

Target:

- Hide/Show (toggle) the properties panel for databases and database objects
- Drill into databases and database objects using hyperlinked name labels.
- Navigate to view database and database object privileges.
- Identify current database, object, and schema using the breadcrumb trail.

Role : SYSADMIN, 3 DBs in the system

Databases				
<div><div><div><div></div><div>Create...</div></div><div><div></div><div>Clone...</div></div><div><div></div><div>Drop...</div></div><div><div></div><div>Transfer Ownership</div></div></div></div>				
<div><div><div>Search Databases</div></div><div>3 databases</div></div>				
Database	Origin	↓ Creation Time	Owner	Comment
SNOWFLAKE_SAMPLE_DATA	SFC_SAMPLES.SA...	4:39 PM	ACCOUNTADMIN	TPC-H, OpenWeatherMap, etc
DEMO_DB		4:39 PM	SYSADMIN	demo database
UTIL_DB		4:39 PM	SYSADMIN	utility database

After selecting and hovering the properties panel slides in:

Databases					Last refreshed 12:34:58 AM	
<div><div><div><div></div><div>Create...</div></div><div><div></div><div>Clone...</div></div><div><div></div><div>Drop...</div></div><div><div></div><div>Transfer Ownership</div></div></div></div>						
<div><div><div>Search Databases</div></div><div>1/3 databases</div></div>						
Database	Origin	↓ Creation Time	Owner			
SNOWFLAKE_SAMPLE_DATA	SFC_SAMPLES.SA...	4:39 PM	ACCOUNTADMIN	TI		
DEMO_DB		10/14/2020, 4:39 PM	SYSADMIN	dr		
UTIL_DB		4:39 PM	SYSADMIN	ut		

DEMO_DB

Owner

Grant Privileges

Privileges granted by role SYSADMIN

CREATE SCHEMA and 1 in

PRIVILEGE_CLAUSE GRANTEE_NAME

PUBLIC

Edit

Drilling into the database,list of tables in SNOWFLAKE_SAMPLE_DATA database:

Databases > SNOWFLAKE_SAMPLE_DATA						
<div>Tables Views Schemas Stages File Formats Sequences Pipes</div>						
<div><div><div><div></div><div>Create...</div></div><div><div></div><div>Create Like...</div></div><div><div></div><div>Clone...</div></div><div><div></div><div>Load Data...</div></div><div><div></div><div>Drop...</div></div><div><div></div><div>Transfer Ownership</div></div></div></div>						
Table Name	Schema	Creation Time ▼	Owner	Rows	Size	Comment
HOURLY_16_TOTAL	WEATHER	2/23/2019, 1:00:53 ...		220.4M	284.6GB	
HOURLY_14_TOTAL	WEATHER	2/23/2019, 12:59:31...		321.2M	509.9GB	
DAILY_14_TOTAL	WEATHER	2/23/2019, 12:59:0...		26.6M	14.1GB	
WEATHER_14_TOTAL	WEATHER	2/23/2019, 12:58:5...		321.2M	12.5GB	
DAILY_16_TOTAL	WEATHER	2/23/2019, 12:25:3...		247.8M	113.5GB	
LINEITEM	TPCH_SF001	2/22/2019, 2:40:36 ...		60.2K	1.5MB	
PARTSUPP	TPCH_SF001	2/22/2019, 2:40:36 ...		8K	348.5KB	
NATION	TPCH_SF001	2/22/2019, 2:40:35 ...		25	2KB	

Similar to the DBs, selecting and hovering over the table gives properties panel

Databases > SNOWFLAKE_SAMPLE_DATA Last refreshed 12:28:42 AM

Tables Views Schemas Stages File Formats Sequences Pipes

Create... Create Like... Clone... Load Data... Drop... Transfer Ownership

Table Name	Schema	Creation Time	Owner	Rows
HOURLY_16_TOTAL	WEATHER	2/23/2019, 1:00:53 ...		220.4
HOURLY_14_TOTAL	WEATHER	2/23/2019, 12:59:31...		321.2
DAILY_14_TOTAL	WEATHER	2/23/2019, 12:59:0...		26.6M
WEATHER_14_TOTAL	WEATHER	2/23/2019, 12:58:5...		321.2

HOURLY_16_TOTAL

Grant Privileges

Privileges granted to or inherited by role SYSADMIN

SELECT PRIVILEGE_CLAUSE GRANTEE_NAME PUBLIC

Databases > SNOWFLAKE_SAMPLE_DATA > HOURLY_16_TOTAL (WEATHER)

