Relational Entities on Databricks

Learning Objectives

- Databases
- Tables
- The impact of the LOCATION keyword

Database

- Databases = Schemas in Hive metastore

- CREATE DATABASE db_name
- CREATE SCHEMA db_name

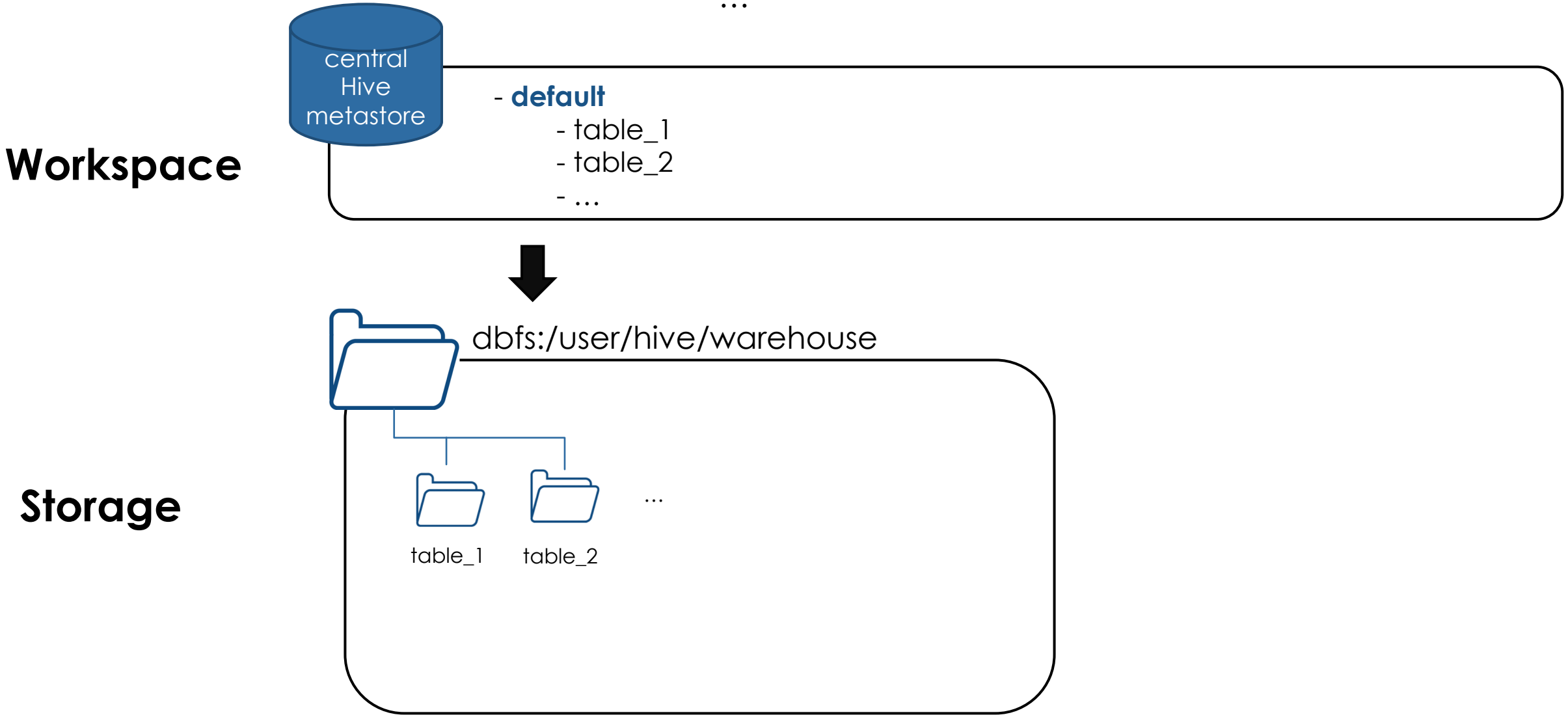
Hive metastore

- repository of metadata
  - Databases
  - Tables
  - …

CREATE TABLE table1;

