



WorkshopPLUS: Azure Databricks Essentials

Creating an Azure Databricks Workspace and Configure a Databricks Cluster

Template Version: 2.0

Introduction

During this lab, you will learn how to configure Azure Databricks workspace and the cluster

Estimated Time

20 minutes

Objectives

At the end of this lab, you will be able to:

- Create a Azure Databricks workspace
- Create a databricks cluster
- Understand the various parameters and values during cluster creation

Table of Contents

[Lab: Creating an Azure Databricks Workspace and Cluster](#)

[Exercise 1: Create a Workspace.](#)

[Exercise 2: Configuring Azure Databricks Cluster](#)

Lab: Creating an Azure Databricks Workspace and Cluster

During this lab, you will learn how to create a workspace.

Creating workspace for Azure Databricks will not create a cluster.

Note for instructor: You must discuss all the parameters\values with the students while creating a workspace and cluster

Exercise 1: Create a Workspace.

Tasks: Workspace Creation Using Azure Portal

1. Log in to the Azure portal

- Log in to the [Azure portal](#).

2. In the Azure portal, select **Create a resource > Analytics > Azure Databricks > Create**

In this section, you create an Azure Databricks workspace using the Azure portal.

In the Azure portal, select **Create a resource** > **Analytics** > **Azure Databricks**.

Microsoft Azure

Search resources, services, a

Home >

Create a resource

Get Started

Recently created

Categories

AI + Machine Learning

Analytics

Blockchain

Compute

Containers

Databases

Developer Tools

DevOps

Identity

Integration

Internet of Things

Search services and marketplace

Getting Started?

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Data Factory

Create | Docs | MS Learn

Azure Synapse Analytics

Create | Docs | MS Learn

Azure Machine Learning

Create | Docs

Event Hubs

Create | Docs | MS Learn

Azure Databricks

Create | Docs | MS Learn

Data Lake Storage Gen1

Under **Azure Databricks Service**, provide the values to create a Databricks workspace.

Create an Azure Databricks workspace

Basics Networking Encryption Tags Review + create

Project Details

Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription *

ME-MngEnv289593-chrey

Resource group *

(New) rg-eus-wspadb

Create new

Instance Details

Workspace name *

adb-eus-wspadb

Region *

East US

Pricing Tier *

Premium (+ Role-based access controls)

We selected the recommended pricing tier for your workspace. You can change the tier based on your needs.

Managed Resource Group name

rg-eus-wspadb-mng

Provide the following values:


Property	Description
Subscription	From the drop-down, select your Azure subscription.
Resource group	Create a new resource group. You can use any name you want. A resource group is a container that holds related resources for an Azure solution.
Workspace name	Provide a name for your Databricks workspace

Property	Description
Region	Select East US or West US
Pricing Tier	Select Premium .
Managed Resource Group	Enter a name, i.e. the resource group name from above and add a '-mng' at the end

Click **Review + Create** and then **Create** to create the workspace.

The workspace creation takes a few minutes. During workspace creation, the portal displays the **Submitting deployment for Azure Databricks** tile on the right side. You may need to scroll right on your dashboard to see the tile. There is also a progress bar displayed near the top of the screen. You can watch either area for progress.

[Home](#) >


databricks-ws_ws_databricks | Overview
Deployment

«
Delete
Cancel
Redeploy
Download
Refresh

Overview
Inputs
Outputs
Template

Deployment is in progress

Deployment name: databricks-ws_ws_databricks
Subscription: [MCAPS-Hybrid-REQ-50829-2023](#)
Resource group: [databricks-ws](#)

Start time: 5/8/2023, 11:30:48 AM
Correlation ID: [ec12b7b1-2389-4aa5-87eb-23d73054cb9e](#)

Deployment details

Resource	Type	Status	Operation details
No results.			

Give feedback
[Tell us about your experience with deployment](#)

Exercise 1 has been completed


Exercise 2: Configuring Azure Databricks Cluster

This exercise shows how to create a cluster using databricks portal.

Tasks: Cluster Configuration

- Once a resource is provisioned, go to the Databricks workspace resource that you created and then click **Launch Workspace**

[Home](#) > [databricks-ws_ws_databricks | Overview](#) >


ws_databricks
Azure Databricks Service


«
Delete

Overview
Activity log
Access control (IAM)
Tags
Settings
Virtual Network Peerings
Encryption
Networking
Properties
Locks
Monitoring
Diagnostic settings

Essentials

Status : Active
Resource group : [databricks-ws](#)
Location : East US
Subscription : [MCAPS-Hybrid-REQ-50829-2023](#)
Subscription ID : 2f5570c6-da09-4547-910d-c624b72052d8
Tags ([edit](#)) : [Click here to add tags](#)

Managed Resource Group : [databricks-rg-ws_databricks-ylltkuq3wofl](#)
URL : [https://adb-109328591033277.17.azure.databricks.net](#)
Pricing Tier : premium




You'll be signed in to the databricks portal automatically.



