Create Snowflake Connections

This section describes how to create a connection to your Snowflake datawarehouse.

- Snowflake is an S3-based data warehouse service hosted in the cloud. Auto-scaling, automatic failover, and other features simplify the deployment and management of your enterprise's data warehouse. For more information, see *https://www.snowflake.com*.

Pre-requisites

- **S3 base storage layer:** Snowflake access requires installation of Trifacta software in the AWS infrastructure and use of S3 as the base storage layer, which must be enabled. See *Set Base Storage Layer*.

- **Integration:** Your Trifacta instance is connected to an EMR cluster.

  > **NOTE:** EMRFS Consistency View must be enabled.

  See *Configure for EMR*.
- **Deployment:** Trifacta platform is deployed in EC2.
- **PUBLIC schema:** If you do not create an external staging database:
    - A PUBLIC schema is required in your default database.
    - If you do not provide a stage database, then a temporary stage is created for you under the PUBLIC schema in the default database.
- **S3 bucket:** The user-created stage must point to the same S3 bucket as the default bucket in use by Trifacta.
- **Same region:** The Snowflake cluster must be in the same region as the default S3 bucket.

Limitations

- You cannot perform ad-hoc publication to Snowflake.
- SSO connections are not supported.

Create Connection

You can create Snowflake connections through the following methods.

Create through application

Any user can create a Snowflake connection through the application.

Steps:

1. Login to the application.
2. In the menu, click **Settings menu > Settings > Connections**.
3. In the Create Connection page, click the Snowflake connection card.
4. Specify the properties for your Snowflake database connection. The following parameters are specific to Snowflake connections:

> **NOTE:** In Snowflake connections, property values are case-sensitive. Snowflake-related locations are typically specified in capital letters.

Property	Description

Account Name	Snowflake account to use. Suppose your hostname is the following:
	
	 ``` mycompany.snowflakecomputing.com ```
	
	 Your account name is the following:
	
	 ``` mycompany ```

Warehouse	The name of the warehouse to which to connect
Stage	If you have deployed a Snowflake stage for managing file conversion to tables, you can enter its name here. A **stage** is a database object that points to an external location on S3. It must be an external stage containing access credentials. If a stage is used, then this value is typically the schema and the name of the stage. Example value: ``` MY_SCHEMA.MY_STAGE ``` If a stage is not specified, a temporary stage is created using the current user's AWS credentials. > **NOTE:** Without a defined stage, you must have write permissions to the database from which you import. This database is used to create the temporary stage. For more information on stages, see *https://docs.snowflake.net/manuals/sql-reference/sql/create-stage.html*.
Database for Stage	(optional) If you are using a Snowflake stage, you can specify a database other than the default one to host the stage. If no value is specified, then your stage must be in the default database.

For more information, see *Create Connection Window*.

Disable SSL connections

By default, connections to Snowflake use SSL. To disable, please add the following string to your Connect String Options:

```
;ssl=false
```

Save your changes.

Connect through proxy

If you require connection to Snowflake through a proxy server, additional Connect String Options are required. For more information, see *https://docs.snowflake.net/manuals/user-guide/jdbc-configure.html#specifying-a-proxy-server-in-the-jdbc-connection-string* .

Create via API

For more information, see *API Connections Create v4*.

Testing

Import a dataset from Snowflake. Add it to a flow, and specify a publishing action back to Snowflake. Run a job. For more information, see *Verify Operations*.