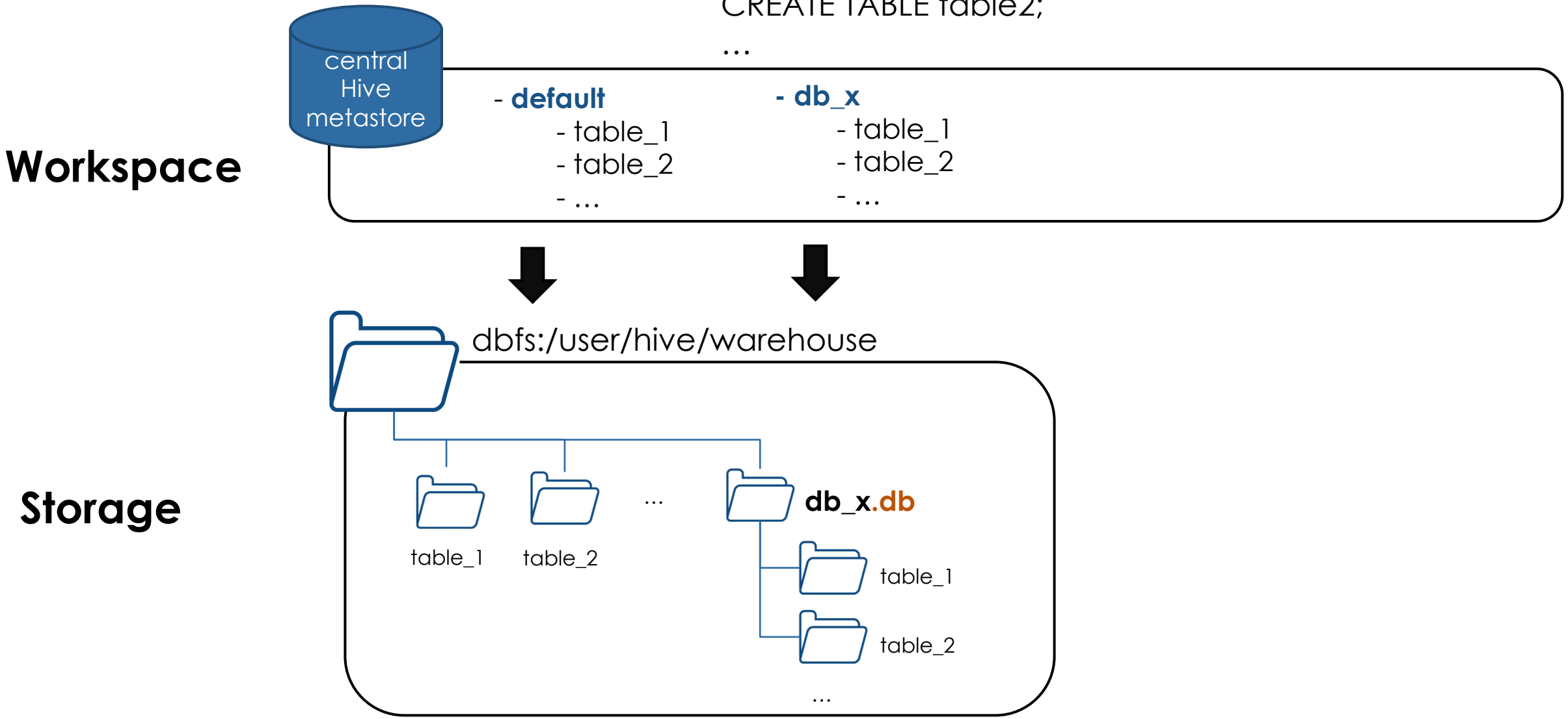
CREATE TABLE table2;

