

JANUARY 1, 2025



## QUESTION 2

### STORAGE CONFIGURATION PROJECT

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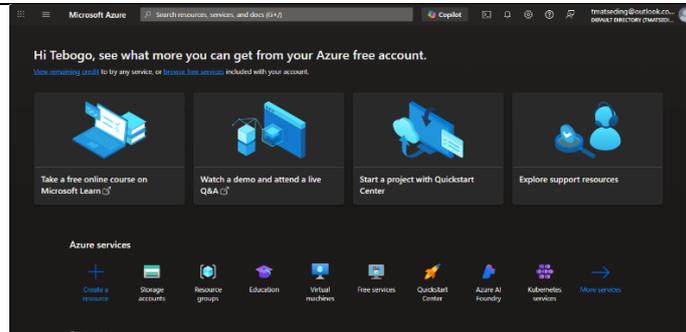
## Introduction

In this project, the main objective is to help **Jane's organization in Southeast Australia** securely store important documents on the **Microsoft Azure Cloud**. The task involves creating a **resource group** and a **storage account** named **Azurestore1**, as well as setting up a **Cosmos DB account in serverless mode**. All services are configured to use **availability zones** for reliability and **private endpoints** for secure connections within Azure's network.

## Azure Dashboard

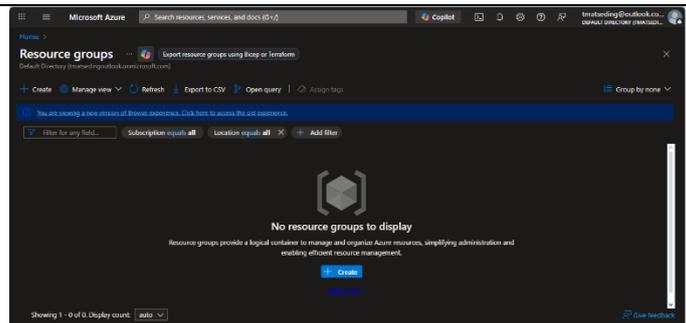
After signing in to the Azure Portal, the dashboard is the main control centre where you can view, create, and manage all Azure services such as storage, databases, and virtual networks.

**Note: all recently accessed services will be in the dashboard**



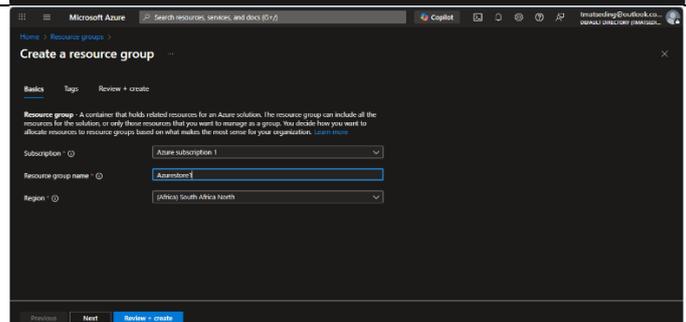
## Resource Group Dashboard

Before creating resources, go to the Resource Groups section. A resource group keeps related Azure items in a centralized location such as your storage account, Cosmos DB, and virtual network so they are easier to manage.



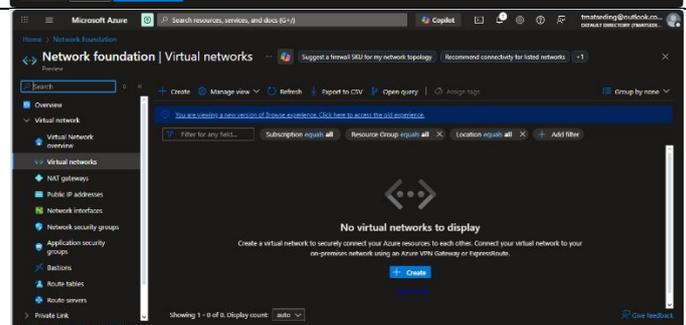
## Resource Group Creation

Click "Create a Resource Group", give it the name **Azurestore1**, and select the relevant region. Once created, this group will serve as the container for all your resources in this project.