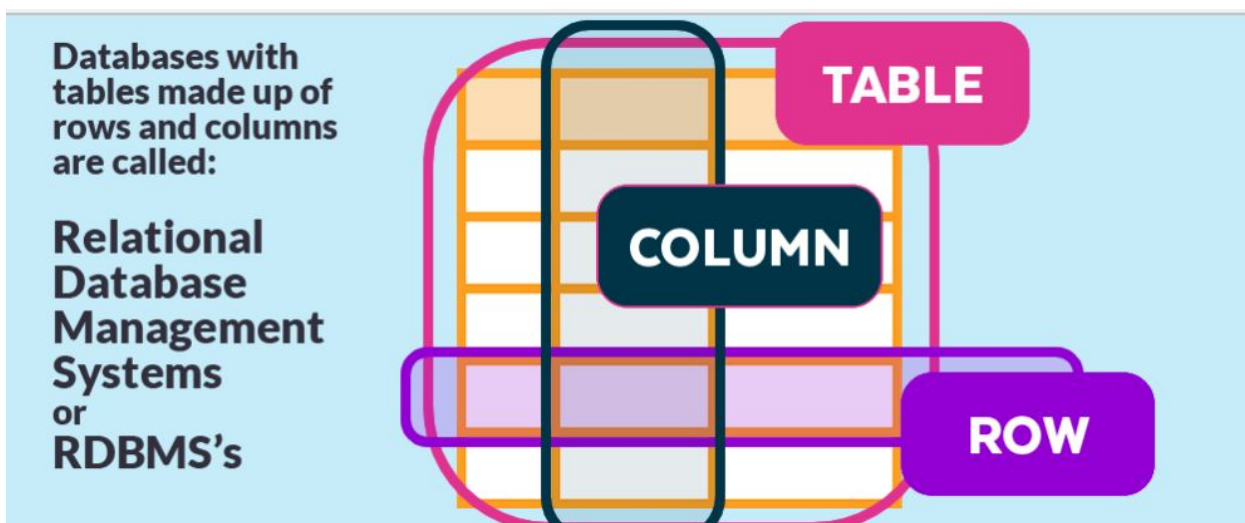
Tables Views Schemas Stages File Formats Sequences Pipes

Load Table

Column Name	Ordinal	Type	Nullable	Default	Comment
V	1	VARIANT	true	NULL	
T	2	TIMESTAMP_NTZ(9)	true	NULL	

Note: Schema in parentheses. WEATHER is the SCHEMA

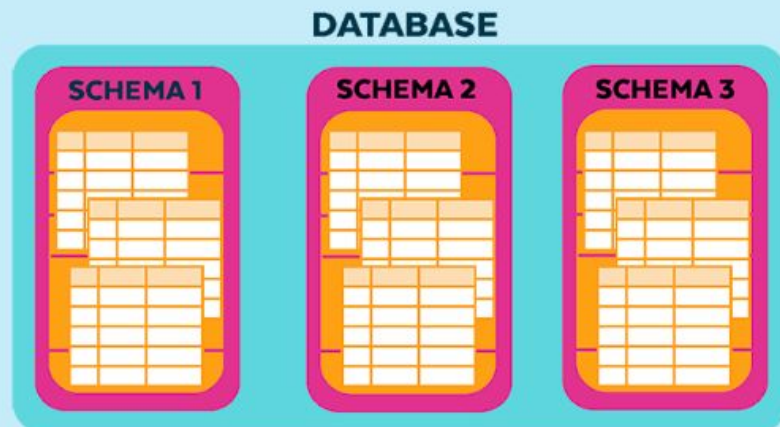
REVIEWING RDBMS:



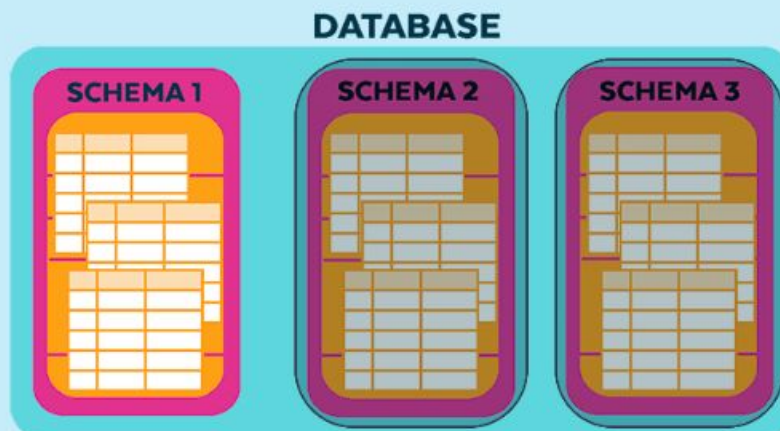
Tables are situated within schemas.

