# Creating the Azure Databricks Lab Environment

**Create the Azure Databricks workspace using the Premium Pricing Tier.**

**Upload the instructor and student notebooks**

Copy the contents of the Instructor folder to an Instructor folder in the Workspace \ Shared.

Copy the contents of the Student folder to an Student folder in the Workspace \ Shared.

**Create an unsecured cluster called "labs-standard" with:**

Cluster Type: Standard

Databricks Runtime Version: 4.0

Python Version: 3.0

Driver Type: Standard\_F4s

Worker Type: Standard\_F4s

Min Workers: 2

Max Workers: 4

Enable Autoscaling: Checked

Auto Termination: 480 minutes (8 hours)

Table Access Control: Enable table access control NOT checked

**Create a secured cluster called "labs-standard (secured)" with:**

Cluster Type: Standard

Databricks Runtime Version: 4.0

Python Version: 3.0

Driver Type: Standard\_F4s

Worker Type: Standard\_F4s

Min Workers: 2

Max Workers: 4

Enable Autoscaling: Checked

Auto Termination: 480 minutes (8 hours)

Table Access Control: Enable table access control checked

**Create the usedcars table**

Download the data for this table from: https://databricksdemostore.blob.core.windows.net/data/usedcars/UsedCars.csv

In the default database, add a table by uploading this file.

Select Create Table with UI

Select a Cluster to Preview the Table, choose any cluster and select Preview Table

In Specify Table Attributes, provide the table name of "usedcars"

Check the box next to First row is header

Select Create Table

**Create the usedcars\_clean table**

Download the data for this table from: https://databricksdemostore.blob.core.windows.net/data/usedcars/UsedCars\_Clean.csv

In the default database, add a table by uploading this file.

Select Create Table with UI

Select a Cluster to Preview the Table, choose any cluster and select Preview Table

In Specify Table Attributes, provide the table name of "usedcars\_clean"

Check the box next to First row is header

Select Create Table

**Create the usedcars\_secured table**

Download the data for this table from: https://databricksdemostore.blob.core.windows.net/data/usedcars/UsedCars\_Clean.csv

In the default database, add a table by uploading this file.

Select Create Table with UI

Select a Cluster to Preview the Table, choose any cluster and select Preview Table

In Specify Table Attributes, provide the table name of "usedcars\_secured"

Check the box next to First row is header

Select Create Table

**Enable All Users to attach to all clusters**

For both clusters, set it so "all users" have "can attach to" permission.

See this for instructions: https://docs.azuredatabricks.net/administration-guide/admin-settings/cluster-acl.html#configure-individual-cluster-permissions

**Enable user access on a per user basis**

For each user added to AAD that will run the labs, the following needs to be done.

Add the user to the Workspace using the Admin Console. They should NOT be admin and they should NOT have Allow cluster creation.

Configure that user's permissions by running the following SQL commands within a notebook. Be sure to use ticks instead of quotes around the email address, and to provide the user's email address in each line:

GRANT CREATE ON DATABASE default to `odl\_user\_25705@mspartnerlabs.onmicrosoft.com`;

GRANT SELECT ON usedcars to `odl\_user\_25705@mspartnerlabs.onmicrosoft.com`;

GRANT SELECT ON usedcars\_clean to `odl\_user\_25705@mspartnerlabs.onmicrosoft.com`;

GRANT READ\_METADATA ON usedcars\_secured to `odl\_user\_25705@mspartnerlabs.onmicrosoft.com`;