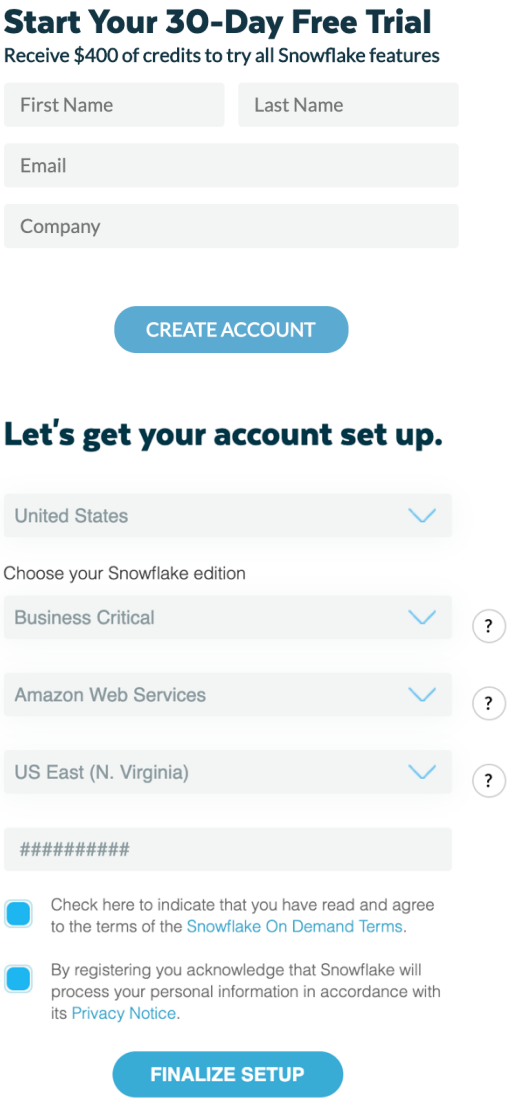
Snowflake Hands-On Workshop

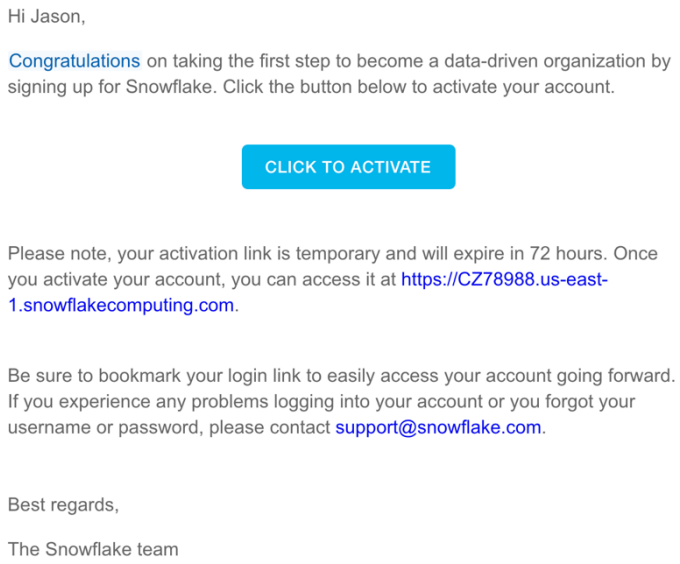
Real-time Analytics with External Data

September 10, 2019

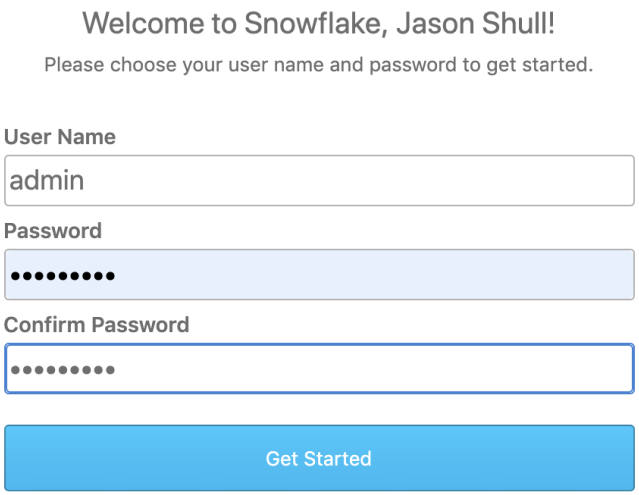
1. Sign up for free Snowflake trial - https://trial.snowflake.com/



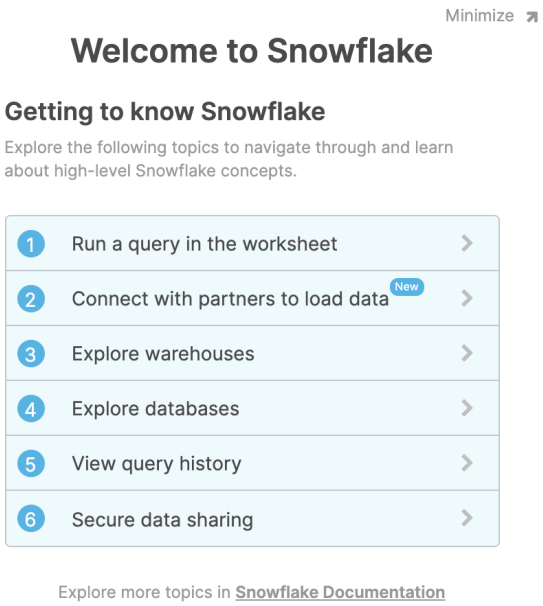
2. Check your e-mail, and [CLICK TO ACTIVATE].