Schemas are organizational buckets.

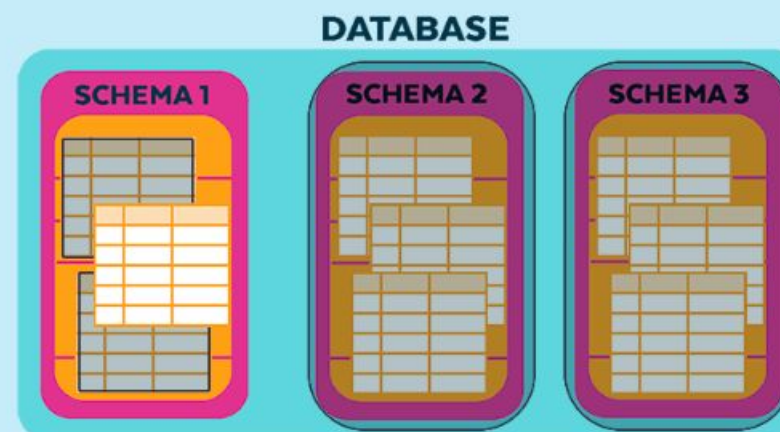
A schema can have multiple tables.



A user might have access to one schema but not other schemas in the same database.



A user might have access to one object in a schema but not others.



You can use the breadcrumb trail for both navigation and orientation.

The breadcrumb trail shows the navigation path: **Databases > SNOWFLAKE_SAMPLE_DATA**. Below this, there are tabs for Tables, Views, Schemas, Stages, and File Formats.

The breadcrumb trail can tell you where you are.

After "Databases >" the first value listed is the name of the database.

We interact with databases and database objects in two ways.

Click on hyperlinks to drill down a level.

From the database name, drill into the tables, views, and schemas.

1

The Databases page shows a table with the following data:

Database	Origin	Creation Time	Owner	Comment
SNOWFLAKE_SAMPLE_DATA	SFC_SAMPLES SA...	12/13/18 3:10:19 PM	ACCOUNTADMIN	TPC-H, OpenWea...
DEMO_DB		12/13/18 3:10:17 PM	SYSADMIN	demo database
UTIL_DB		12/13/18 3:10:03 PM	SYSADMIN	utility database

2

Click on the row background to open a properties panel for the row object.

The panel will allow you to see the security privileges of the object.

Back

Next

Click on the numbers to learn about various features.

The properties panel for SNOWFLAKE_SAMPLE_DATA is displayed, showing the following information:

- Database: SNOWFLAKE_SAMPLE_DATA
- Origin: SFC_SAMPLES SA...
- Grant Privileges: Grant Privileges
- Privileges granted by role ACCOUNTADMIN: USAGE granted to PUBLIC

If your current role is the object's owner, you will see that information in the upper corner of the panel.

4

3

Read about the current privileges granted on the object.

Back

Next

Click on the numbers to learn about various features.

The screenshot shows the Snowflake Databases page. At the top, there's a navigation bar with icons for Databases, Worksheets, History, Account, and Partner Connect. Below the navigation bar, the 'Databases' section is active, showing a table of databases. The table has columns 'Database' and 'Origin'. The first row is 'SNOWFLAKE_SAMPLE_DATA' with origin 'SFC_SAMPLES_SA...'. A callout with the number 5 points to the '+ Grant Privileges' button. Another callout with the number 6 points to the 'Edit' button. A third callout points to the 'Grant Privileges' button, stating 'Grant new privileges by clicking the plus sign.' A fourth callout points to the 'Edit' button, stating 'Edit existing privileges using this [Edit] hyperlink.'

Database	Origin
SNOWFLAKE_SAMPLE_DATA	SFC_SAMPLES_SA...
DEMO_DB	
UTIL_DB	

Buttons: Create..., Clone..., Drop..., Transfer C...

SNOWFLAKE_SAMPLE_DATA Owner

+ Grant Privileges

Privileges granted by role ACCOUNTADMIN

USAGE granted to PUBLIC

Edit

Click on the numbers to learn about various features.