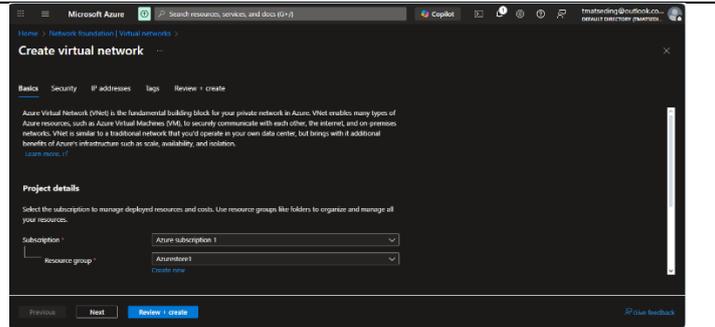


## Virtual Network Dashboard

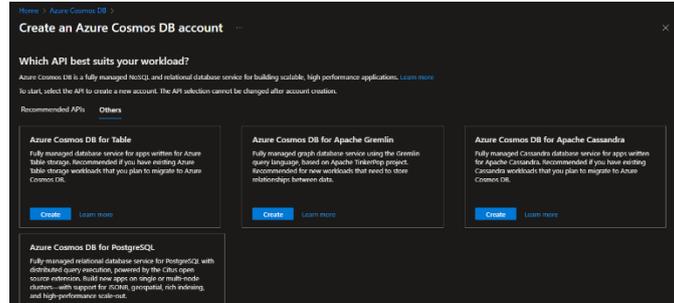
Next, go to the Virtual Networks section from the Azure menu. A virtual network is like a private area within the Azure cloud that allows your resources to communicate securely with each other.



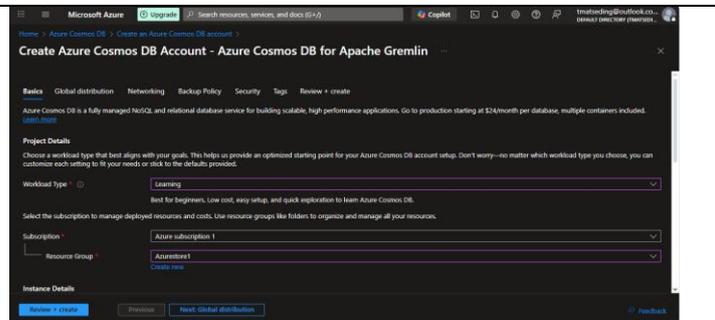
Create Virtual Network  
Click "Create Virtual Network." Link it to the Azurestore1 resource group, set the region to the relevant, and use the default subnet settings. This network will later be connected to your Cosmos DB and storage account using private endpoints.



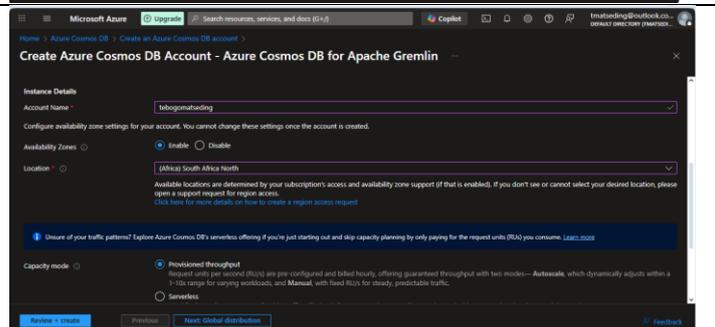
Cosmo DB for Apache (Gremlin Dashboard)  
From the main menu, open Azure Cosmos DB for Apache Gremlin. This dashboard is used to create and manage graph-based databases, which store data in nodes and relationships rather than tables. Selecting Cosmos DB for Apache Gremlin ensures that your project supports the Gremlin Graph API, allowing you to build and visualize data connections such as relationships or networks.



