



TRACELINK UNIVERSITY

**Home**

**Resources**

**TraceLink University**

## Add Transforms in Integration Catalog

Transforms enable seamless data exchange between businesses and their trade partners by mapping data between external formats and TraceLink's canonical, and from the canonical to the external formats. Owners of the Integration Catalog app can search for, view, and create Transforms.


The Transforms can be categorized as follows based on their accessibility:

- Company - Transforms that are only accessible within a specific company.
- Marketplace - Transforms that are accessible to all companies in the TraceLink network.

Transforms allow you to perform a series of complex tasks using Steps.

## Add and update Transforms

### Create, update and release a Company Transform

1. Select the Main Menu  icon.
2. Select Integration Catalog.
3. Select Transforms in the side menu.

4. Select Company.

5. Select the Add  button. The New Company Transforms page displays.

6. In the **General** section, fill in the following information:

- Transform Name field - **Required**. The unique name of the Transform.
- Input Opus schema field - The schema that defines the required format for an input message.
- Output Opus Schema field - The schema that defines the required format for an output message.
- Description field - **Required**. A description explaining what the Transform does.

7. Select the Save  button.

The screen is directed to the Company Transform Details page with the Transform in the Edit state and with the required sections populated.

8. In the **General** section, the following fields can be edited when the Transform is in Edit status:

- Transform Name field - **Required**. The unique name of the Transform.
- Input Opus schema field - The schema that defines the required format for an input message.
- Output Opus Schema field - The schema that defines the required format for an output message.

9. Description field - **Required**. A description explaining what the Transform does.

10. In the **Version Information** section, fill in the following information:

- Version field – The version number of the Transform. This field is auto populated and read-only.
- Catalog Access Type drop-down – The type of Transform based on the accessibility. This field is auto populated and read-only.
- Input MIME Type field – The type of input file, e.g. `application/xml`.



The format is `application/`.

- Output MIME Type field – The type of output file, e.g. `application/json`.



The format is `application/`.

- B2B Transaction Direction field – Defines whether the transaction is inbound or outbound.
- Outbound File Extension field – Defines the file extension of the output file, e.g. `.json`.

11. Select the Add **+** icon in the Transform Steps section to add a new Step.

In the Transform Steps section, fill in the following fields:

- Step Name field – **Required**. The unique name of the Step.
- Step Details field – A description explaining what the step does.
- Step Type drop-down – The type of map selected for a Step. Valid values are:

- Run Contivo – If you select this option, fill in the following information:
  - Contivo Version drop-down – The version of the Contivo file type.
  - Map Class Name field – The name of the class that is executed from the attached Contivo executable file.
  - Contivo Executable File – The `.jar` file that contains the logic to execute the Transform.
- Run Java – If you select this option, fill in the following information:
  - Class Name drop-down – The name of the class that is executed from the attached Java executable field.
  - Java Class File – The `.class` file that contains the logic to execute the Transform.
- Run JavaScript – If you select this option, fill in the following information:
  - JavaScript File – The `.js` file that contains the logic to execute the Transform.
- Run Transform From Catalog – If you select this option, fill in the following information:
  - Catalog Type drop-down – The version of the Contivo file type.
  - Catalog Entry field – The class name used in the attached Contivo executable file.

12. Select the Move To button at the top of the screen to release the Transform to be accessed by all the users in the company.



By default, the Transform is set to Edit Status unless it is manually changed to Released Status.


The submit status indicator circle is filled in with green to indicate the

Transform is in Released status.

13. Select the Save  button.

The Transform is created with Version as 1.

### **Create a new version for Company Transforms**

1. Select the Main Menu  icon.
2. Select Integration Catalog.
3. Select Transforms in the side menu.
4. Select Company.
5. On the Search Company Transforms screen, select the row of a Transform and select New version.
6. On the New Version side panel, select Apply.



An incremented version of Transform with the *same Transform name* is created.