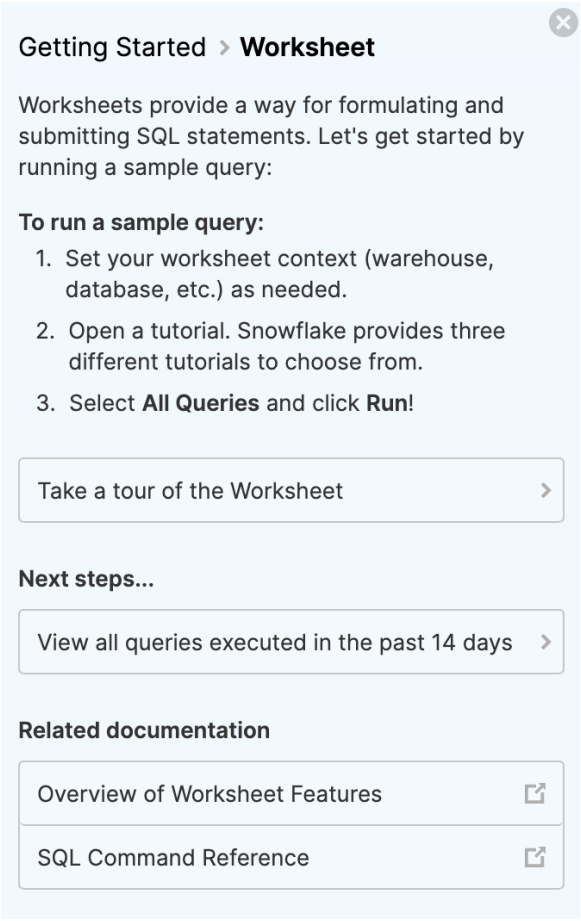
3. Create the admin User ID.



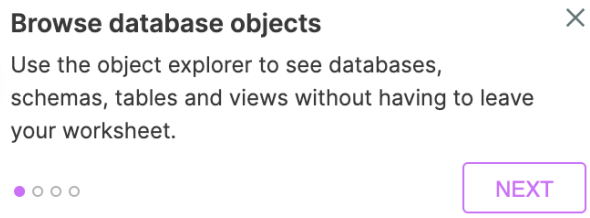
4. Minimize the Welcome to Snowflake message.



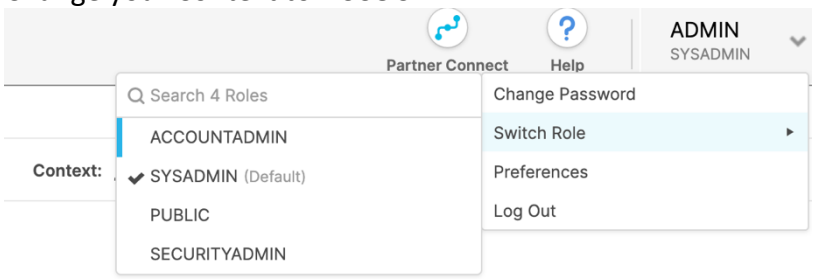
5. Close the Getting Started side panel.



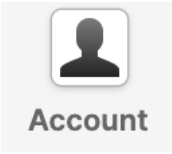
6. Close Browse the database objects panel.



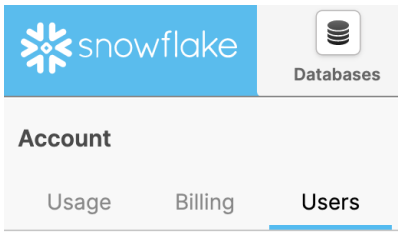
7. Change your Context to ACCOUNTADMIN.



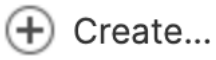
8. Click on the Account button in the top middle of the Web UI.



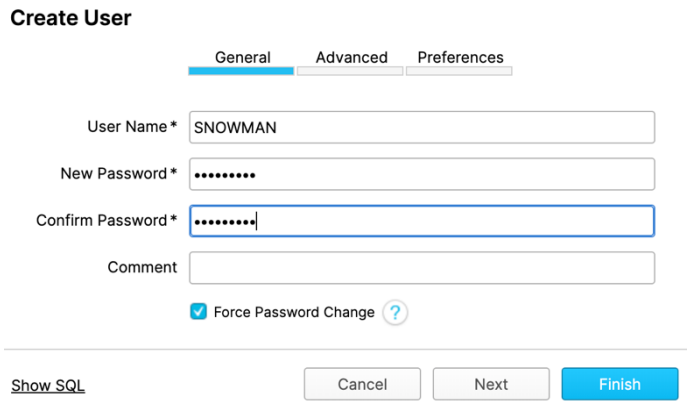
9. Click on the Users tab.



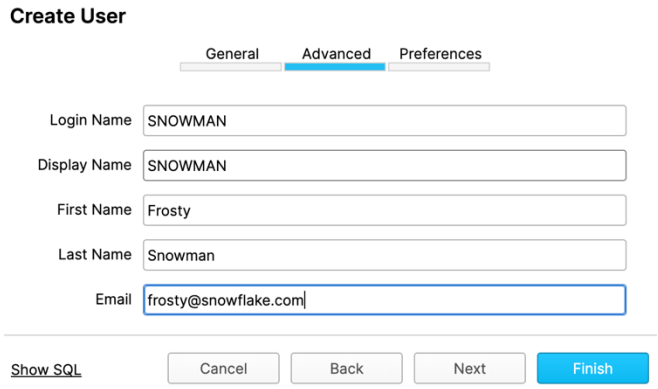
10. Click on the Create button.



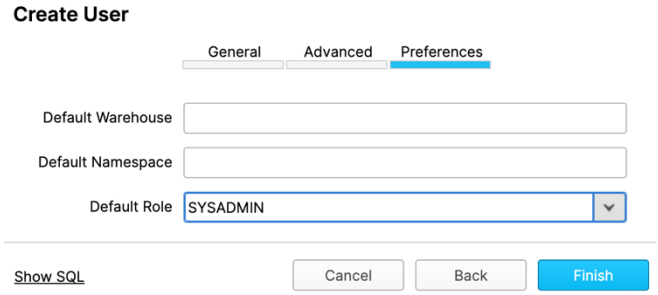
11. Fill in the required General fields to create a new user named SNOWMAN, and click on the Next button.



12. The Advanced information is not required, but you may fill it out of you would like to. Then click on the Next button.