Azure Databricks

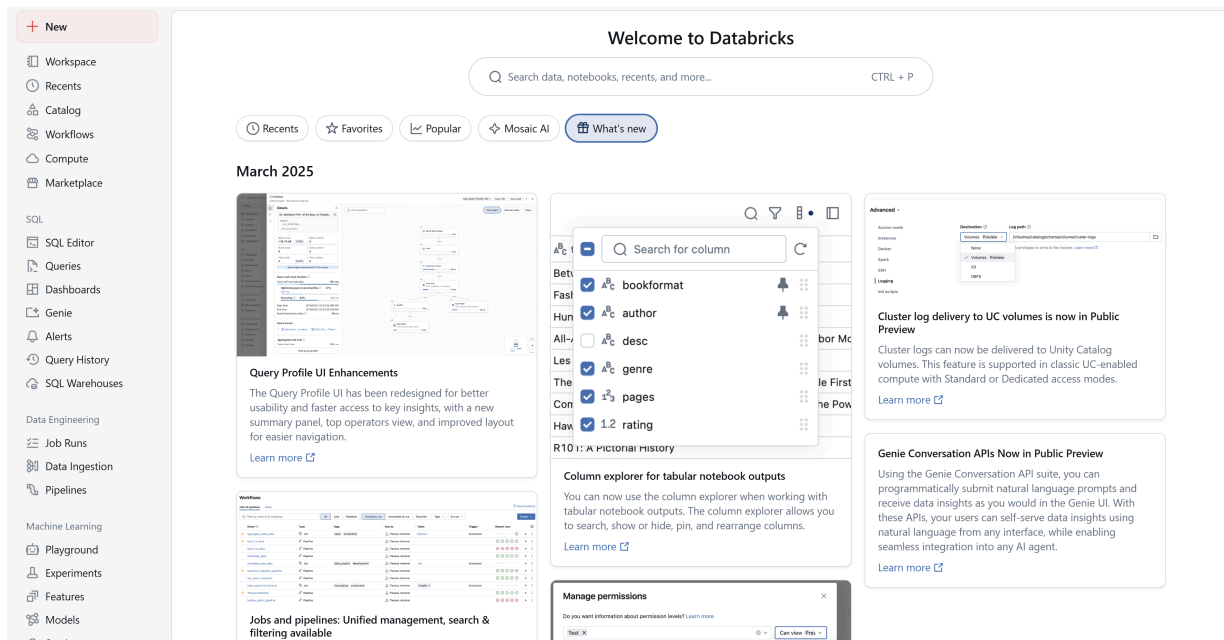
Sign In to Databricks

Sign in using Azure Active Directory Single Sign On.

 Signing you in

Contact your site administrator to request access.

2. You will be redirected to the Azure Databricks portal. From the portal, click + New > More > Cluster.



The screenshot shows the Azure Databricks portal interface. On the left is a sidebar with navigation options: + New, Workspace, Recents, Catalog, Workflows, Compute, Marketplace, SQL (SQL Editor, Queries, Dashboards, Genie, Alerts, Query History, SQL Warehouses), Data Engineering (Job Runs, Data Ingestion, Pipelines), Machine Learning (Playground, Experiments, Features, Models, Governance), and a bottom section for Workspace. The main content area is titled 'Welcome to Databricks' and includes a search bar, filters (Recents, Favorites, Popular, Mosaic AI, What's new), and a 'March 2025' section. This section features several updates: 'Query Profile UI Enhancements' (redesigning the UI for better usability), 'Column explorer for tabular notebook outputs' (allowing search, show/hide, pin, and rearrange columns), 'Cluster log delivery to UC volumes is now in Public Preview' (supporting classic UC-enabled compute), and 'Genie Conversation APIs Now in Public Preview' (allowing natural language prompts). A 'Manage permissions' dialog is also visible at the bottom.

3. In the New Cluster page, provide the values to create a cluster.

[Compute](#) > [New compute](#) > [UI preview](#) [Provide feedback](#)

adb122su [✎](#)

Policy [?](#)

Unrestricted [▼](#)

☐ Multi node ☒ Single node

Access mode [?](#) Single user access [?](#)

Single user [▼](#) Muller-Reyes [▼](#)

Performance

Databricks runtime version [?](#)

Runtime: 12.2 LTS (Scala 2.12, Spark 3.3.2) [▼](#)

☐ Use Photon Acceleration [?](#)

Node type [?](#)

Standard_DS3_v2 14 GB Memory, 4 Cores [▼](#) [?](#)

☒ Terminate after 120 minutes of inactivity [?](#)

[UI](#) | [JSON](#)

Summary

1 Driver 14 GB Memory, 4 Cores

Runtime 12.2.x-scala2.12

Standard_DS3_v2 0.75 DBU/h

Accept all other default values other than the following:

- Enter a name for the cluster at the top by clicking on the pencil icon (e.g. Databricks Essential's Cluster).
- Select **Single Node**
- Accept the proposed runtime or follow the instructor instructions, if any.
- Make sure you select the Terminate after __ minutes of inactivity checkbox. Provide a duration (in minutes) to terminate the cluster, if the cluster is not being used.

1. Select **Create Cluster**.

Once the cluster is running, you can attach notebooks to the cluster and run Spark jobs.

Exercise 2 has been completed