# Master databricks



2<sup>nd</sup> Edition

Lesson 2

Databricks Workspace





# What is the Databricks Workspace?

- Contains all the Compute Resources needed to support Databricks
  - File Storage
  - Virtual Machine to run the Databricks User Interface
  - Databricks Software
  - Network Stuff
  - Integration with the Cloud Provider



## Standard vs. Premium Tier



Yes, Databricks is deprecating its Standard tier for new and existing customers on both AWS and Google Cloud, with existing customers being automatically upgraded to the Premium tier on October 1, 2025.

Databricks Premium

VS

Databricks Standard

Here's a more detailed breakdown:

#### **Deprecation Timeline:**

Databricks has discontinued the Standard tier for new customers on AWS and Google Cloud.

#### **Automatic Upgrade:**

Any existing customer using the Standard tier on AWS and Google Cloud will be automatically upgraded to the Premium tier on October 1, 2025.

#### **New Features in Premium:**

As Databricks continues to evolve, many new features and enhancements are released exclusively for the Premium tier, pushing users towards that tier.

#### Azure Databricks:

While the current focus is on AWS and Google Cloud, the likelihood of a similar move (deprecating the Standard tier) for Azure Databricks is high.

#### **Key Differences:**

The Premium tier offers additional features and benefits beyond the standard tier, including <u>role-based access control</u> for notebooks, jobs, and tables, <u>audit logs</u>, and more.

#### Why Deprecation?

This move likely reflects Databricks' strategy to focus on their higher-end platform and encourage users to take advantage of premium features.



## Each Databricks Workspace is Isolated

Workspace Finance Dev Workspace Finance QA Workspace Finance Prod

Workspace Sales Prod Each Has Separate

- Storage
- Hive Catalog
  Unity Catalog
- Secret Scopes
- Notebooks/Code
- Configuration

Workspace Sales Dev Workspace Sales QA

Workspace Proliferation = Maintenance Issue



# Free Databricks Community Edition

#### Start your free trial

Use express setup

Quickly get hands-on with Databricks. We'll manage your account and cloud infrastructure.

Continue with Express Setup

#### Use your existing cloud account

If you have significant data volume in your cloud account or want to manage compute and storage.

Continue with Cloud Setup

Looking for Databricks Community Edition? Click here

Already have an account? Log in

Sign In:

https://community.cloud.databricks.com

https://databricks.com/try-databricks

## **Databricks Community Edition Limitations**



Databricks Community Edition, while great for learning Spark, has limitations compared to paid versions, including limited cluster uptime, reduced processing power, and the absence of enterprise features like advanced security and automated job scheduling.

Here's a more detailed breakdown of the limitations of Databricks Community Edition:

#### Cluster Uptime and Termination:

#### **Limited Uptime:**

Community Edition clusters are limited to 2 hours of usage and automatically terminate after that time, and this behavior cannot be changed within the Community Edition.

#### **Data Retention:**

Data tables and databases are not retained after cluster termination, and any data stored in memory or temporary tables associated with the cluster is lost.

#### No Restart:

You cannot restart a cluster with saved data, meaning you must create a new cluster from scratch each time you need to work.

#### **Processing Power:**

 Limited Resources: Community Edition clusters have fewer CPU and memory resources compared to paid versions, which can restrict processing large datasets.

#### No Enterprise Features:

Advanced security options, automated job scheduling, integration with external data sources, and other enterprise features are not available in the Community Edition.

#### No Notebook Version History:

Past versions of notebooks cannot be restored, making it difficult to revert changes or roll back mistakes.

#### No Git Integration:

Community Edition doesn't support Git integration, which can make it harder to track, share, and collaborate on work.

#### **Workspace Quota:**

There is a workspace quota of 100 MB, which can be exceeded.

#### **Data Persistence:**

Data stored directly on the cluster is erased when the cluster is shut down.

#### **Data Security:**

You should have no expectation of privacy regarding the data you submit, as Databricks personnel have unrestricted access for monitoring and improving the service.  ${\cal P}$ 

#### Strict Limits on Data:

You should limit your data to only that data and information that you can afford to lose or have accessed, obtained, or disseminated by other parties.



### Demo

# Create a Databricks Workspace in Azure

https://portal.azure.com/

https://azure.microsoft.com/en-us/pricing/details/databricks/



# What is the Databricks Workspace?

- Free Community Edition Can be used to learn Spark
- Creating a Workspace
- Launching the Workspace

Thank You!