

Lab 1: Azure Cosmos DB for MongoDB vCore

This document explains how to create databases and collections in a Cosmos DB for MongoDB vCore account

Create a Cosmos DB for MongoDB vCore account

Here are the steps to create a Cosmos DB for MongoDB vCore account more information at [Quickstart: Create a new cluster - Azure Cosmos DB for MongoDB vCore | Microsoft Learn](#)

1. In the Azure portal, search for and select Azure Cosmos DB.
2. In the Azure Cosmos DB page, select Add.
3. On the Basics tab, enter the required information for the new account. Select version 6
4. Select Review + create. Review the account settings, and then select Create.
5. The account creation takes a few minutes. Wait for the portal to display the confirmation

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Create Azure Cosmos DB for MongoDB cluster

Microsoft

Basics Networking 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 *	<input type="text"/>
Resource group *	<input type="text" value="cloud-shell-storage-west europe"/> Create new

Cluster details

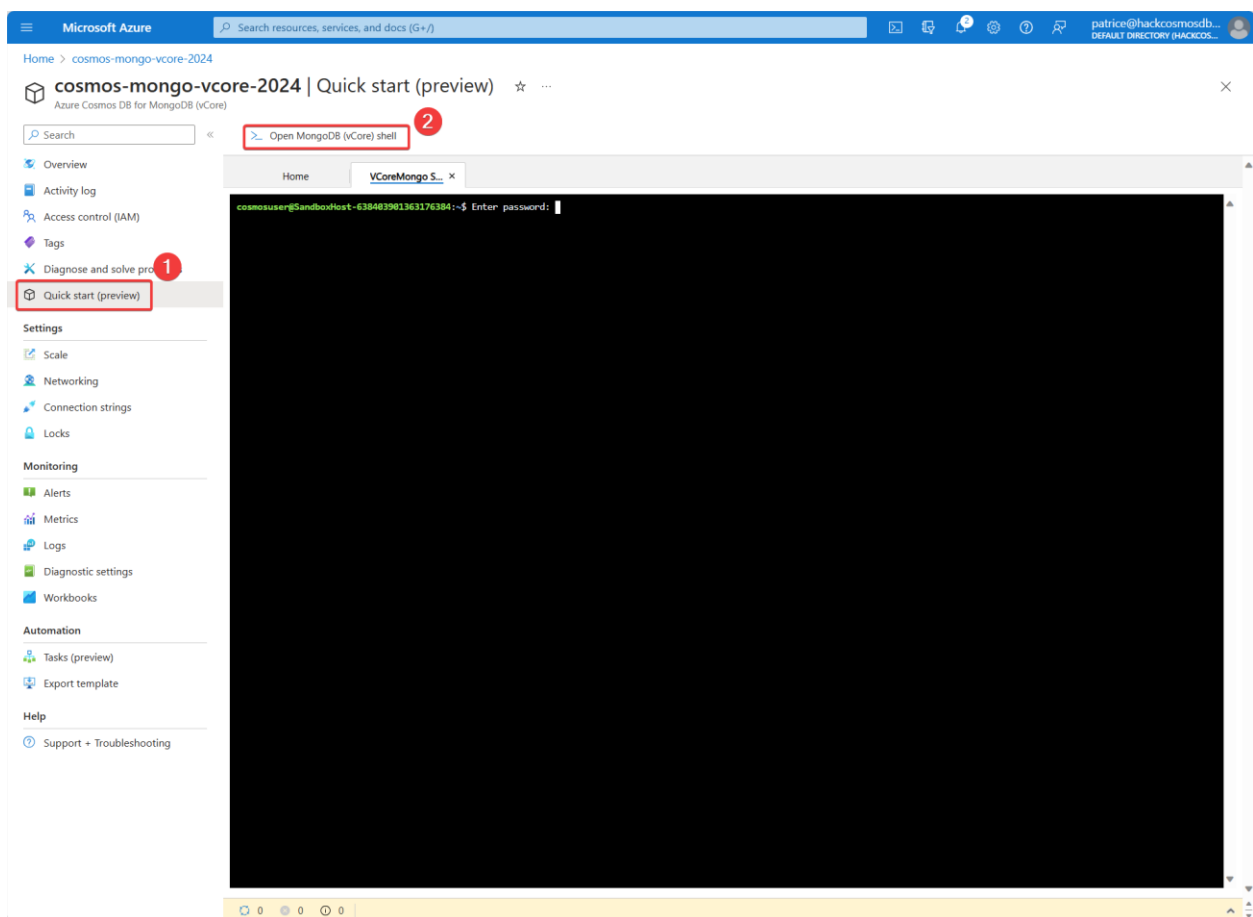
Cluster name *	<input type="text" value="Enter a name for the Azure Cosmos DB for MongoDB cluster"/>
Free tier	<input type="checkbox"/>
Location *	<input type="text" value="(Europe) West Europe"/>
Cluster tier *	Configure
MongoDB version	<input type="text" value="6.0"/>