…



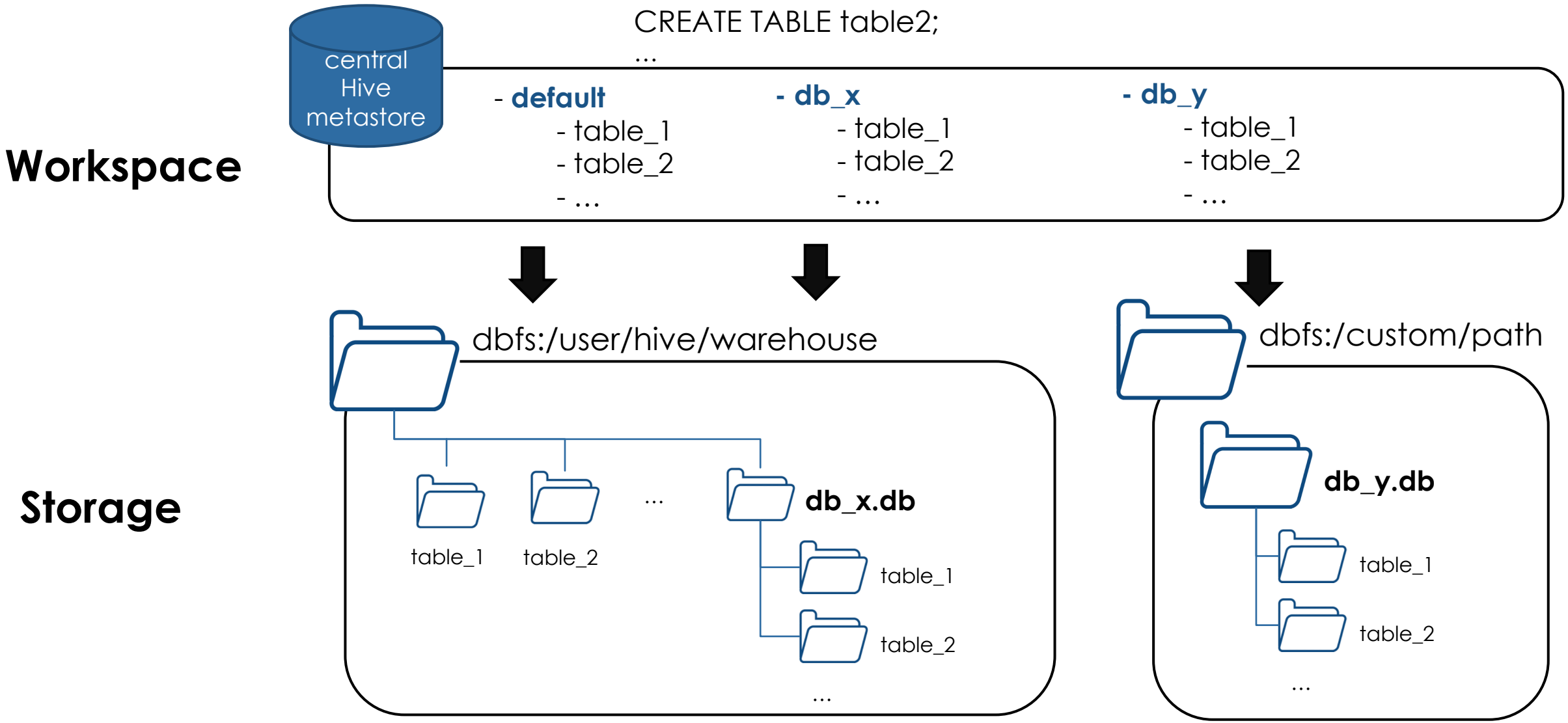
CREATE SCHEMA db_x

USE db_x;
CREATE TABLE table1;
CREATE TABLE table2;
…



```
CREATE SCHEMA db_y
LOCATION 'dbfs:/custom/path/db_y.db'

USE db_y;
CREATE TABLE table1;
CREATE TABLE table2;
...
```



