

Snowflake Invoke Stored Procedure Activity

Introduction

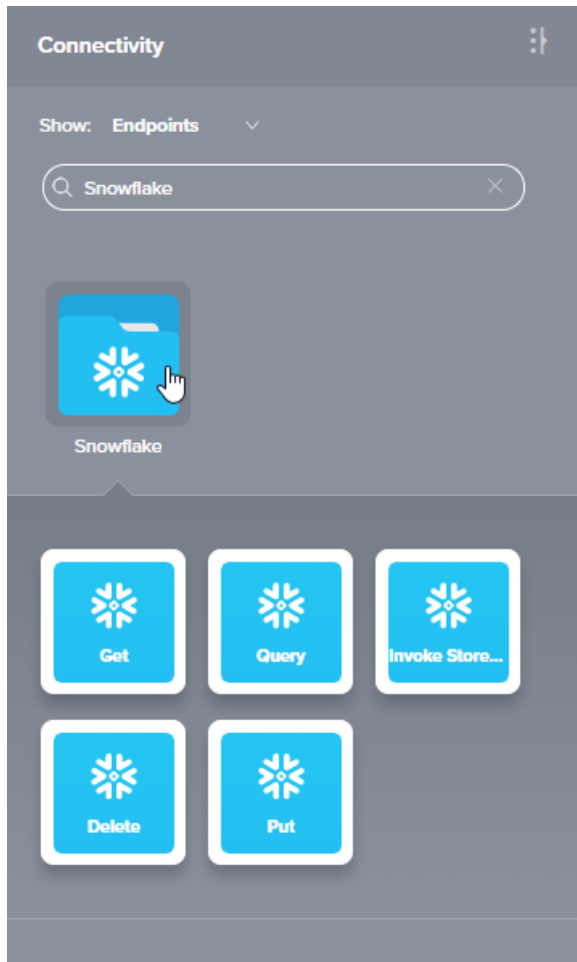
A Snowflake Invoke Stored Procedure activity lets you take advantage of Snowflake's extended features and to use stored procedures created in Snowflake, and is intended to be used as a target to consume data in an operation. Information on Snowflake stored procedures is available from Snowflake at [Stored Procedures](#) and [Stored Procedure Management & Usage](#). After configuring a Snowflake connection, you can configure as many Snowflake activities as you like for each Snowflake connection.

Creating a Snowflake Activity

From the design canvas, open the **Connectivity** tab of the design component palette:



Use the **Show** dropdown to filter on **Endpoints**, and then click the Snowflake connection block to display activities that are available to be used with a Snowflake connection:



To create an activity that can be configured, [drag the activity block](#) from the palette to the operation.

For more information about the parts of an operation and adding activities to operations, see [Operation Creation and Configuration](#).

Accessing Menu Actions

After a Snowflake activity has been added to an operation, menu actions for that activity are accessible from the project pane in either the **Workflows** or the **Components** tabs, and from the design canvas:

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- **Project Pane:** In the **Workflows** or **Components** tab of the project pane, hover over an activity name and click the actions menu icon to open the actions menu.
- **Design Canvas:** Within the operation, click an existing activity block to open the actions menu.

Each of these menu actions is available:

- **View/Edit:** Opens the activity configuration screen for you to configure the activity. For details, see *Configuring a Snowflake Invoke Stored Procedure Activity* later on this page.
- **Delete:** Permanently deletes the activity. A message asks you to confirm that you want to delete the activity.
- **Rename:** Positions the cursor on the activity name in the project pane for you to make edits.
- **View Dependencies:** Changes the view in the project pane to display any other parts of the project that the activity is dependent on.
- **Remove:** Removes the activity as a step in the operation without deleting it from the project. (This is available only from the actions menu on the design canvas.) When you remove an activity that is adjacent to a transformation and schemas are provided within that activity, the schemas are no longer referenced by the transformation. Removed components can be accessed or permanently deleted from the project pane.
- **Deploy:** Deploys the activity and any components it is dependent on.
- **Configurable Deploy:** Opens the deployment screen, where you can select project components to deploy.
- **Add to Group:** Opens a prompt to create a new custom group or to add the component to an existing group.
- **Duplicate:** Creates a copy of the activity as a new, unreferenced component. On creating the component copy, the cursor is positioned on the component name within the project pane for you to rename the component.

