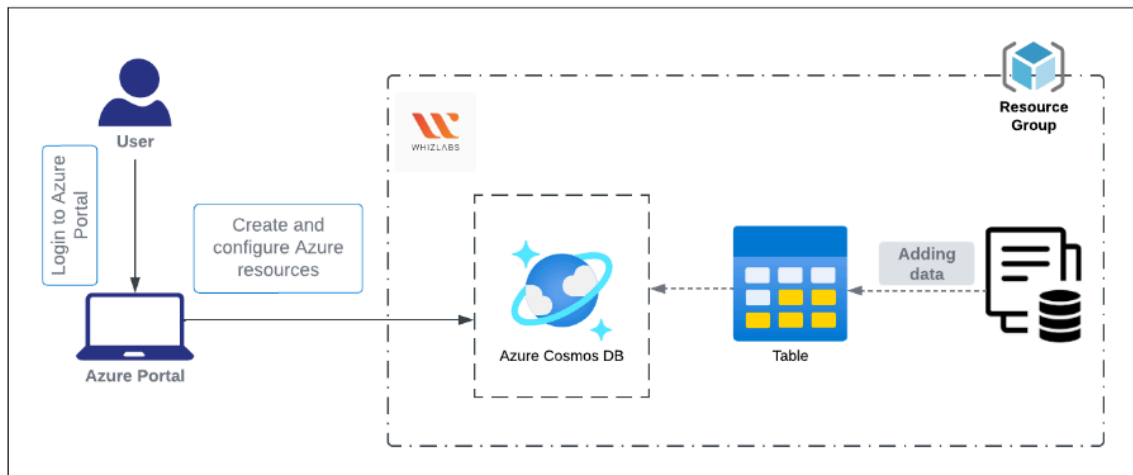


Introduction

What is Azure Cosmos DB?

- Azure Cosmos DB is a fully managed NoSQL database that can be used for application development.
- It is highly scalable with very low latency.
- Management of Cosmos DB including updating and patching is done automatically without any manual intervention.
- Table API is based on structured NoSQL data

Architecture Diagram



Lab Steps

Task 1: Sign in to Azure Portal

1. Go to the Azure portal by clicking on the **Open Console** button or by using the URL <https://portal.azure.com>.

- **Note:** It is recommended to use incognito mode to avoid Azure portal cache related issues.

2. If it automatically logs into any other Azure account, please log out of it and clear the cache.

3. Sign in with your given **username** and **password** on the Azure portal.

4. If the login is not working, Click on **End Lab** and start the lab again.

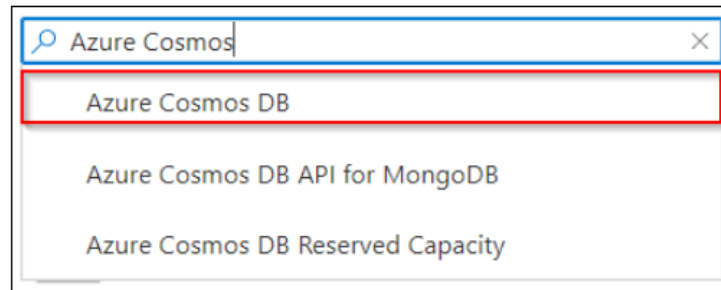
Task 2: Creating an Azure Cosmos DB Account

In this task, we will create an Azure Cosmos DB account named **whizuser** in the **West US** region using provisioned throughput mode.

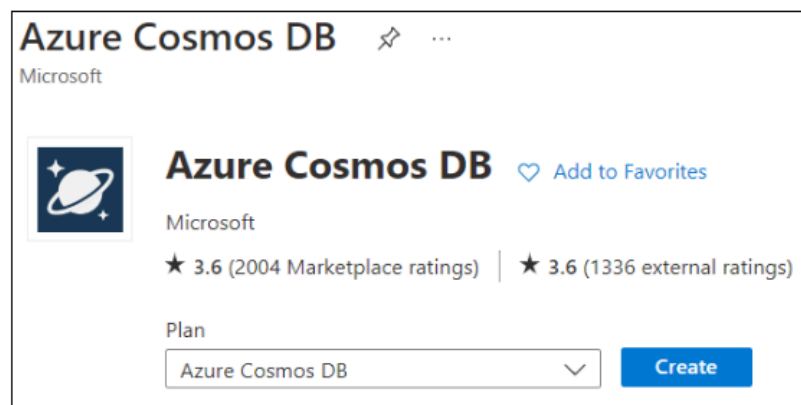
1. From the Azure portal menu or from the Home page, select **Create a resource**.



2. On the search bar, enter Azure Cosmos and then select **Azure Cosmos DB**.



3. Click on **Create**.



4. On the next page, click on Create under **Azure Cosmos DB for Table**.

Azure Cosmos DB for Table

Fully managed database service for apps written for Azure Table storage. Recommended if you have existing Azure Table storage workloads that you plan to migrate to Azure Cosmos DB.

