# Copilot

Certainly! Let's break down the steps for setting up roles and permissions in Unity Catalog in Azure Databricks, creating a Snowflake connection, and creating a Unity Catalog with the specified connection:

1. **Roles and Permissions Setup in Unity Catalog:**
   * Unity Catalog allows you to control access to data and other objects. You can set access controls using Catalog Explorer, SQL statements, Unity Catalog REST API, or Terraform.
   * Users initially have no access to data in a metastore. Access can be granted by metastore admins, object owners, or catalog/schema owners.
   * Admin privileges are available for Azure Databricks account admins, workspace admins, and metastore admins[**1**](https://docs.databricks.com/en/data-governance/unity-catalog/manage-privileges/index.html).
   * Object ownership is important; owners have all privileges on the object and can grant permissions to other principals.
   * Unity Catalog privileges can be granted by metastore admins, object owners, or catalog/schema owners[**2**](https://learn.microsoft.com/en-us/azure/databricks/data-governance/unity-catalog/create-catalogs).
   * Privileges are hierarchical and inherited downward. For example, granting a privilege on the catalog automatically grants it to all objects within the catalog[**3**](https://docs.databricks.com/en/data-governance/unity-catalog/manage-privileges/index.html)[**16**](https://learn.microsoft.com/en-us/azure/databricks/data-governance/unity-catalog/best-practices).
2. **Create a Snowflake Connection:**
   * To create a Snowflake connection, you can use SQL commands. The CREATE CONNECTION statement allows you to define a new connection in your Snowflake account.
   * For example:
   * You can also create a secondary connection as a replica of a primary connection:
   * Make sure you have the necessary permissions and configure the connection details[**4**](https://learn.microsoft.com/en-us/azure/databricks/data-governance/unity-catalog/manage-privileges/).
3. **Create Unity Catalog with the Snowflake Connection:**
   * Ensure your Azure Databricks workspace is enabled for Unity Catalog. If it was automatically enabled, you'll have an automatically-provisioned Unity Catalog metastore.
   * Workspace admins are default owners of the workspace catalog, which is bound to your workspace.
   * You can create a catalog using SQL commands or Catalog Explorer:
   * The cluster running the notebook must use a Unity Catalog-compliant access mode[**5**](https://learn.microsoft.com/en-us/azure/databricks/data-governance/unity-catalog/create-catalogs)[**15**](https://registry.terraform.io/providers/databrickslabs/databricks/latest/docs/guides/unity-catalog).

Remember to adjust the commands and details according to your specific environment and requirements. If you need further assistance, feel free to ask! 😊

Source(s)

1. [Admin privileges in Unity Catalog - Azure Databricks](https://learn.microsoft.com/en-us/azure/databricks/data-governance/unity-catalog/manage-privileges/admin-privileges)

2. [Unity Catalog privileges and securable objects - Databricks](https://docs.databricks.com/en/data-governance/unity-catalog/manage-privileges/privileges.html)

3. [Manage privileges in Unity Catalog | Databricks on AWS](https://docs.databricks.com/en/data-governance/unity-catalog/manage-privileges/index.html)

4. [CREATE CONNECTION | Snowflake Documentation](https://docs.snowflake.com/en/sql-reference/sql/create-connection)

5. [Create and manage catalogs - Azure Databricks | Microsoft Learn](https://learn.microsoft.com/en-us/azure/databricks/data-governance/unity-catalog/create-catalogs)

6. [Manage privileges in Unity Catalog - Azure Databricks](https://learn.microsoft.com/en-us/azure/databricks/data-governance/unity-catalog/manage-privileges/)

7. [Manage Unity Catalog permissions in Catalog Explorer - Azure Databricks ...](https://learn.microsoft.com/en-us/azure/databricks/catalog-explorer/manage-permissions)

8. [Unity Catalog Data Permissions Tour | Databricks](https://www.databricks.com/resources/demos/tours/governance/unity-catalog-data-permissions-and-external-locations)

9. [HOW TO: Create IICS Snowflake connection - Informatica](https://knowledge.informatica.com/s/article/HOW-TO-Create-IICS-Snowflake-connection)

10. [Connect to Snowflake from Visual Studio using the .NET Connector](https://community.snowflake.com/s/article/Connect-to-Snowflake-from-Visual-Studio-using-the-NET-Connector)

11. [Connecting to Snowflake with the Python Connector](https://docs.snowflake.com/en/developer-guide/python-connector/python-connector-connect)

12. [Using the Python Connector | Snowflake Documentation](https://docs.snowflake.com/en/developer-guide/python-connector/python-connector-example)

13. [Set up and manage Unity Catalog - Azure Databricks](https://learn.microsoft.com/en-us/azure/databricks/data-governance/unity-catalog/get-started)

14. [Setting up Unity Catalogs in Databricks - bookshelf.erwin.com](https://bookshelf.erwin.com/bookshelf/public_html/12.5/Content/User%20Guides/erwin%20Help/Setting%20up%20Unity%20Catalogs%20in%20Databricks.html)

15. [Deploying pre-requisite resources and enabling Unity Catalog](https://registry.terraform.io/providers/databrickslabs/databricks/latest/docs/guides/unity-catalog)

16. [Unity Catalog best practices - Azure Databricks | Microsoft Learn](https://learn.microsoft.com/en-us/azure/databricks/data-governance/unity-catalog/best-practices)

17. [Manage privileges in Unity Catalog | Databricks on Google Cloud](https://docs.gcp.databricks.com/en/data-governance/unity-catalog/manage-privileges/index.html)