13. Change the Default Role to SYSADMIN under Preferences, and click on the Next button.



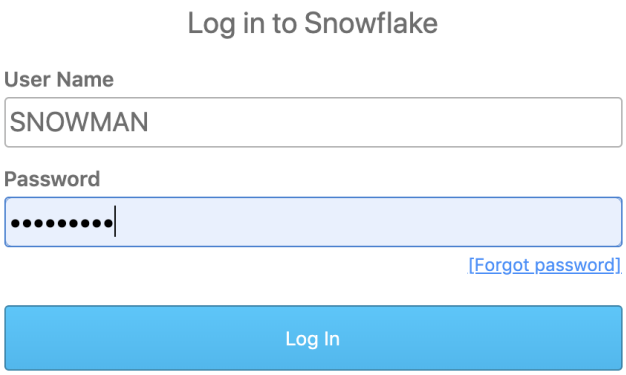
14. Open a new tab within the Worksheets for the Web UI by clicking on the +.

15. Enter the following SQL command, click on the Run button, and verify that the statement completed successfully.

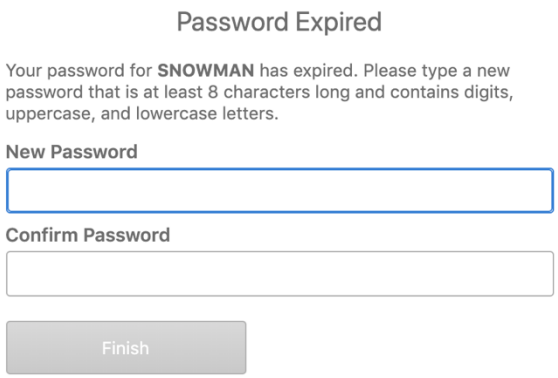
```
grant role accountadmin to user snowman;
```

16. Launch a new tab in your browser, and connect to your Trial Snowflake URL.

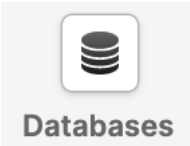
17. Login with the User you created above.



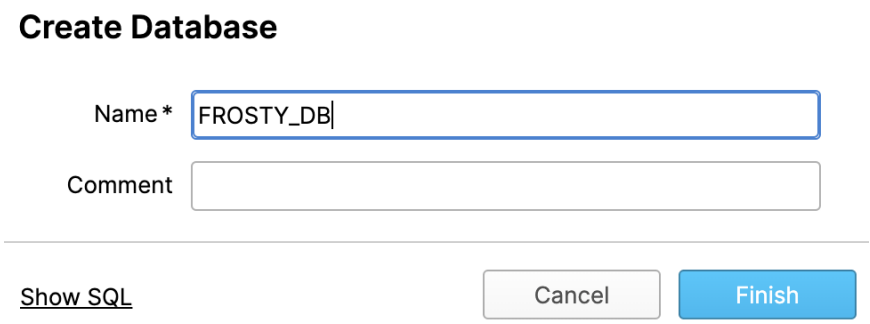
18. If you did not uncheck the Force Password Change check box on the General tab, change the password for your new user, and click on the Finish button.



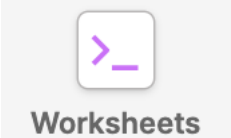
19. Close / Minimize the informational messages as you did before starting in Step 4 above.
20. Click on the Databases tab.



21. Click on the Create button, type in a name for your Database, and click on the Finish button.



22. Click on the Worksheets button.

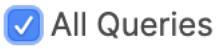


23. Type in the following commands in the SQL Worksheet.

```
--Set up
USE ROLE ACCOUNTADMIN; --Highest level access for this URL
DROP DATABASE IF EXISTS DEMO_WEATHERSOURCE; --Clean up
DROP SHARE IF EXISTS "WEATHER_2016";        --Clean up
DROP MANAGED ACCOUNT IF EXISTS "OLAF";      --Clean up
USE ROLE SYSADMIN; --Change to lower privileged DBA role
CREATE OR REPLACE DATABASE FROSTY_DB;  --Create Database

CREATE OR REPLACE WAREHOUSE WINTER_WH WITH WAREHOUSE_SIZE =
'MEDIUM' WAREHOUSE_TYPE = 'STANDARD'
AUTO_SUSPEND = 600 AUTO_RESUME = TRUE MIN_CLUSTER_COUNT = 1
MAX_CLUSTER_COUNT = 2 SCALING_POLICY = 'STANDARD'; --Create
virtual compute warehouse
```

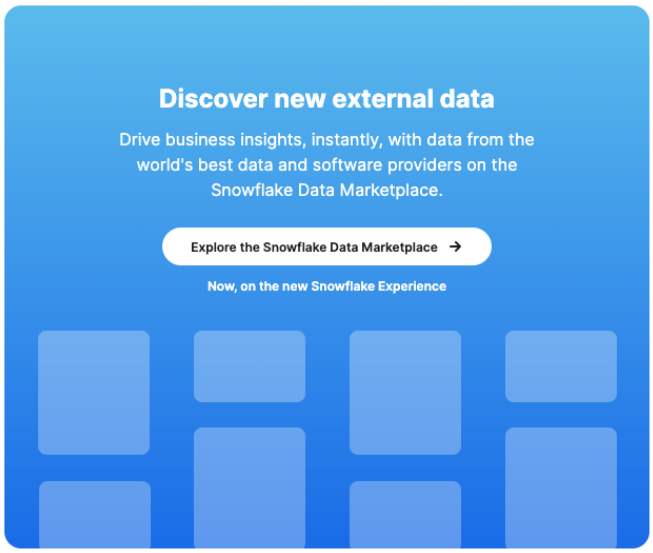
24. Check the All Queries box.