[Create](#)[Learn more](#)

5. Now, fill out the form with the following information:

- Resource group: Select **rg_westus_XXXXX**
- Account Name: Enter **whizuser**
- Location: Select **(US) West US**
- Capacity mode: Select **Provisioned throughput**
- Apply Free Tier Discount: Select **Do Not Apply**

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

Subscription *

Resource Group * [Create new](#)

Instance Details

Account Name *


Location *


Capacity mode ⓘ ☒ Provisioned throughput ☐ Serverless
[Learn more about capacity mode](#)

With Azure Cosmos DB free tier, you will get the first 1000 RU/s and 25 GB of storage for free in an account. You can enable free tier on up to one account per subscription. Estimated \$64/month discount per account.

Apply Free Tier Discount ☐ Apply ☒ Do Not Apply

6. Keeping the rest in default, click on **Review+Create** and then click on **Create**.

 **Your deployment is complete**



Deployment name: Microsoft.Azure.CosmosDB-20220906231758
Subscription: [Pay-As-You-Go](#)
Resource group: [rg_westus_](#)

⌵ Deployment details

⌶ Next steps

[Go to resource](#)


Do you Know?


Creating a Cosmos DB account with the Table API offers a schema-less, key-value data model for flexible storage and efficient querying of structured data.


Task 3: Creating Table within Cosmos DB Account


In this task, we will create a table named **WhizTable** with autoscale throughput within the Cosmos DB account.

1. After successful deployment, click on **Go to Resource**.

 **Your deployment is complete**

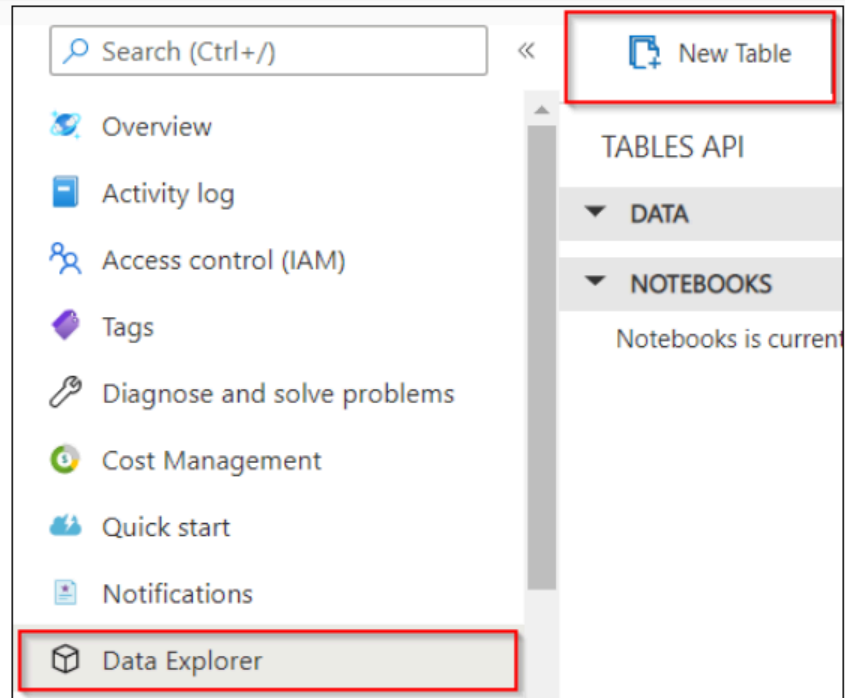
 Deployment name: Microsoft.Azure.CosmosDB-20220228115923
Subscription: [Pay-As-You-Go](#)
Resource group: [task_365](#)

 **Deployment details** [\(Download\)](#)

 **Next steps**

[Go to resource](#)

2. On the left panel, click on **Data Explorer** and then click on **New Table**.



3. Fill out the form with the following information:

- Table id: Enter **WhizTable**
- Table throughput (autoscale): Select **Autoscale**
- Table Max RU/s : Enter **1000**
- Click on **Ok**

New Table



With free tier, you'll get the first 1000 RU/s and 25 GB of storage in this account for free. Billing will apply if you provision more than 1000 RU/s of manual throughput, or if the table scales beyond 1000 RU/s with autoscale. [Learn more](#)

* Table id ⓘ

* Table throughput (autoscale) ⓘ

☒ Autoscale ☐ Manual

Estimate your required RU/s with [capacity calculator](#).

Table Max RU/s ⓘ

*

Your table throughput will automatically scale from **100 RU/s (10% of max RU/s) - 1000 RU/s** based on usage.