The screenshot shows the Snowflake Databases page. At the top, there's a navigation bar with icons for Databases, Shares, Warehouses, Worksheets, History, Account, and Partner Connect. Below the navigation bar, the 'Databases' section is active, showing a table of databases. The table has columns 'Database' and 'Origin'. The first row is 'SNOWFLAKE_SAMPLE_DATA' with origin 'SFC_SAMPLES_SA...'. A callout with the number 7 points to the row background. A text box below the callout states 'Hide the properties panel by clicking on the row background a second time.'

Database	Origin
SNOWFLAKE_SAMPLE_DATA	SFC_SAMPLES_SA...
DEMO_DB	

Buttons: Create..., Clone..., Drop..., Transfer C...

SNOWFLAKE_SAMPLE_DATA Owner

+ Grant Privileges

Privileges granted by role ACCOUNTADMIN

USAGE granted to PUBLIC

Edit

Once you are within a database, six tabs become available.

Three of these you will recognize as common RDBMS objects.

The screenshot shows the Snowflake Databases page. At the top, there's a navigation bar with icons for Databases, Shares, Warehouses, and Worksheets. Below the navigation bar, the 'Databases' section is active, showing a table of databases. The table has columns 'Database' and 'Origin'. The first row is 'SNOWFLAKE_SAMPLE_DATA' with origin 'SFC_SAMPLES_SA...'. A callout with the number 7 points to the row background. A text box below the callout states 'Hide the properties panel by clicking on the row background a second time.'

Database	Origin
SNOWFLAKE_SAMPLE_DATA	SFC_SAMPLES_SA...
DEMO_DB	

Buttons: Create..., Clone..., Drop..., Transfer C...

SNOWFLAKE_SAMPLE_DATA Owner

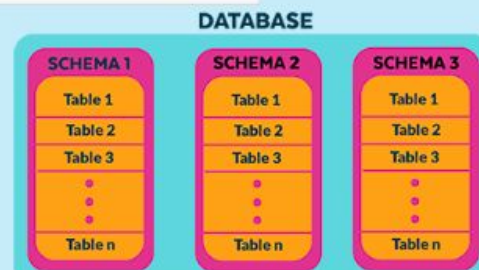
+ Grant Privileges

Privileges granted by role ACCOUNTADMIN

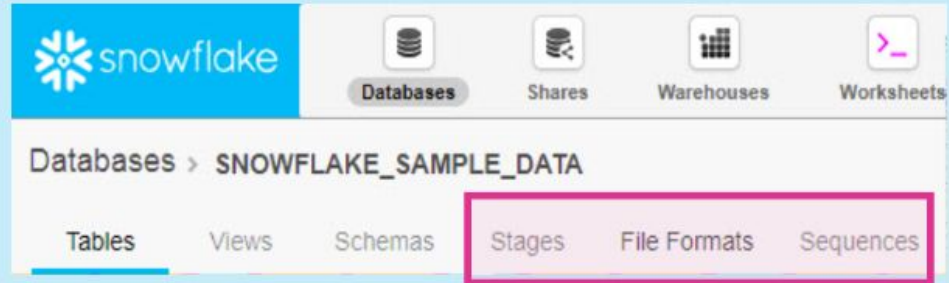
USAGE granted to PUBLIC

Edit

Tables, views and schemas are common objects in nearly every relational database management system.

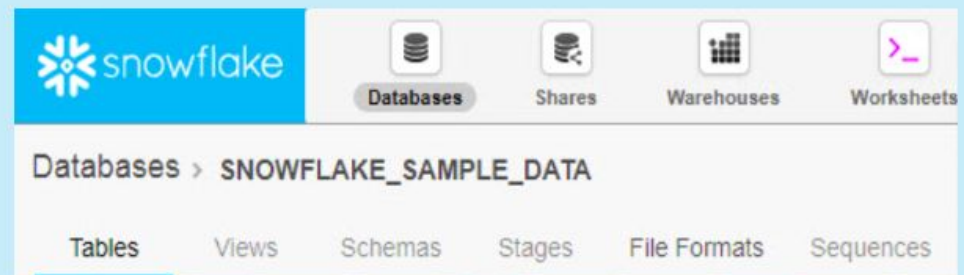


The other three tabs are not wholly new concepts, but they have attributes that require more explanation than this lesson will provide.



Stages, File Formats and Sequences are not as consistent across the various RDBM systems, so we'll cover them more in depth in a later lesson.

