databricks 1.6 - Demo - Working with Compute Resources

(https://databricks.com)

Demo: Compute Resources

In order to work with data in Databricks, we need to use compute resources (i.e., clusters and warehouses). In this demo, we will launch a new cluster and a new warehouse.

Learning Objectives

- 1. Launch a new cluster.
- 2. Launch a new warehouse.

Create a Cluster

Depending on the workspace in which you're currently working, you may or may not have cluster creation privileges.

Instructions in this section assume that you **do** have cluster creation privileges, and that you need to deploy a new cluster to execute the lessons in this course.

NOTE: Check with your instructor or a platform admin to confirm whether or not you should create a new cluster or connect to a cluster that has already been deployed. Cluster policies may impact your options for cluster configuration.

Steps:

- 1. In the left sidebar, right-click on **Compute** and open the link in a new tab. This will allow you to refer back to these instructions, as needed
- 2. Click the blue Create Compute button
- 3. For the **Cluster name**, use your name so that you can find it easily
- 4. Set the cluster to Single Node, to control costs for this testing cluster.
- 5. Set the Access Mode to Single User (this mode is required for Unity Catalog)
- 6. Use the recommended **Databricks runtime version** for this course
- 7. Leave boxes checked for the default settings under the **Autoscaling Options**
- 8. Note the configuration options available for clusters
- 9. Click the blue **Create Compute** button

NOTE: Clusters can take several minutes to deploy and startup. Once you have finished deploying a cluster feel free to continue to explore the compute creation

Single User Cluster Required for This Course

IMPORTANT: This course requires you to run notebooks on a single user cluster.

Follow the instructions above to create a cluster that has **Access mode** set to **Single User**.

Create a SQL Warehouse

Now that we have created a cluster, let's create a SQL Warehouse, so we can run queries in Databricks SQL.

Steps:

- 1. Click on the tab, **SQL Warehouses**, on the Compute page
- 2. Click Create SQL warehouse
- 3. For the **Name**, use your name so that you can find it easily
- 4. Set the Cluster size to 2X-Small
- 5. Verify the **Auto-stop** is set to 10 minutes
- 6. Verify the **Scaling** is set to 1 for the **Min.** and 1 for the **Max.**
- 7. Verify that **Type** is set to Serverless
- 8. Note the **Advanced options**
- 9. Click Create

Conclusion

Now that we have created our compute resources, we can begin running notebooks and queries.

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