These tasks must be executed in the following order:

Table 8-5 PurgeAMIngestionTables Batch Details

Sequ ence	Tasks for PurgeAMIngestionTables Batch	Jobs for PurgeAMIngestionTables Batch	Pipelines for PurgeAMIngestionTables Batch
1	StartBatch	Not Applicable	Not Applicable
2	DeleteAMTable	Delete Business Data	Delete Business Data
3	EndBatch	Not Applicable	Not Applicable

 Note

There are no Out of the Box data pipelines associated with DTP.

9

Administrative Tasks

Certain tasks are frequently performed by Supervisor or Administrator users.

This section tells how to perform the following administrative tasks:

- [Viewing Audit History](#)
- [Creating Focus Types](#)
- [Creating Event Types](#)

9.1 Viewing Audit History

The Audit History provides a record of changes made to pipelines or threshold configuration.

For example, changing a pipeline name, adding or modifying widgets in the pipeline, creating or deleting a threshold set, changing threshold set configurations, and so on.

This allows you to view the changes made to a scenario before executing the scenario, and to detect and mitigate the risk of internal employee manipulation, as required by auditors and regulators.

You can also filter the results to show updates made to a specific pipeline since the last tuning cycle or last regulatory exam. If needed, you can export the Audit History data in .csv or .xls format to analyze further.

9.1.1 Accessing Audit History

You can access the Audit History from the Navigation List.

1. Navigate to the Applications landing page.
2. Click the **Navigation Menu**  to access the **Navigation List**. The Navigation List displays the list of modules.
3. Click **Business Processes** and then click **Data Transformation Pipeline** in the Navigation List to view all DTP menu options.
4. Select **DTP Audit Screen**. The Audit History page displays.

The following table describes the columns which display in the Audit History.

Table 9-1 Columns in the Audit History

Column	Description
Component	Type of component the action was taken on. For example, Data Transformation Pipeline or Threshold.
Component Name	Name of the threshold or pipeline the action was taken on. For example, if you are viewing the Audit History for a scenario pipeline, the scenario name will display.

Table 9-1 (Cont.) Columns in the Audit History

Column	Description
Sub Component	Type of sub component the action was taken on. For example, Business Filter, Aggregation, Evaluation, and so on. If there is no sub component, this column will appear blank.
Sub Component Name	Name of the sub component the action was taken on. For example, if a scenario Risk Indicator was updated, the name of the Risk Indicator will display, such as <i>Total of Very High Risk Amount Percentage</i> . If there is no sub component, this column will appear blank.
Action	Type of action that was taken. The DTP Audit History tracks the following types of actions: • Copy: An existing component has been copied with a new name. For example, an existing scenario pipeline is copied and then configured to meet your specific business needs. • Bulk Delete: A widget or pipeline is deleted at the parent level without deleting its underlying parameters. • Delete: A parameter or threshold is deleted. • Edit: A change has been made to an existing component or subcomponent. • Export: A pipeline or threshold set has been downloaded. • Import: A pipeline or threshold set has been imported. • Insert: A new threshold has been added to an existing pipeline.
Current State	The current state of the component which was acted upon. Compare the Current State with the Previous State to see the change which was made.
Previous State	The previous state of the component which was acted upon. Compare the Current State with the Previous State to see the change which was made.
Updated By	User who took the action.
Date & Time	Date and Time the action was taken.

9.1.2 Filtering Audit History

The Filter option allows you to search and narrow down the results of the Audit History.

You can use a combination of these search criteria to quickly find the components you are interested in. If you don't enter any value in any search field, it is equivalent to selecting all the criteria.

To filter the Audit History, follow these steps:

1. In the Audit History page, click **Filter** . The Filter criteria appear on the left-hand-side pane.
2. Select one or more criteria using the drop-down list selectors. You can filter by the following criteria:

- Updated by
 - Action
 - Component
 - Component Name
 - From Date
 - To Date
3. Click **Apply** to filter the Audit History by the selected criteria.
 - Click **Reset** to clear the filter criteria.
 - Click **Close** to remove all filters.

9.1.3 Exporting Audit History

If needed, you can export the Audit History data in .csv or .xls format to analyze further.

Filter the Audit History data as desired, using the steps in [Filtering Audit History](#).

To export the Audit History, follow these steps:

1. In the Audit History page, click **Export** to expand the output options.
2. Select from the following output options:
 - CSV
 - XLS
3. Select a folder to save the exported data.
4. Enter a file name, if desired.
5. Click **Save**. The exported Audit History is saved.

9.2 Creating Focus Types

Organizations can create and configure Focus Types according to their business needs.

A Focus Type describes the main entity on which the analysis, report, or calculation is centered. For example, a focal entity might be a customer whose transactions are being analyzed for suspicious activity. Focusing on the entity of interest ensures the granularity required for regulatory, risk, and business reporting or monitoring is appropriate. Relevant data is aggregated, filtered, or analyzed specifically for that entity.

The Account and Customer focus types are provided out-of-the-box, but you can create additional focus types to meet your organization's business needs.

To create a focus type, follow these steps:

1. Navigate to the Applications landing page.
2. Click the **Navigation Menu** to access the **Navigation List**. The Navigation List displays the list of modules.
3. Click **Application Administration**, then **Data Transformation Pipeline Admin**.
4. Select **Focus Type**. The Focus Type admin page displays with a sortable list of current focus types.



5. Click **Add**. The Add Focus Type pane opens.
6. Enter a **Name** for the Focus Type, such as External Entity. Valid characters include: A-Z a-z '-', with a maximum length of 100 Characters. For example, ABCDef or Abc-Def.
7. Click **Save**. A Focus Type ID is generated for this type and the new focus type is added to the list.

9.3 Creating Event Types

Organizations can create and configure Event Types according to their business needs.

Event Types, such as AML, show the designated classification for the behavior being detected when an event is generated.

To create an event type, follow these steps:

1. Navigate to the Applications landing page.
2. Click the **Navigation Menu** to access the **Navigation List**. The Navigation List displays the list of modules.
3. Click **Application Administration**, then **Data Transformation Pipeline Admin**.
4. Select **Event Type**. The Event Type admin page displays with a sortable list of current event types.



5. Click **Add**. The Add Event Type pane opens.
6. Enter a **Name** for the event type, such as Anti Money Laundering. Valid characters include: A-Z a-z '-', with a maximum length of 100 Characters. For example, ABCDef or Abc Def.
7. Enter a **Code** for the event type, such as AML.
8. Click **Save**. An Event Type ID is generated for this type and the new event type is added to the list.



If you want to delete an Event Type, click **Delete**. A verification message displays. Click **Delete** to remove the event type from the list.

Glossary

Index