### **Tips**

- A Transform in Released status cannot be updated. To upgrade a Transform, create a new version.
- A new version can be created for Transforms in Edit and Released status.
- There are 4 Step Types: Run Java(.class), Run Contivo(.jar), Run JavaScrip(.js), and Run Transform From Catalog.

- Each Step is a piece of executable code of any type of file. Each Step is executed sequentially, with the output of one Step serving as the input for the next. For example:
  - Step 1: A Java executable file (.class) executes, generating an output A.
  - Step 2: Output A from Step 1 is used as input for a Contivo (.jar) executable file in Step 2 generating output B.
  - Step 3: Output B from Step 2 is passed to a Transform in Step 3, which may contain one or more additional Steps.
- The total number of cumulative Steps cannot exceed 10.

### **Create, update and promote a Marketplace Transform**

1. Select the Main Menu  icon.
2. Select Integration Catalog.
3. Select Transform in the side menu.
4. Select Marketplace.
5. Select the Add  button. The New Marketplace Transform page displays.
6. In the **General** section, fill in the following information:
  - Transform Name field - **Required**. The unique name of the Transform.
  - Input Opus schema field - The schema that defines the required structure for an input message when creating the transform.
  - Output Opus Schema field - The schema that defines the required structure for an output message when creating the transform.

7. Description field - **Required**. A description explaining what the Transform does.

8. Select the Save  button.

The screen is directed to the Marketplace Transform Details page with the Transform in the Edit state and with the required sections populated.

9. In the **General** section, fill in the following information:

- Transform Name field - **Required**. The unique name of the Transform.
- Input Opus schema field - The schema that defines the required structure for an input message when creating the transform.
- Output Opus Schema field - The schema that defines the required structure for an output message when creating the transform.

10. Description field - **Required**. A description explaining what the Transform does.

11. In the Version Information section, fill in the following information:

- Version field - The version number of the Transform. This field is auto populated and read-only.
- Catalog Access Type drop-down - The type of Transform based on the accessibility. This field is auto populated and read-only.
- Input MIME Type field - The type of input file, e.g. application/xml.

 The format is application/.

- Output MIME Type field - The type of output file, e.g. `application/json`.



The format is `application/`.

- B2B Transaction Direction field - Defines whether the transaction is inbound or outbound.
- Outbound File Extension field - Defines the file extension of the output file, e.g. `.json`.


12. Select the Add **+** icon in the Transform Steps section to add a new Step.

In the Transform Steps section, fill in the following fields:

- Step Name field - **Required**. The unique name of the Step.
- Step Details field - A description explaining what the step does.
- Step Type drop-down - The type of map selected for a Step. Valid values are:
  - Run Contivo - If you select this option, fill in the following information:
    - Contivo Version drop-down - The version of the Contivo file type.
    - Map Class Name field - The name of the class that is executed from the attached Contivo executable file.
    - Contivo Executable File - The `.jar` file that contains the logic to execute the Transform.
  - Run Java - If you select this option, fill in the following information:
    - Class Name drop-down - The name of the class that is executed from the attached Java executable field.
    - Java Class File - The `.class` file that contains the logic to execute the Transform.


- Run JavaScript – If you select this option, fill in the following information:
  - JavaScript File – The .js file that contains the logic to execute the Transform.
- Run Transform From Catalog – If you select this option, fill in the following information:
  - Catalog Type drop-down – The version of the Contivo file type.
  - Catalog Entry field – The class name used in the attached Contivo executable file.

13. Select the Move To button at the top of the screen to release the Transform to be accessed by all the users in the company.

14.  By default, the Transform is set to Edit Status unless it is manually changed to Released Status.


The submit status indicator circle is filled in with green to indicate the Transform is in Released status. The Transform is created with Version Number as 1 in Edit state.

15. Select the Promote button at the top of the screen to release the Transform to be accessed by all the users in the network.

 The status of the Marketplace Transform remains as **Pending Review** after promoting the Transform. Contact TraceLink Support to request approval and promotion. Once approved, the Marketplace Transform transitions to the Released state.

The submit status indicator displays a filled in green circle when the Transform reaches Released state.