Estimated monthly cost (USD) ⓘ: **\$8.76 - \$87.60** (1 region, 100 - 1000 RU/s, \$0.00012/RU)

OK

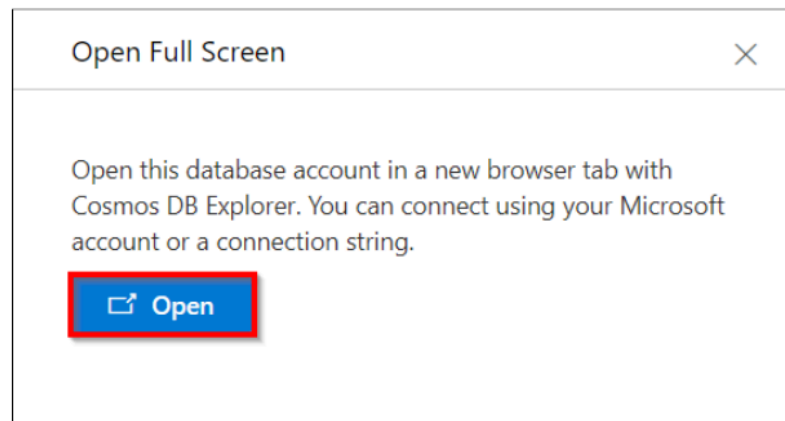
Task 4: Adding default data into Table

In this task, we will add default data to **WhizTable** with values **Australia** and **1** for the first row and **CustomerName** as **WhizUser** for the second row.

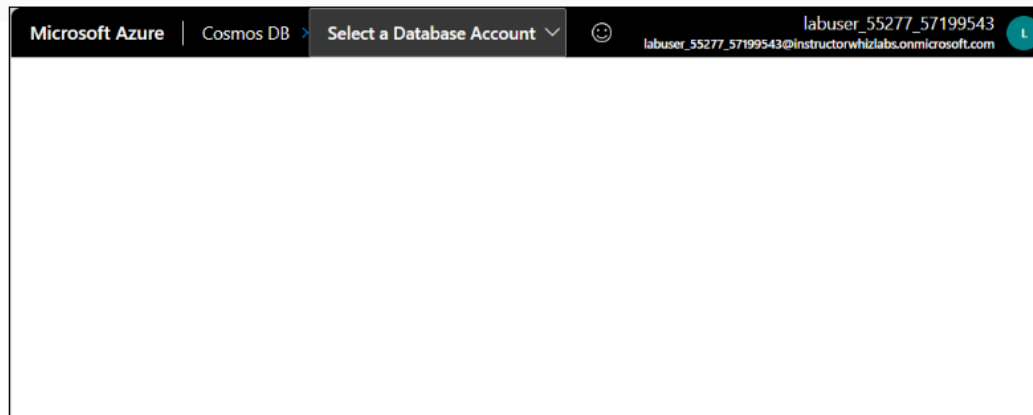
1. After the successful creation of the Table, on the top right corner, click on the Open Full Screen option.



2. Click on **Open**.



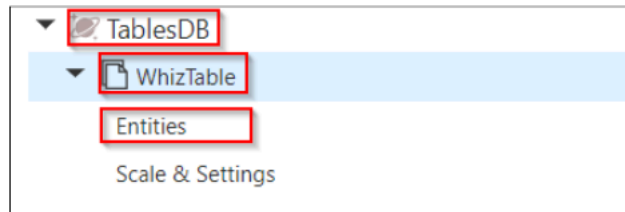
3. A new tab will open in your browser. Sign in with your given **username** and **password** on the Azure portal.



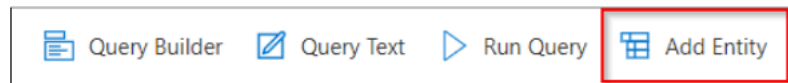
4. Now, click on **Select a Database Account**, then select Subscription as **Pay-As-You-Go** and then select Cosmos DB Account Name as **whizuser**.

A screenshot of a dropdown menu in the Azure portal. The menu is titled 'whizuser' with a downward arrow. It contains two sections: 'Subscription' with a dropdown menu showing 'Pay-As-You-Go' and a downward arrow, and 'Cosmos DB Account Name' with a dropdown menu showing 'whizuser' and a downward arrow.

5. Now, in the new tab, click on **TablesDB**, then on **WhizTable**, and then on **Entities**.



6. On the top panel, click on **Add Entity**.



7. Fill out the form with the following details:

- For the first row: Enter **Australia** in the Value
- For the second row: Enter **1** in the Value

Property Name *	Type	Value
PartitionKey	String	Australia
RowKey *	String	1

8. Click on **Add Property**.

Property Name *	Type	Value
PartitionKey	String	Australia
RowKey *	String	1
+ Add Property		

9. Fill in the following details:

- Name: Enter **CustomerName**
- Value: Enter **WhizUser**

Property Name *	Type	Value
PartitionKey	String	Australia
RowKey *	String	1
CustomerName *	String	WhizUser

10. Click on **Add Entity**.

Add Entity

11. Now, you can see your Entity will be displayed.

PartitionKey	RowKey	Timestamp	CustomerName
Australia	1	Sat, 05 Mar 2022 11:50:32 GMT	WhizUser

Completion and Conclusions

1. You have successfully logged into Azure Portal.
2. You have successfully created an Azure Cosmos DB Account.
3. You have successfully created a Table within Cosmos DB Account
4. You have successfully added default data into the Table.
5. You have successfully tested the validation.
6. You have successfully deleted the resources.