

Table Types

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Types of Tables

Snowflake supports three types of tables

1. Permanent tables
2. Transient tables
3. Temporary tables

Permanent Tables

- Default table type in Snowflake
- These are the regular and common tables
- Tables exists until we drop them explicitly
- Time travel retention period is 0-90 days depends on Snowflake edition
- 7 days of fail-safe period
- Syntax to create Permanent table is

CREATE TABLE TABLE_NAME();

Transient Tables

- Similar to Permanent tables but with 1 day retention period
- No fail-safe period
- Tables exists until we drop them explicitly
- Useful when data protection is not required
- Defining stage tables as Transient is best practice
- Syntax to create Transient table is

```
CREATE TRANSIENT TABLE TABLE_NAME();
```

Temporary Tables

- Table exists only within the session
- Once the session ends, table gets dropped completely and is not recoverable.
- They are not visible to other users or sessions
- 1 day retention period
- No fail-safe period
- Useful for development work
- Can be used in stored procedures for intermediate data storing
- Syntax to create Temporary table is

CREATE TEMPORARY TABLE TABLE_NAME();

Points to Remember

- We can't convert any type of table to other type
- We can create Transient databases and Transient schemas
- Tables created under Transient databases/schemas are by default Transient
- We can create a temporary table with same name as Perm/Tran table. If we query with that table name, it fetches data from Temporary table in that session.
- How to find the table type?

Look at the '*Kind*' field in SHOW TABLES properties

Comparison of Tables

Table Type	Persistence	Time-Travel Retention period in days	Fail-Safe period in days
Temporary	Until session is active	0 or 1 (default is 1)	0
Transient	Until explicitly dropped	0 or 1 (default is 1)	0
Permanent (Standard Edition)	Until explicitly dropped	0 or 1 (default is 1)	7
Permanent (Enterprise and higher)	Until explicitly dropped	0 to 90 (default is 1, can be modified)	7

Thank You