## Create a new version for Marketplace Transforms

1. Select the Main Menu  icon.
2. Select Integration Catalog.
3. Select Transforms in the side menu.
4. Select Marketplace.
5. On the Search Marketplace Transforms screen, select the row of a Transform and select New version.
6. On the New Version side panel, select Apply.

An incremented version of Transform with the *same Transform name* is created.

### Tips



- A Transform in Released status cannot be updated. To upgrade a Transform, create a new version.
- A new version can be created for Transforms in Edit and Released status.
- On the Search Marketplace Transforms screen, the status of the incremented version is always displayed as Edit.
- There are 4 Step Types: Run Java(.class), Run Contivo(.jar), Run JavaScript(.js), and Run Transform From Catalog.
  - Each Step is a piece of executable code of any type of file. Each Step is executed sequentially, with the output of one Step serving as the input for the next. For example:
    - Step 1: A Java executable file (.class) executes, generating an

output A.

- Step 2: Output A from Step 1 is used as input for a Contivo (.jar) executable file in Step 2 generating output B.
  - Step 3: Output B from Step 2 is passed to a Transform in Step 3, which may contain one or more additional Steps.
- The total number of cumulative Steps cannot exceed 10.

## Search and view all Transforms

### View all Transforms

1. Select the Main Menu  icon.
2. Select Integration Manager.
3. From the Transforms drop-down, select All in the side menu.
4. Select the Filter  button.

In the Filters panel, fill in one or more of the following fields to filter the results:

- Transform Name field - The name of the Transform.
- Version field - The version number of the Transform.
- Status drop-down - The status of the Transform:
  - Edit - The Transform is still in edit mode.
  - Released - The Transform is complete, released, and ready to be executed.

- Pending\_Review - The Transform is promoted and awaiting approval from TraceLink.
- Input MIME Type field - The type of input file, e.g. application/xml.



The format is application/.

- Output MIME Type field - The type of output file, e.g. application/json.



The format is application/.

## 5. Select Apply.

The results will be displayed in a table based on the filter results.

## 6. Select the link on the Transform name from the results table.

### **See the information that displays for each Transform**

- The **General** section displays the following information:
  - Transform Name field - The unique name of the Transform.
  - Input Opus schema field - The schema that defines the required structure for an input message when creating the transform.
  - Output Opus Schema field - The schema that defines the required structure for an output message when creating the transform.
- Description field - A description explaining what the Transform does.

## 7. The Version Information section displays the following information:

- Version field - The version number of the Transform. This field is auto populated and read-only.

- Catalog Access Type field - The type of Transform based on the accessibility. This field is auto populated and read-only.
- Input MIME Type field - The type of input file, e.g. `application/xml`.



The format is `application/`.

- Output MIME Type field - The type of output file, e.g. `application/json`.



The format is `application/`.



- B2B Message Direction field - Defines whether the transaction is inbound or outbound.
- Outbound File Extension field - Defines the file extension of the output file, e.g. `.json`.
- Promotion Status field - The status of the Transform promotion status:
  - `NOT_SUBMITTED` - The Transform is not promoted.
  - `PENDING_REVIEW` - The Transform is submitted to Tracelink and in review.
  - `REJECTED` - The promoted Transform is rejected by Tracelink.
  - `APPROVED` - The promoted Transform is approved and available as Marketplace Transforms.

8. The Transform Steps section displays the following fields:

- Step Name field - The unique name of the Step.

- Step Details field - A description explaining what the step does.
- Step Type - The type of map selected for the step.

### **View Company Transforms**

1. Select the Main Menu  icon.
2. Select Integration Manager.
3. From the Transforms drop-down, select Company in the side menu.
4. Select the Filter  button.

In the Filters panel, fill in one or more of the following fields to filter the results:

- Transform Name field - The name of the Transform.
- Status drop-down - The status of the Transform:
  - Edit - The Transform is still in edit mode.
  - Released - The Transform is complete, released, and ready to be executed.
  - Pending\_Review - The Transform is promoted and awaiting approval from TraceLink.
- Input MIME Type field - The type of input file, e.g. `application/xml`.

