

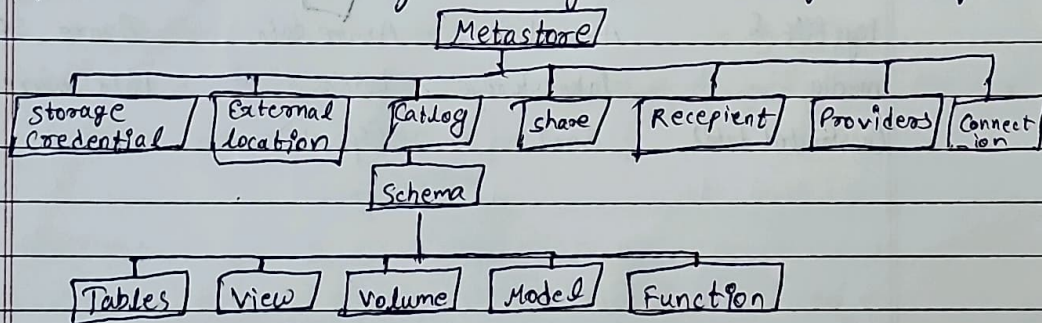
Unity Catalog

It provides centralised access control, auditing, lineage and data recovery capabilities across Azure Databricks workspace

Key features of Unit Catalog

Define once, S

- Define Once, Secure everywhere: It offers a single place to administer data access policies that apply across all workspace
- Standard-complaint security model: It's security model is based on standard ANSI SQL and allows administration to grant permissions in their existing data lake using familiar syntax, at the level of catalogs, databases, tables and views.
- Built-in auditing and lineage: It automatically captures user-level audit logs that record access to your data. Unit catalog also captures lineage data that tracks how data assets are created and used across all languages
- Data discovery: It lets you tag and document data assets and provides a search interface to help data consumers find data.
- System tables: It lets you easily access and query your accounts operational data, including audit logs, billable usage & lineage.



Managed tables:-

Default way to create tables in unity catalog.
Unity catalog manages the files layout and lifecycle for these tables.

External tables:-

whose data lifecycle and file layout are not managed by Unity catalog. large amount of existing data.

The Unity Catalog Object model:-

In Unity Catalog, the hierarchy of primary data object flows from the metastore to table of volume.

→ Metastore:- The top-level container for metadata. Each metadata exposes a three-level namespace that organises your data.

→ Catalog:- The first layer of the object hierarchy used to organize your data ^{as} sets.

→ Schema:- Also known as databases, schemas are the second layer of object hierarchy and contain tables and views.

→ Tables & Views & Volumes:- At the lowest level in the data set hierarchy are the tables, views and volumes. Volumes provide governance for non-tabular data.

→ Models:- Although they are not strictly speaking, data assets registered models can also be managed in unity catalog and reside at the lowest level in the object hierarchy.