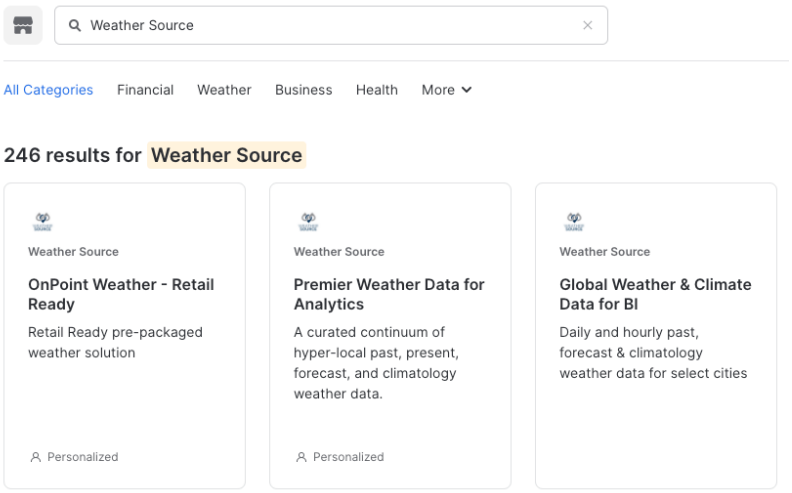
25. Click on the Run button.

26. Go out to the Data Marketplace by clicking on the button shown below.

27. Click on the Explore the Snowflake Data Marketplace -> button.



28. Search for Weather Source.



29. Select Weather Source - Global Weather & Climate Data for BI.
30. Click on the Get Data button.

31. Get the data and name the Database DEMO_WEATHERSOURCE.
32. Leave the default permissions for SYSADMIN.
33. Be sure to click the “I accept…” check box.
34. Click on the Create Database button.
35. Go back to the Browser tab where the snowman user is logged in.
36. Be sure that you are still on the Worksheets tab within the Snowflake Web UI.
37. Paste the following SQL at the end of the worksheet where you were working before.

```
/* How many Deliveries will be delayed due to snowfall?

When it snows in excess of 6 inches per day, my company
experiences delivery delays.
How many deliveries may have been delayed? */

SELECT    COUNTRY,
          POSTAL_CODE,
          DATE_VALID_STD,
          TOT_SNOWFALL_IN
FROM      DEMO_WEATHERSOURCE.STANDARD_TILE.HISTORY_DAY
WHERE     COUNTRY='US'
AND       TOT_SNOWFALL_IN > 6.0
ORDER BY POSTAL_CODE, DATE_VALID_STD
LIMIT 10;
```

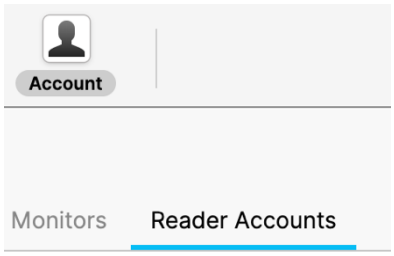
38. Click on the Run button with All Queries unchecked. Your cursor will need to be placed somewhere within the code that you pasted from above.

39. Paste the following SQL at the end of the worksheet where you were working before.

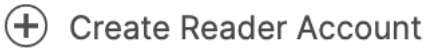
```
-- Create a table for snowfall greater than 6 inches.
CREATE OR REPLACE TABLE FROSTY_DB.PUBLIC.HISTORY_DAY as
SELECT   COUNTRY,
         POSTAL_CODE,
         DATE_VALID_STD,
         TOT_SNOWFALL_IN
FROM     DEMO_WEATHERSOURCE.STANDARD_TILE.HISTORY_DAY
WHERE    COUNTRY='US'
AND      TOT_SNOWFALL_IN > 6.0
ORDER BY POSTAL_CODE, DATE_VALID_STD;
```

40. Click on the Run button with All Queries unchecked. Your cursor will need to be placed somewhere within the code that you pasted from above.

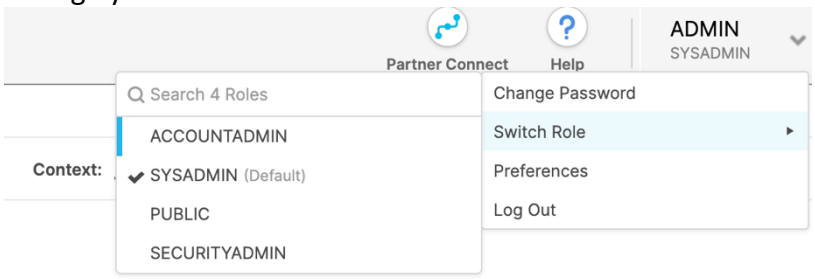
41. Go back to the Browser tab where the admin user is logged in.
42. Click on the Reader Accounts tab.



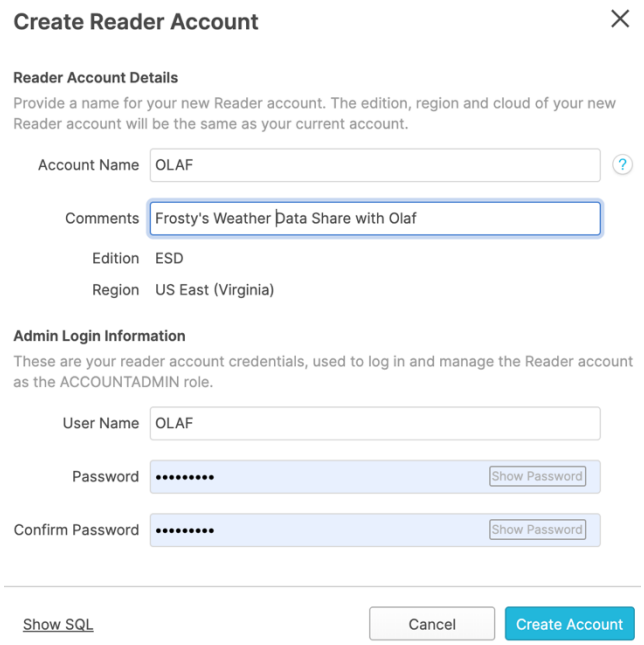
43. Click on the Create Reader Account button.