Tables

Manged tables

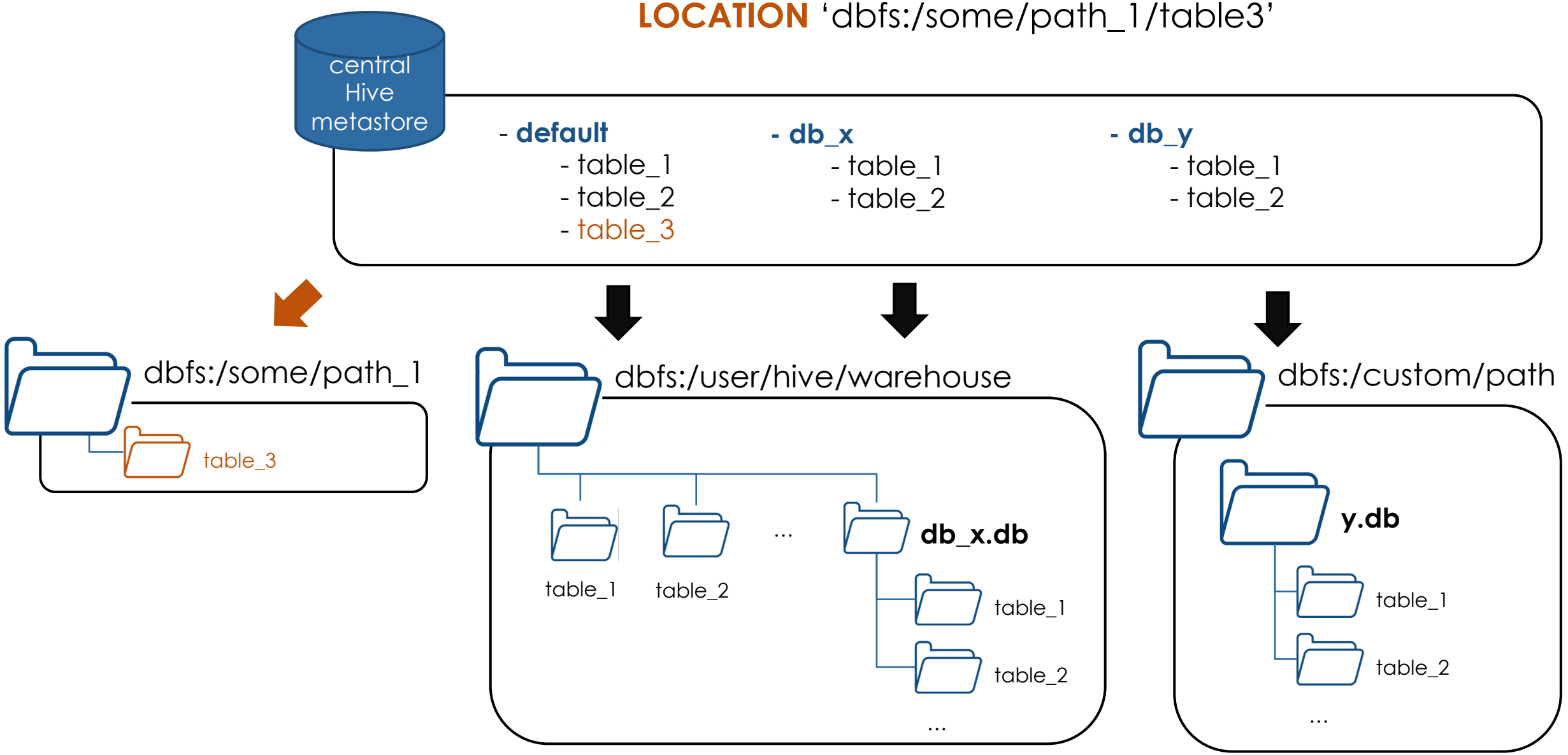
- Created under the database directory
  - CREATE TABLE table_name
- Dropping the table, delete the underlying data files

External tables

- Created outside the database directory
  - CREATE TABLE table_name **LOCATION** 'path'
- Dropping the table, will **Not** delete the underlying data files

