

# Exercise: Use the Delta Lake Time Machine and perform optimization

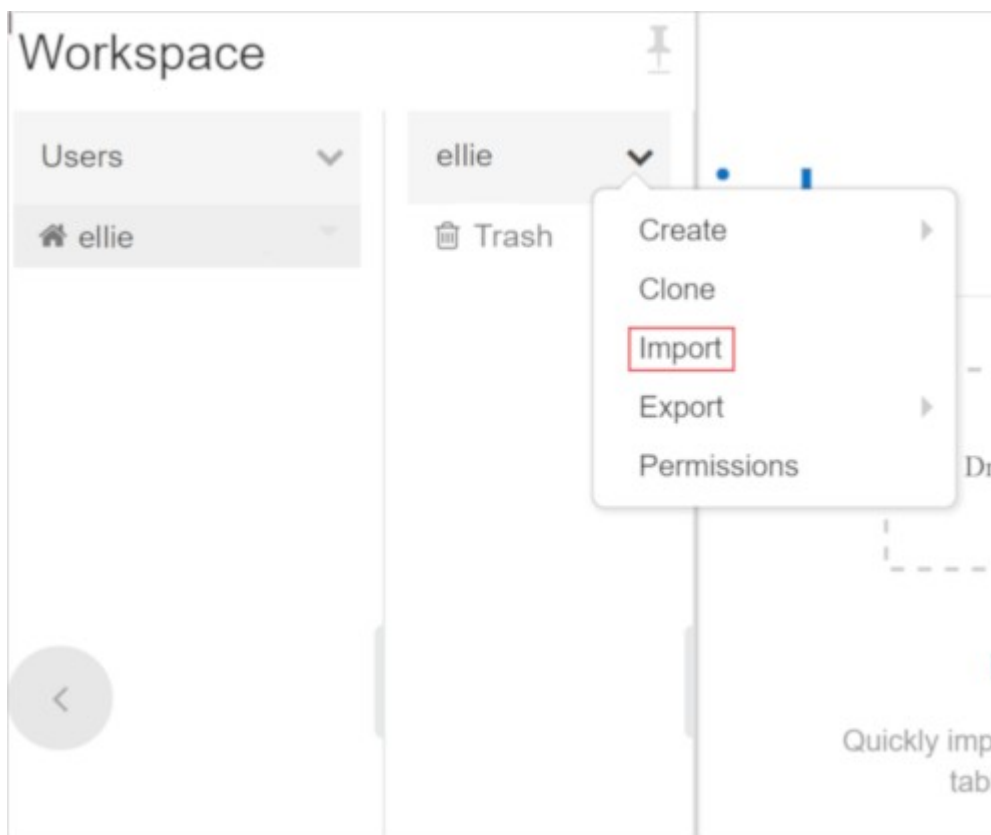
In your Azure Databricks workspace, open the **09-Building-And-Querying-A-Delta-Lake** folder that you imported within your user folder.

## Unit notebook

In this unit, you need to complete the exercises within two Databricks Notebooks. To begin, you must first import the notebooks by cloning a Databricks archive.

## Clone the Databricks archive

1. If you do not currently have your Azure Databricks workspace open then access the Azure portal, navigate to your deployed Azure Databricks workspace and select **Launch Workspace**.
2. In the left pane, select **Workspace > Users**, and then select your username (the entry with the house icon).
3. In the pane that appears, select the arrow next to your name, and select **Import**.



The menu option to import the archive.

4. In the **Import Notebooks** dialog box, select the URL bar and paste in the following address:

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<https://github.com/solliancenet/microsoft-learning-paths-databricks-notebooks/blob/master/data-engineering/DBC/08-Azure-Databricks-Security-Data-Protection.dbc?raw=true>

5. Select **Import**.

6. Select the **09-Building-And-Querying-A-Delta-Lake** folder that appears.

## Complete the following notebook

Open the **4.Delta-Time-Machine-and-Optimization-Lab-2** notebook.

Make sure you attach your cluster to the notebook before following the instructions and running the cells within.

In this exercise, you:

- Compare different versions of a Delta table using Time Machine.
- Optimize your Delta Lake to increase speed and reduce number of files.

The instructions are provided within the notebook, along with empty cells for you to do your work. At the bottom of the notebook are additional cells that will help verify that your work is accurate.

**Note:** You will find a corresponding notebook within the **solutions** subfolder. This contains completed cells for the exercise. Refer to the notebook if you get stuck or simply want to see the solution.

After you've completed the notebook, return to this screen, and continue to the next step.