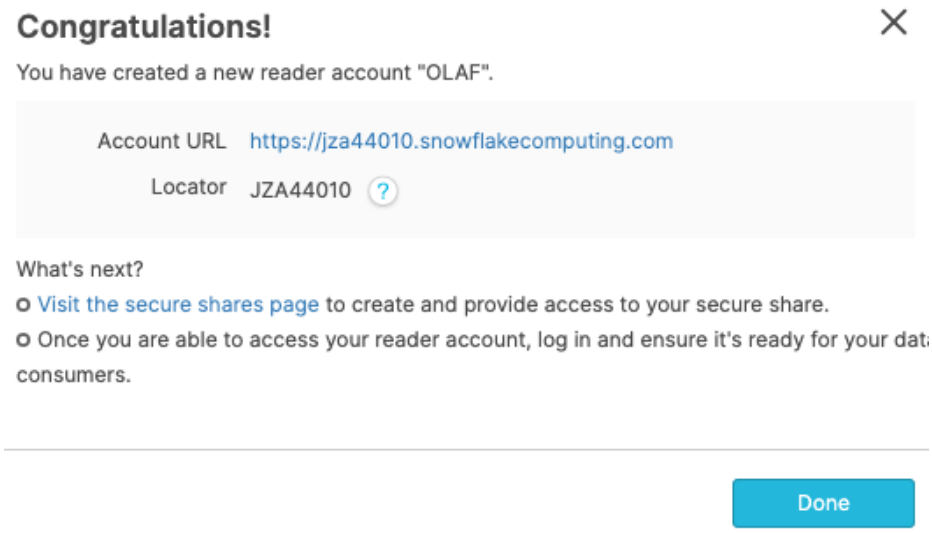
44. Change your Context to ACCOUNTADMIN.



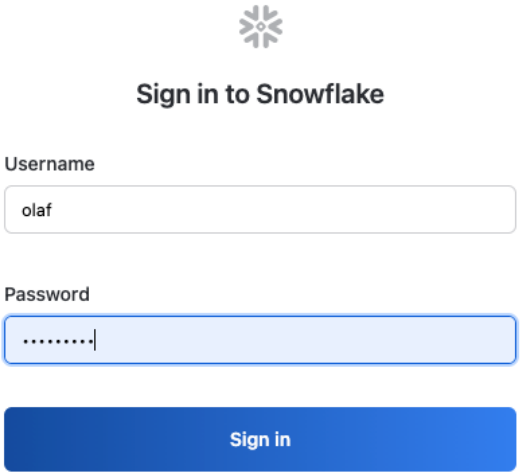
45. Fill out the Reader Account information as shown below and click on the Create Account button.



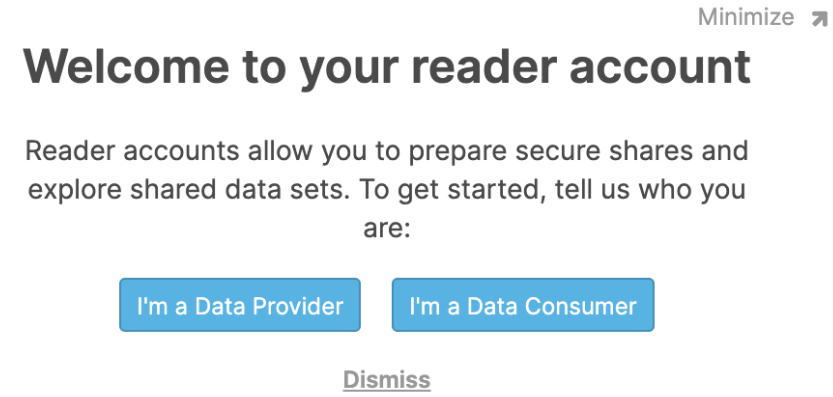
46. Wait for the shared URL to be created. Click on the URL created in the following window (Note – all URLs are unique and will not match the example below). This step may take approximately 20 minutes for the URL to be registered.



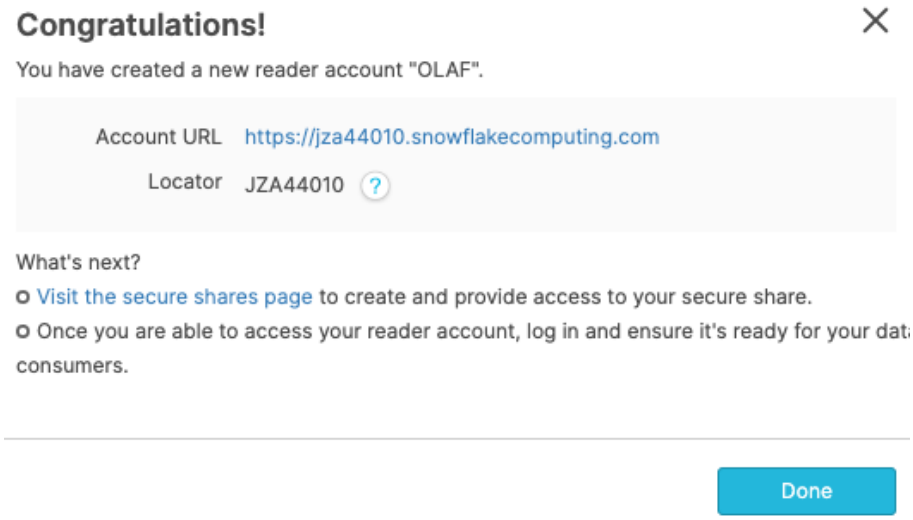
47. Log in with your newly created OLAF reader user. If you get a 403 forbidden error, you need to wait a little longer until the URL is registered.



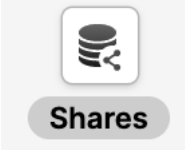
48. Once logged in, click on the I'm A Data Consumer button.