The tab highlighting and underlining can also be helpful for orientation.



The blue underline is useful during navigation.

Where Am I?

Use clues in the breadcrumb and tab names to discern your current location.

Column Name		Type
CC_CALL_CENTER_SK	1	NUMBER(38,0)
CC_CALL_CENTER_ID	2	VARCHAR(16)
CC_REC_START_DATE	3	DATE

Exercise:

- 1)Click on [Databases] in the Navigation Ribbon
- 2)Click on the background of any row (database) and notice how the Properties Panel Appears and disappears.
- 3)Click the background of the row several times, to toggle the Properties Panel on and off.

Databases Last refreshed 1:09:33 AM

[Create...](#)
[Clone...](#)
[Drop...](#)
[Transfer Ownership](#)

Search Databases 1/3 databases

Database	Origin	Creation Time	Owner
SNOWFLAKE_SAMPLE_DATA	SFC_SAMPLES.SA...	10/14/2020, 4:39 PM	ACCOUNTADMIN
DEMO_DB		10/14/2020, 4:39 PM	SYSADMIN
UTIL_DB		10/14/2020, 4:39 PM	SYSADMIN

DEMO_DB Owner

[Grant Privileges](#)

Privileges granted by role SYSADMIN

CREATE SCHEMA and **1** **PRIVILEGE_CLAUSE GRANTEE_NAME** PUBLIC [Edit](#)

- 1)Click on the blue, hyperlinked name of any row (database name). Note that you have drilled into the database.
- 2) Click on [Database] in the Navigation Ribbon to “drill back up” to the list of databases.
- 3) Drill down again. Repeat as necessary.

Databases > SNOWFLAKE_SAMPLE_DATA

[Tables](#)
[Views](#)
[Schemas](#)
[Stages](#)
[File Formats](#)
[Sequences](#)
[Pipes](#)

[Create...](#)
[Create Like...](#)
[Clone...](#)
[Load Data...](#)
[Drop...](#)
[Transfer Ownership](#)

Table Name	Schema	Creation Time	Owner	Rows	Size	Comment
SUPPLIER	TPCH_SF10	2/21/2019, 1:56:35 ...		100K	6.6MB	
CUSTOMER	TPCH_SF10	2/21/2019, 1:56:35 ...		1.5M	102.6MB	
NATION	TPCH_SF10	2/21/2019, 1:56:18 ...		25	2KB	
REGION	TPCH_SF10	2/21/2019, 1:56:17 ...		5	1.5KB	

- 1) Drill into any database. Note the Breadcrumb Trail that lists the database name.
- 2) Make sure you are on the [Tables] tab.
- 3) Click the background of any row (table) to bring up the Properties Panel

Databases > SNOWFLAKE_SAMPLE_DATA Last refreshed

[Tables](#)
[Views](#)
[Schemas](#)
[Stages](#)
[File Formats](#)
[Sequences](#)
[Pipes](#)

[Create...](#)
[Create Like...](#)
[Clone...](#)
[Load Data...](#)
[Drop...](#)
[Transfer Ownership](#)

Table Name	Schema	Creation Time	Owner	Rows
WEB_SALES	TPCDS_SF1...	2/21/2019, 3:11:48 ...		72.0G
CATALOG_PAGE	TPCDS_SF1...	2/21/2019, 3:11:48 ...		50K
HOUSEHOLD_DEMOGRAPHICS	TPCDS_SF1...	2/21/2019, 3:11:47 ...		7.2K
CUSTOMER	TPCDS_SF1...	2/21/2019, 3:11:47 ...		100M

WEB_SALES

[Grant Privileges](#)

Privileges granted to or inherited by role SYSADMIN

SELECT **PRIVILEGE_CLAUSE GRANTEE_NAME** PUBLIC

Databases > SNOWFLAKE_SAMPLE_DATA > WEB_SALES (TPCDS_SF100TCL)

[Tables](#) [Views](#) [Schemas](#) [Stages](#) [File Formats](#) [Sequences](#) [Pipes](#) Load Table

Column Name	Ordinal ▲	Type	Nullable	Default	Comment
WS_SOLD_DATE_SK	1	NUMBER(38,0)	true	NULL	
WS_SOLD_TIME_SK	2	NUMBER(38,0)	true	NULL	
WS_SHIP_DATE_SK	3	NUMBER(38,0)	true	NULL	

.SCHEMA Name in Parentheses.