Configuring a Snowflake Invoke Stored Procedure Activity


Follow these steps to configure a Snowflake Invoke Stored Procedure activity:

- Step 1: Select a Stored Procedure
- Step 2: Review Data Schema

Step 1: Select a Stored Procedure

The screenshot shows the configuration interface for a Snowflake Invoke Stored Procedure activity. It includes a 'NAME' field, a search box for selecting a stored procedure, and a table with the following data:

Name	Type
JB_PROC	Stored Procedure

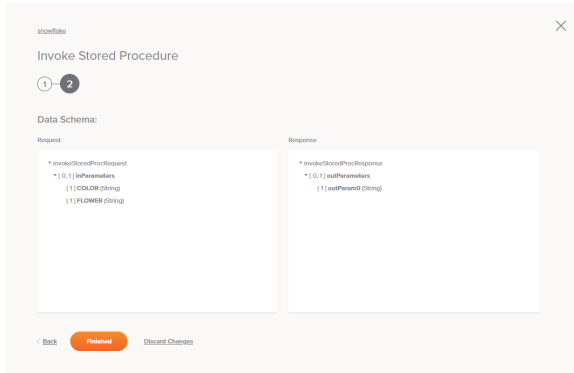
- **Name:** Enter a name to use to identify the Snowflake Invoke Stored Procedure activity. The name must be unique for each Invoke Stored Procedure activity and must not contain forward slashes (/) or colons (:).
- **Select a Stored Procedure:** This section displays the stored procedures available in the Snowflake endpoint. When reopening an existing activity configuration, only the selected stored procedure is displayed instead of reloading the entire stored procedure list.
 - **Selected Stored Procedure:** After a stored procedure is selected, it will be listed here.
 - **Search:** Enter any part of the stored procedure name into the search box to filter the list of stored procedures. The search is not case-sensitive. If the stored procedures are already displayed in the list, the results will be filtered in real time with each keystroke. To reload stored procedures from the endpoint when searching, enter search criteria and then refresh, as described below.
 - **Refresh:** Click the refresh icon  or the word **Refresh** to reload stored procedures from the Snowflake endpoint. This may be useful if you have recently added stored procedures to the Snowflake instance. This action refreshes all metadata used to build the list of stored procedures displayed in the configuration.
 - **Selected Stored Procedure:** Within the list, click anywhere on a row to select a stored procedure. Only one stored procedure can be selected. The information available for each stored procedure is fetched from the Snowflake endpoint:

- **Name:** The stored procedure name from Snowflake.
- **Type:** The stored procedure type from Snowflake.

TIP: If the list does not populate with available stored procedures, the [Snowflake connection](#) may not be successful. Ensure you are connected by reopening the connection and retesting the credentials.

- **Save & Exit:** If enabled, click to save the configuration for this step and close the activity configuration.
- **Next:** Click to continue to the next step and temporarily store the configuration. The configuration will not be saved until you click the **Finished** button on the last step.
- **Discard Changes:** After making changes, click to close the configuration without saving changes made to any step. A message asks you to confirm that you want to discard changes.

Step 2: Review Data Schema



- **Data Schema:** The request and response data schemas for Snowflake will be displayed. If the operation uses a transformation, the data schemas will be displayed again later during the transformation mapping process, where you can map to target fields using source objects, scripts, variables, custom values, and more.

The data schemas will be determined by the stored procedure that is being invoked.

- **Back:** Click to return to the previous step and temporarily store the configuration.
- **Finished:** Click to save the configuration for all steps and close the activity configuration.
- **Discard Changes:** After making changes, click to close the configuration without saving changes made to any step. A message asks you to confirm that you want to discard changes.

Next Steps

After configuring a Snowflake Invoke Stored Procedure activity, complete the configuration of the operation by adding and configuring other activities, transformations, or scripts as operation steps. You can also configure an operation's operation settings, which include the ability to chain operations together that are in the same or different workflows.

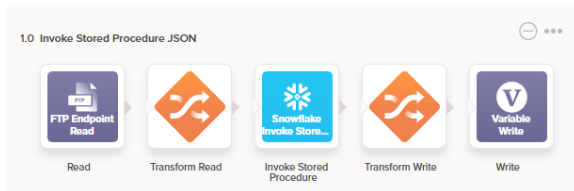
Snowflake Invoke Stored Procedure activities can be used as a target with these operation patterns:

- [Transformation Pattern](#)
- [Two-Transformation Pattern](#) (as the first or second target)

Other patterns are not valid using Snowflake Invoke Stored Procedure activities. See the validation patterns on the [Operation Validity](#) page.

A typical use case is to use a Snowflake Invoke Stored Procedure activity in the *Two-Transformation Pattern*.

In this example, an FTP Read activity reads from an FTP endpoint; it passes data to the first transformation (*Transform Read*), which creates a request structure; that request is passed to the Snowflake Invoke Stored Procedure activity. The second transformation (*Transform Write*) receives the response structure, which is then written by a Variable Write activity (*Write*) to a variable:



To use the activity with scripting functions, write the data to a temporary location and then use that temporary location in the scripting function.

When ready, deploy and run the operation and validate behavior by checking the [operation logs](#).