49. Go back to the Admin user tab in your web browser, and click on the Done button.



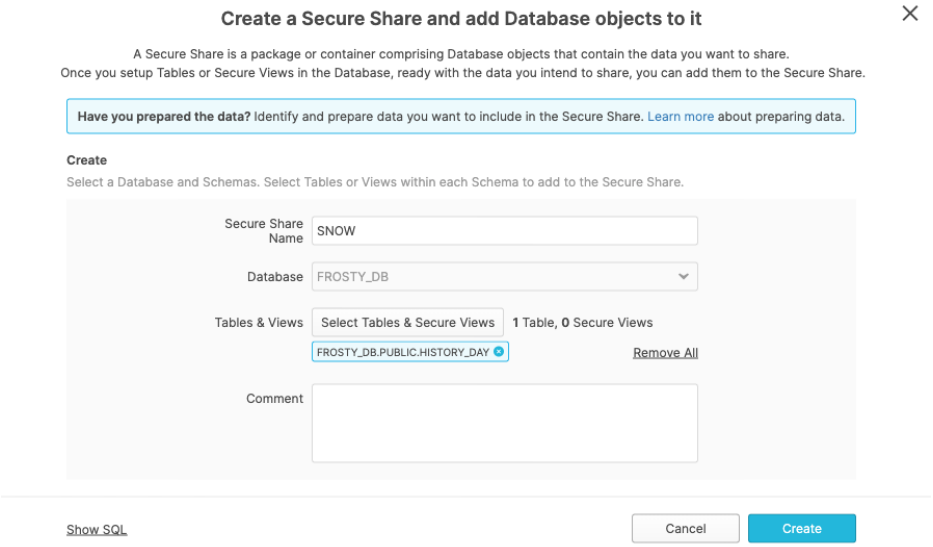
50. Click on the Shares button.



51. Click on the Outbound button.

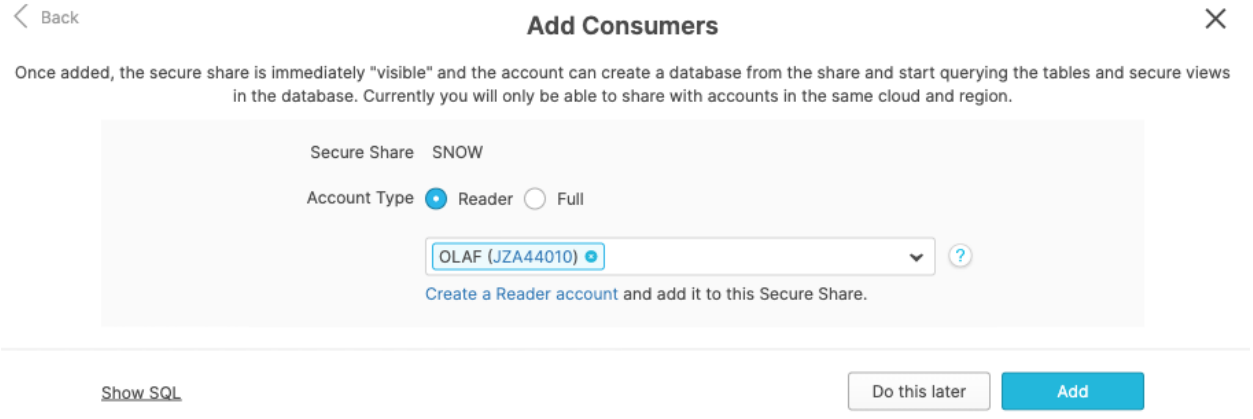
52. Click on the Create button.

53. Fill in the Secure Share info as shown below and click on the Create button.

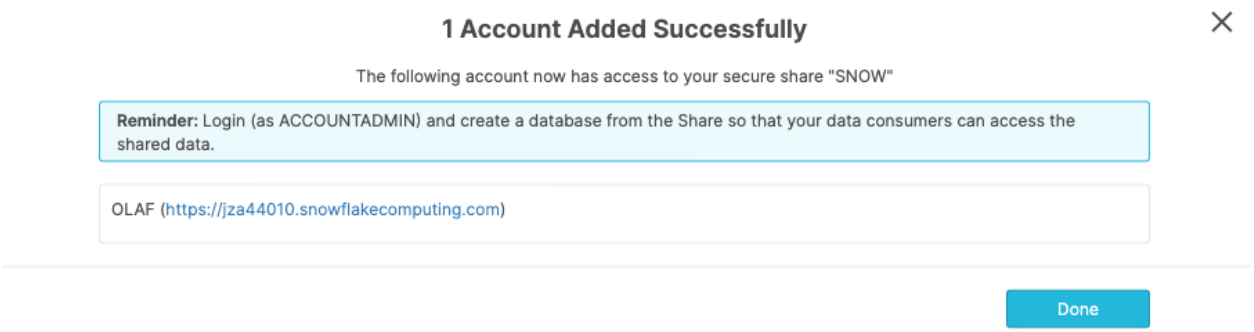


54. Click on the Next: Add Consumers button.

55. Select the Olaf reader account, and click on the Add button.

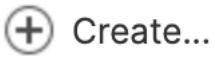


56. Click on the Done button.

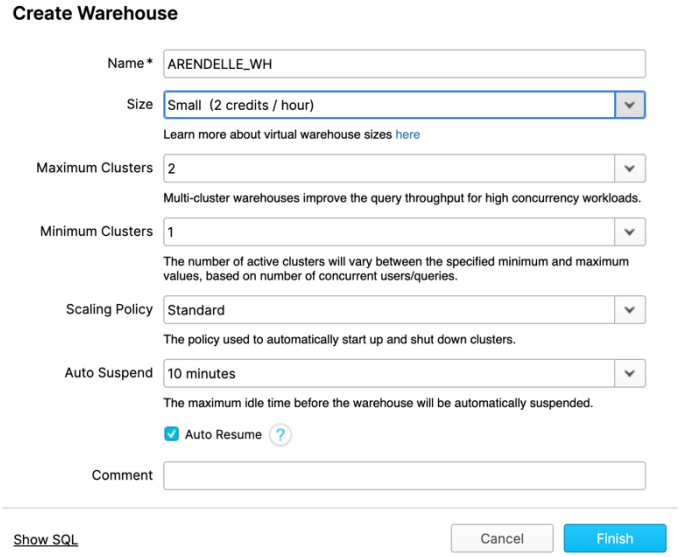


57. Go back over to the Olaf tab in your browser.
58. Click on Warehouses button.

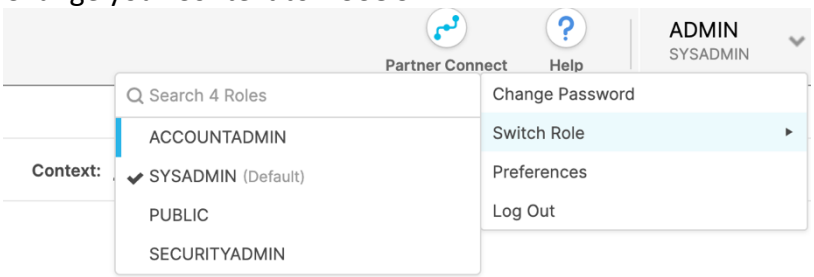
59. Click on the Create Warehouse button.