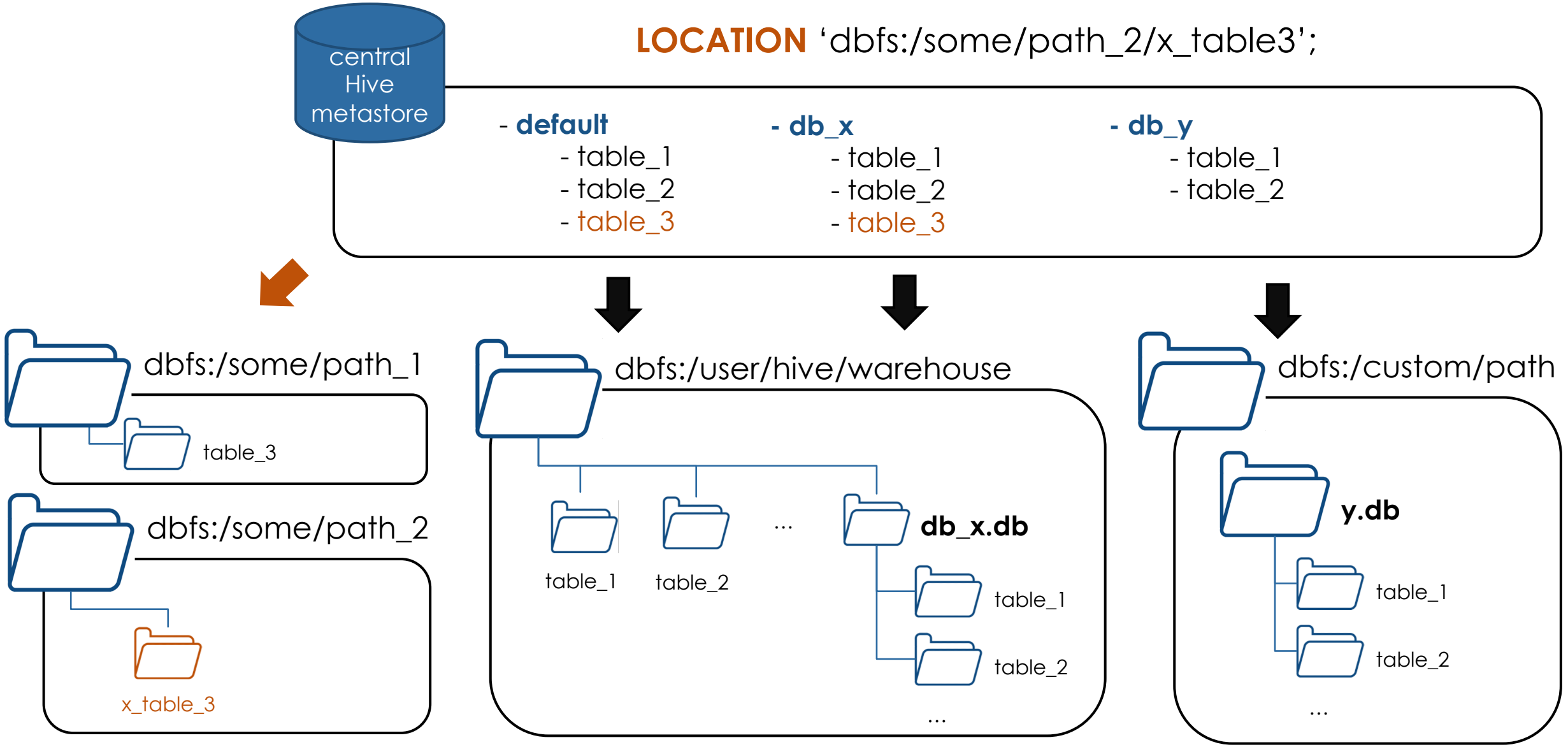
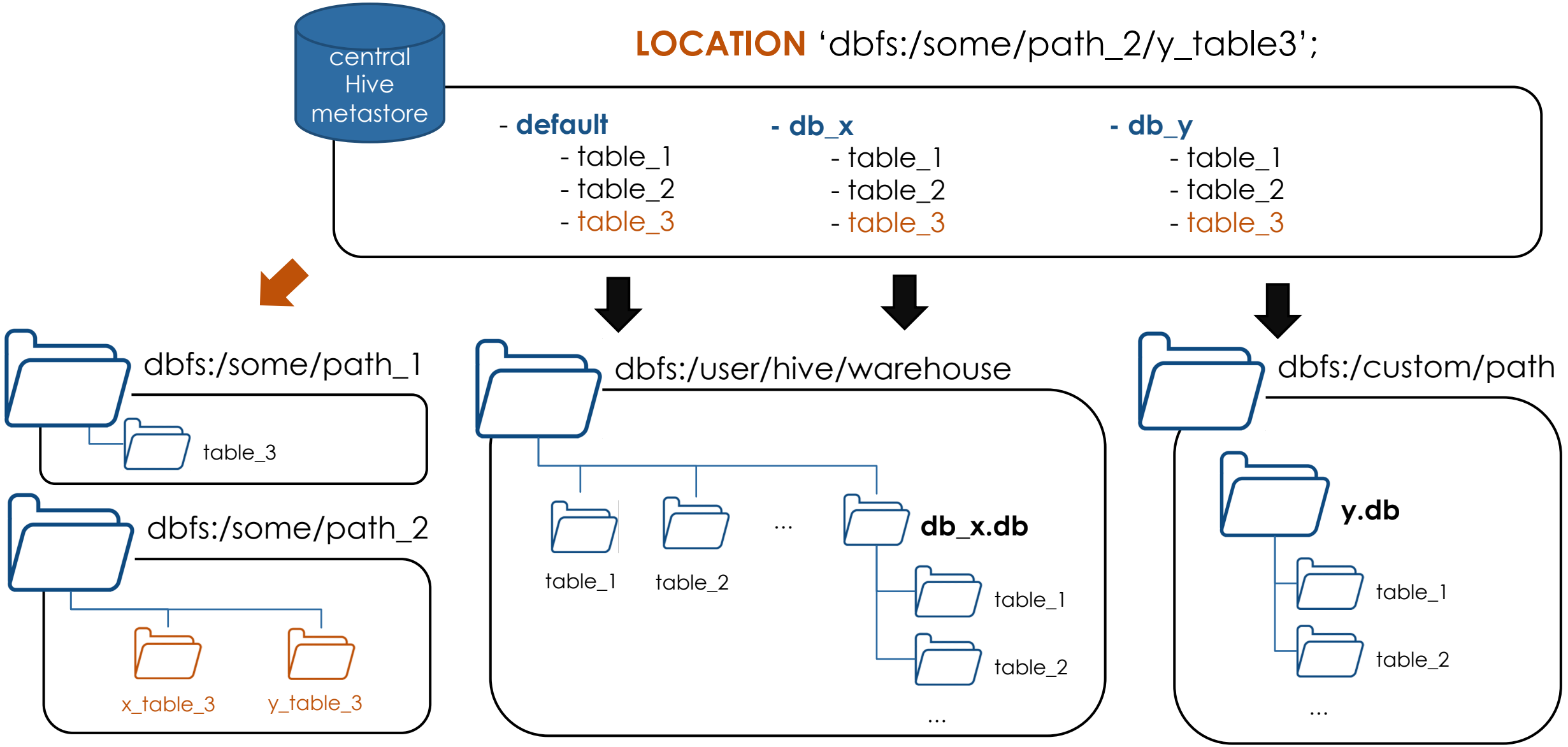
CREATE TABLE table3

LOCATION 'dbfs:/some/path_1/table3'



```
USE db_x;

CREATE TABLE table3
LOCATION 'dbfs:/some/path_2/x_table3';
```



```
USE db_y;

CREATE TABLE table3
LOCATION 'dbfs:/some/path_2/y_table3';
```