 The format is `application/`.

- Output MIME Type field – The type of output file, e.g. application/json.

 The format is application/.

5. Select Apply.

The results will be displayed in a table based on the filter results.


6. Select the link on the Transform name from the results table.

### **See the information that displays for each Transform**

- The **General** section displays the following information:
  - Transform Name field – The unique name of the Transform.
  - Input Opus schema field – The schema that defines the required structure for an input message when creating the transform.
  - Output Opus Schema field – The schema that defines the required structure for an output message when creating the transform.
- Description field – A description explaining what the Transform does.

7. The Version Information section displays the following information:

- Version field – The version number of the Transform. This field is auto populated and read-only.
- Catalog Access Type field – The type of Transform based on the accessibility. This field is auto populated and read-only.
- Input MIME Type field – The type of input file, e.g. application/xml.

 The format is application/.

- Output MIME Type field - The type of output file, e.g. application/json.



The format is application/.

- B2B Transaction Direction field - Defines whether the transaction is inbound or outbound.
- Outbound File Extension field - Defines the file extension of the output file, e.g. .json.

8. The Transform Steps section displays the following fields:

- Step Name field - The unique name of the Step.
- Step Details field - A description explaining what the step does.
- Step Type - The type of map selected for the step.

### **View Marketplace Transforms**

1. (missing or bad snippet)
2. Select Integration Manager.
3. From the Transforms drop-down, select Marketplace in the side menu.

4. Select the Filter  button.

In the Filters panel, fill in one or more of the following fields to filter the results:

- Transform Name field - The name of the Transform.
- Version field - The version number of the Transform.
- Status drop-down - The status of the Transform:

- Edit – The Transform is still in edit mode.
  
- Released – The Transform is complete, released, and ready to be executed.
  
- Pending\_Review – The Transform is promoted and awaiting approval from TraceLink.
  
- Input MIME Type field – The type of input file, e.g. `application/xml`.



The format is `application/`.

- Output MIME Type field – The type of output file, e.g. `application/json`.



The format is `application/`.

## 5. Select Apply.

The results will be displayed in a table based on the filter results.

## 6. Select the link on the Transform name from the results table.

## 7. Select the link on the Transform name from the results table.

### **See the information that displays for each Transform**

- The **General** section displays the following information:
  - Transform Name field – The unique name of the Transform.
  - Input Opus schema field – The schema that defines the required structure for an input message when creating the transform.

- Output Opus Schema field - The schema that defines the required structure for an output message when creating the transform.
- Description field - A description explaining what the Transform does.

8. The Version Information section displays the following information:

- Version field - The version number of the Transform. This field is auto populated and read-only.
- Catalog Access Type field - The type of Transform based on the accessibility. This field is auto populated and read-only.
- Input MIME Type field - The type of input file, e.g. `application/xml`.



The format is `application/`.

- Output MIME Type field - The type of output file, e.g. `application/json`.



The format is `application/`.


- B2B Transaction Direction field - Defines whether the transaction is inbound or outbound.
- Outbound File Extension field - Defines the file extension of the output file, e.g. `.json`.
- Promotion Status field - The status of the Transform promotion status:
  - `NOT_SUBMITTED` - The Transform is not promoted.
  - `PENDING_REVIEW` - The Transform is submitted to Tracelink and in review.

- REJECTED – The promoted Transform is rejected by Tracelink.
  
- APPROVED – The promoted Transform is approved and available as Marketplace Transforms.

9. The Transform Steps section displays the following fields:

- Step Name field – The unique name of the Step.
  
- Step Details field – A description explaining what the step does.
  
- Step Type – The type of map selected for the step.

### **Tips**

- On the Search All Transforms screen, the Marketplace or Company Transform Details screen opens depending on the Catalog Access Type. If the selected Transform is Marketplace, then the Marketplace Transform Details screen opens and if the selected Transform is Company, then the Company Transform Details screen opens.
- When on the Company Transform Details screen or Marketplace Transform Details screen, select the Edit  button to update the changes.