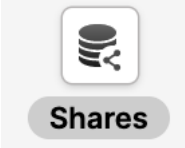
60. Fill out the Warehouse information as shown below, and click on the Finish button.



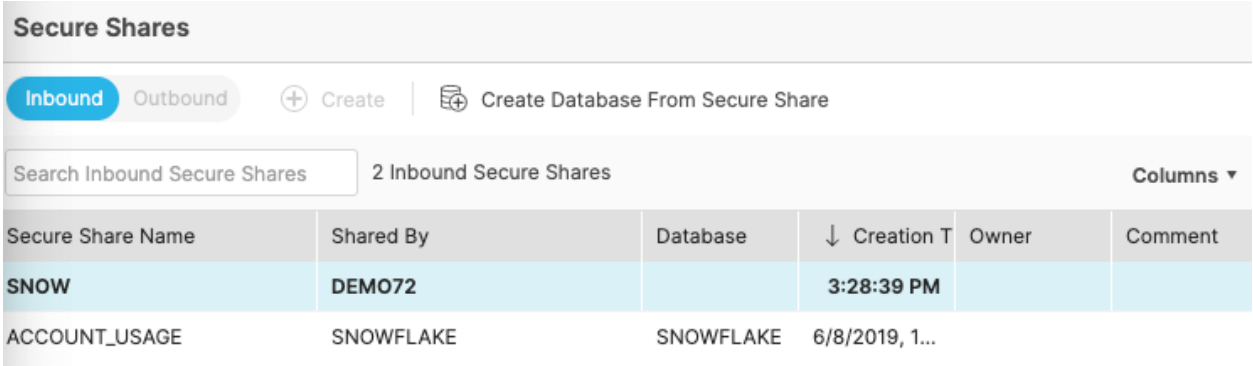
61. Change your Context to ACCOUNTADMIN.



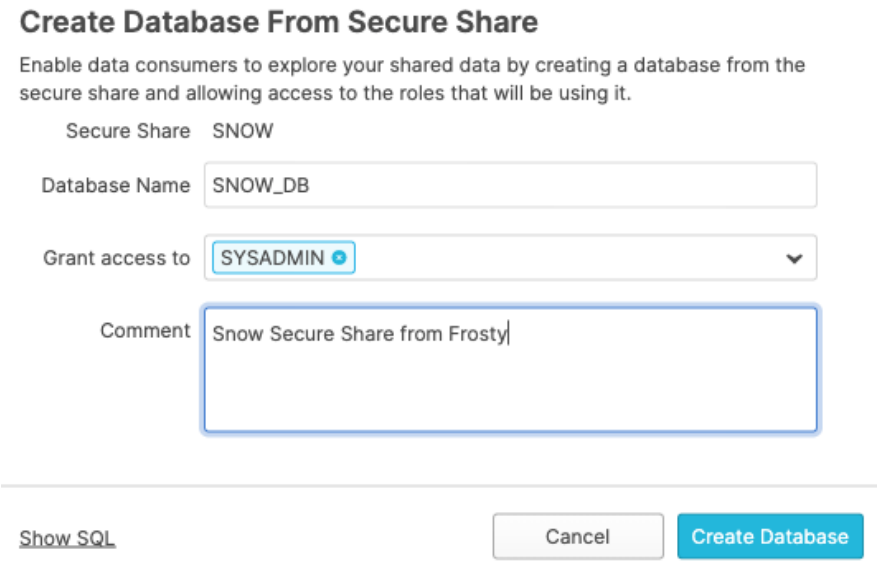
62. Click on the Shares button.



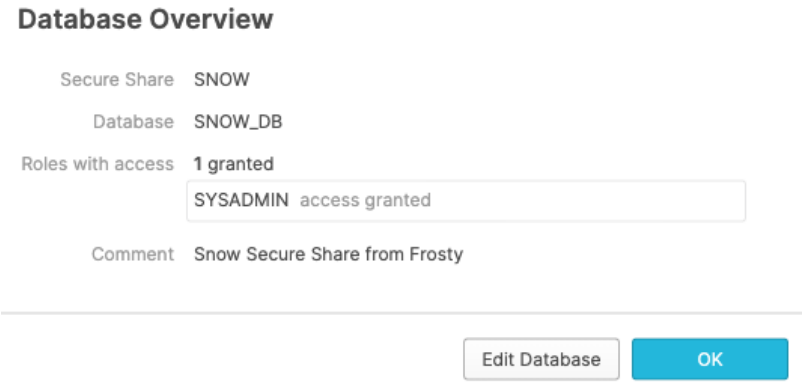
63. Select SNOW and click on the Create Database from Secure Share BUTTON.



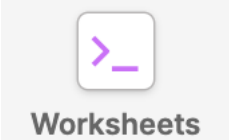
64. Fill out the share information as shown below and click on the Create Database button.