Administrator account

Admin username *	<input type="text" value="Enter username"/>
Password *	<input type="password" value="Enter password"/>
Confirm password *	<input type="password" value="Confirm the above password"/>

Connect to an existing Cosmos DB for MongoDB vCore account

1. In the search bar, type 'Azure Cosmos DB for MongoDB'
2. Click on the instance that was just created e.g. 'cosmos-mongo-vcore-2024'
3. Click on 'Quick Start' in the menu
4. Click on the 'Open MongoDB (vCore) shell' button



Create databases and tables

In the shell, type the following commands:

Enter password: Password1234

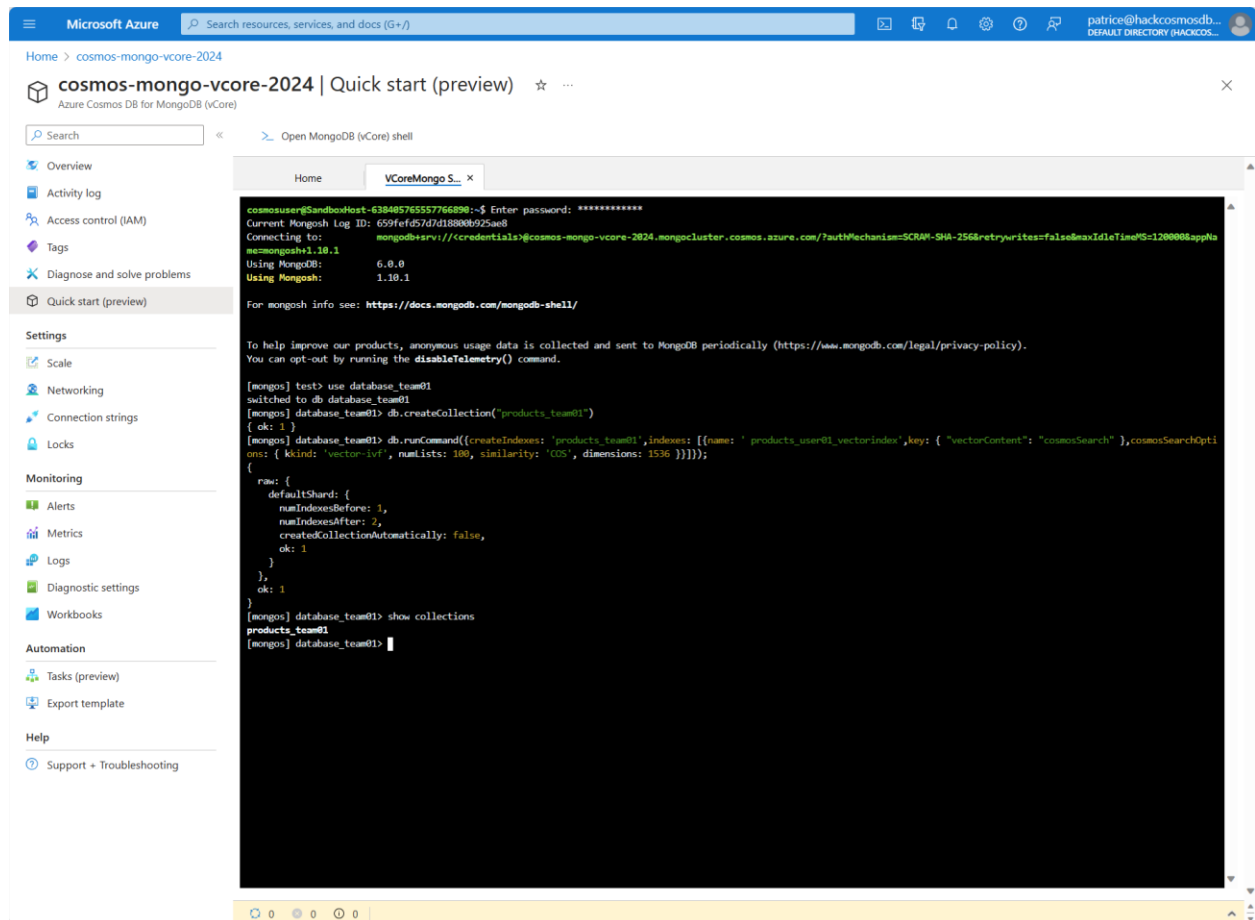
use database_user01

- 1) `db.createCollection("products_user01")`
- 2) `db.runCommand({createIndexes: 'products_user01', indexes: [{name: 'products_user01_vectorindex', key: {"vectorContent": "cosmosSearch"}, cosmosSearchOptions: {kind: 'vector-ivf', numLists: 100, similarity: 'COS', dimensions: 1536}}]})`

