

Assignment-Creating a new Virtual Warehouse Solution

The purpose of the assignment is to familiarize yourself with two methods for creating new virtual warehouses.

1. Make sure that you have the SYSADMIN role or higher.

```
USE ROLE SYSADMIN;
```

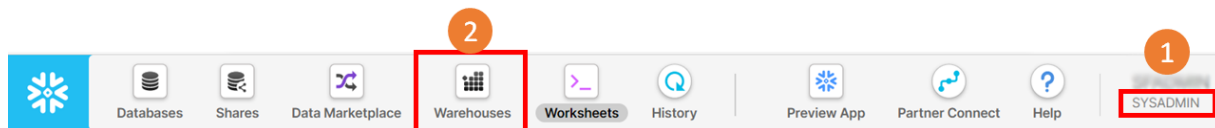
2. To create a basic virtual warehouse, use the following syntax.

```
CREATE WAREHOUSE DBA_WH  
WAREHOUSE_SIZE = XSMALL  
AUTO_SUSPEND = 300 -- automatically suspend the virtual warehouse after 5  
minutes of inactivity  
AUTO_RESUME = TRUE  
INITIALLY_SUSPENDED = TRUE -- create the virtual warehouse in a suspended state  
COMMENT = 'X-Small virtual warehouse for database administrator queries';
```

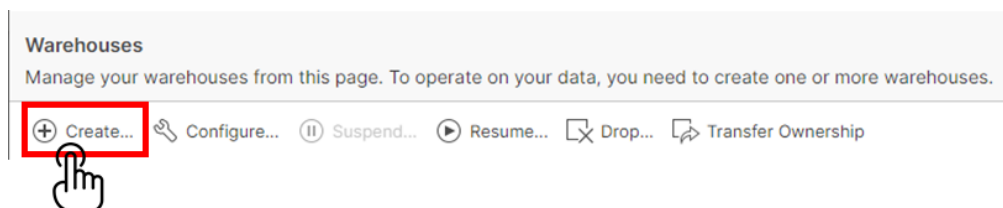
3. Drop the virtual warehouse, so that we can recreate it through the WebUI.

```
DROP WAREHOUSE DBA_WH;
```

4. Now you will re-create the virtual warehouse through the WebUI. Make sure that your role is set to SYSADMIN or higher. Click on the “Warehouse” button.



5. You can create new virtual warehouses on the resulting screen, configure existing virtual warehouses, suspend, resume or drop a virtual warehouse. Click on “Create” to create a new virtual warehouse.



6. On the resulting create warehouse screen, enter the details as shown below. Make sure that the size is set to the smallest possible so that the incurred costs are minimal. Click Finish to complete the creation. Note that you can click “Show SQL” to see the SQL statement generated by this screen.

Create Warehouse

Name *	<input type="text" value="DBA_WH"/>
Size	<input type="text" value="X-Small (1 credit / hour)"/>
Learn more about virtual warehouse sizes here	
Maximum Clusters	<input type="text" value="1"/>
Multi-cluster warehouses improve the query throughput for high concurrency workloads.	
Scaling Policy	<input type="text" value="Standard"/>
The policy used to automatically start up and shut down clusters.	
Auto Suspend	<input type="text" value="5 minutes"/>
The maximum idle time before the warehouse will be automatically suspended.	
<input checked="" type="checkbox"/> Auto Resume ?	
Comment	<input type="text" value="X-Small virtual warehouse for database administrator queries"/>

[Show SQL](#)

CancelFinish

Note that there is no way to create a virtual warehouse in a suspended state, so this virtual warehouse will be created in a running state; however, it will enter a suspended state if you leave it inactive for 5 minutes.

In this assignment, we created a new virtual warehouse. A new virtual warehouse can be created through SQL statement or the Snowflake WebUI.

Questions for this assignment:

A virtual warehouse can be created or modified through the Snowflake WebUI or through SQL. Which method do you prefer and why?

I personally prefer the SQL method for a variety of reasons.

1. The Snowflake WebUI doesn't show settings like "INITIALLY_SUSPENDED", "RESOURCE_MONITOR" and other parameters such as "MAX_CONCURRENCY_LEVEL", but you can configure these settings through the SQL syntax.
2. Using SQL removes the dependency on the user interface, and eases any future automation.