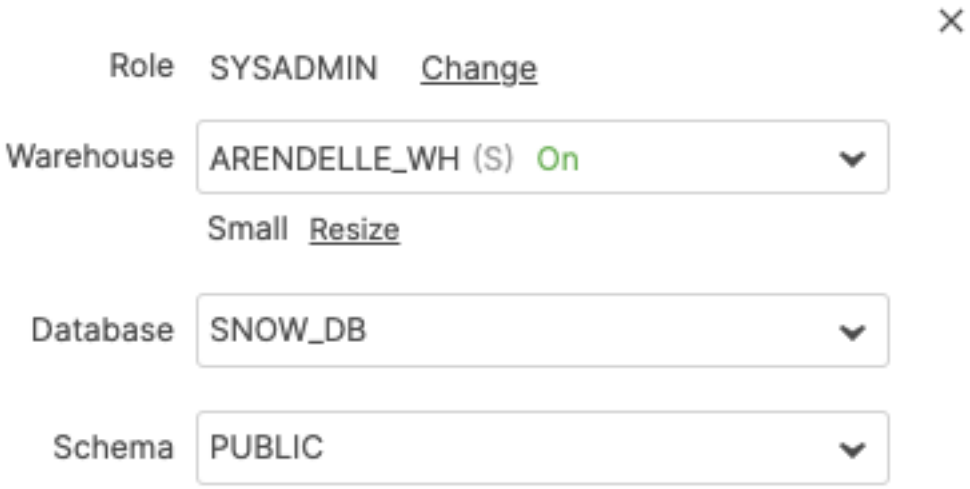
65. Click on the OK button.



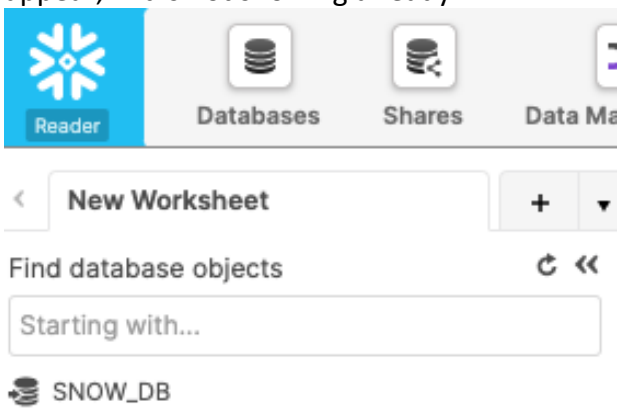
66. Click on the Worksheets button.



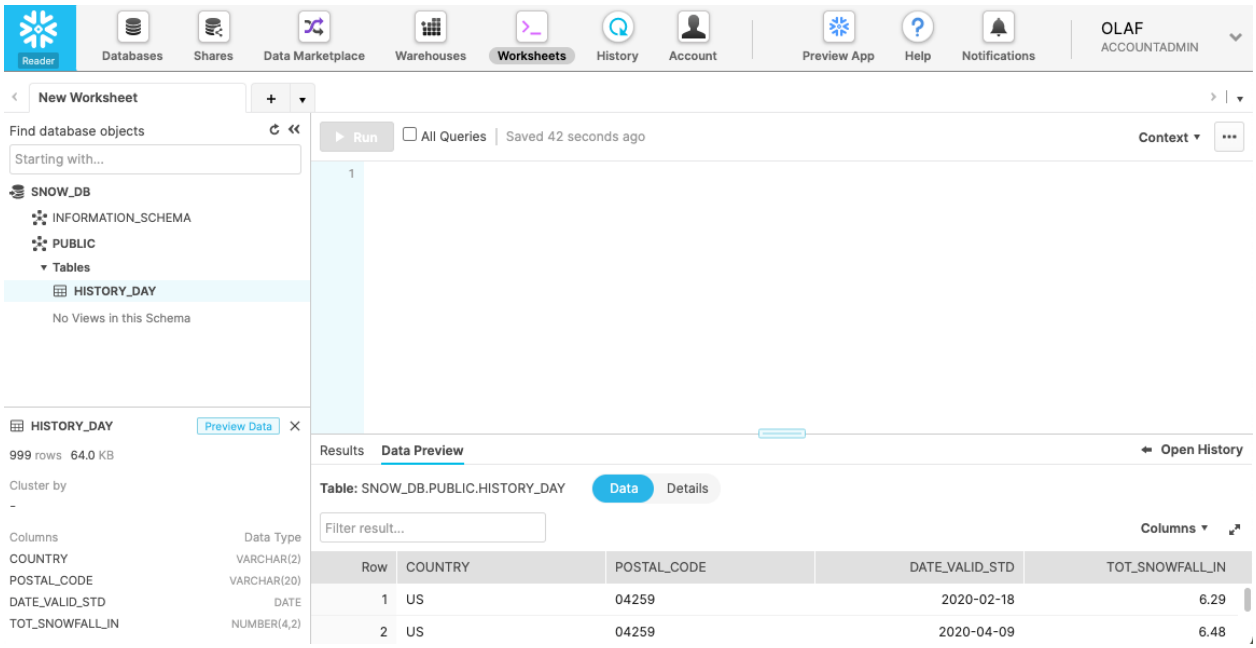
67. Select a warehouse, database, and schema in the worksheet context drop-down.



68. Click on the refresh button next to Find database objects, and your new database will appear, if it is not showing already.



69. Click on the shared SNOW_DB to expand the objects under the PUBLIC schema to preview the data.


Reader
Databases
Shares
Data Marketplace
Warehouses
Worksheets
History
Account
Preview App
Help
Notifications
OLAF
ACCOUNTADMIN
New Worksheet
Find database objects
Starting with...
SNOW_DB
INFORMATION_SCHEMA
PUBLIC
Tables
HISTORY_DAY
No Views in this Schema
Run
All Queries
Saved 42 seconds ago
Context
1
HISTORY_DAY
Preview Data
999 rows 64.0 KB
Cluster by
-
Columns
Data Type
COUNTRY
VARCHAR(2)
POSTAL_CODE
VARCHAR(20)
DATE_VALID_STD
DATE
TOT_SNOWFALL_IN
NUMBER(4,2)
Results
Data Preview
Open History
Table: SNOW_DB.PUBLIC.HISTORY_DAY
Data
Details
Filter result...
Columns
Row
COUNTRY
POSTAL_CODE
DATE_VALID_STD
TOT_SNOWFALL_IN
1
US
04259
2020-02-18
6.29
2
US
04259
2020-04-09
6.48