Verify that the collection was properly created:

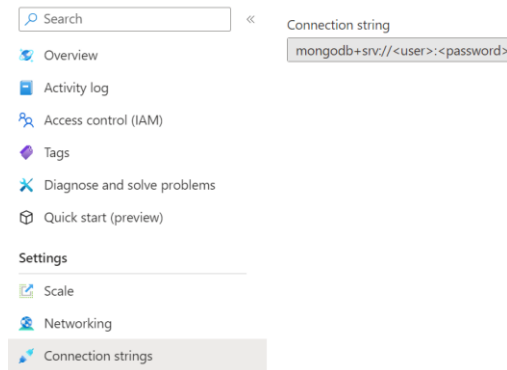
show collections

repeat steps 1-2 for the collection customers naming the colored parameter accordingly



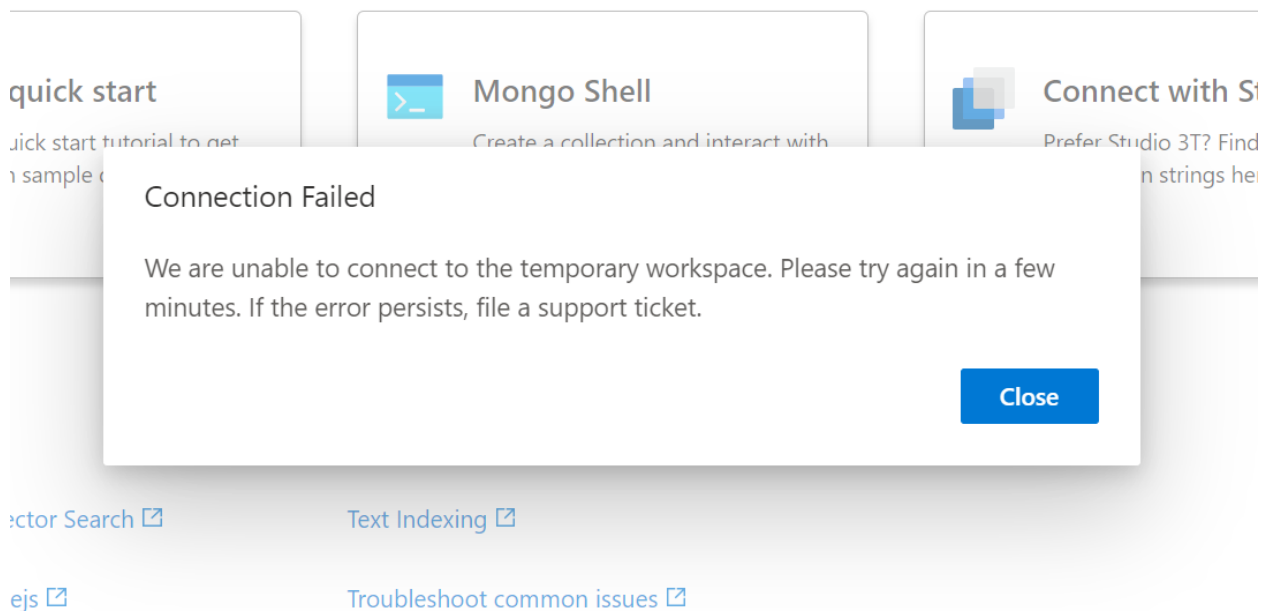
Verifications/Test

Verify that the connection is accessible by opening a MongoShell or other client on a standalone machine that represents your environment and quick access to the service using the connection url available inside the blade



Troubleshooting

1. Consider that the cosmosuser used in the Mongo Shell may differ from the account that has been specified at cluster creation . For what follows you need to remember the credentials identified at cluster creation
2. If you encounter this error



- a. The firewall settings allow the connection from the local machine
- b. The firewall settings allow connections from Azure Services