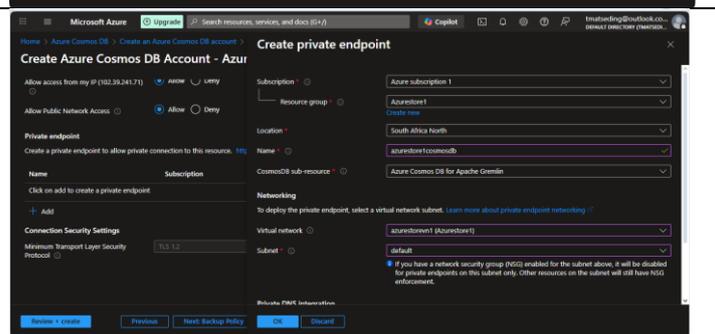
Cosmos DB Name Config



Cosmos DB AZ Selection  
In the setup process, make sure that Availability Zones are turned on. This setting increases reliability by keeping your database accessible even if one data zone experiences a problem or outage.

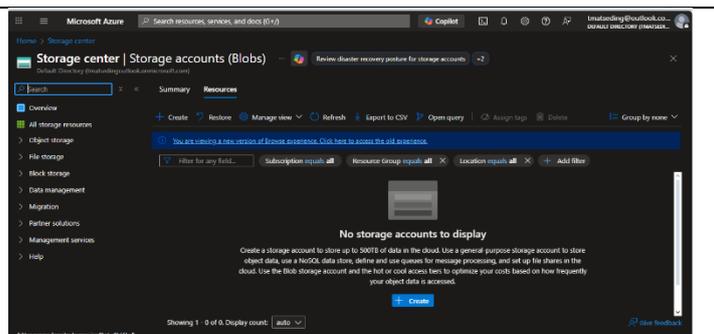


Cosmos DB Private Endpoint  
Under the Networking section, select Private Endpoint as the connectivity option. This keeps all communication between your Cosmos DB and other Azure resources private and secure within your virtual network preventing exposure to the public internet.



## Storage Dashboard

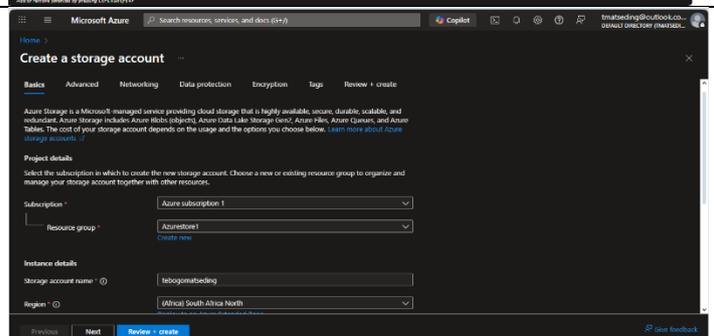
Next, navigate to the Storage Accounts section on the Azure dashboard. This is where you'll create and manage all Azure storage types, such as blob containers, files, and queues.



## Storage Account Creation

(Storage account name)

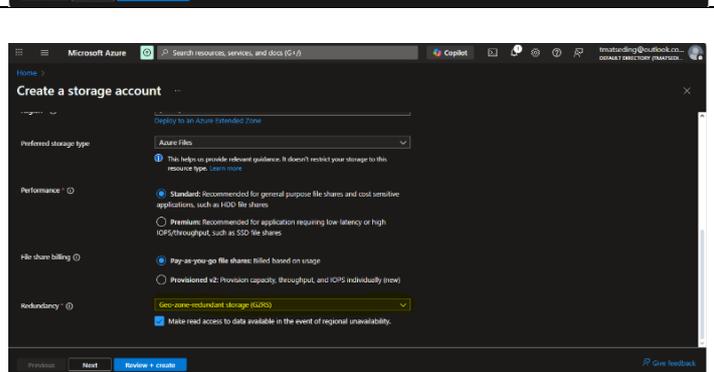
Click "Create a Storage Account." Under the Basics tab, choose the Azurestore1 resource group, select Southeast Australia as the region, and enter a unique name for your storage account.



## Storage Account Creation

(Preferred File Type & Redundancy)

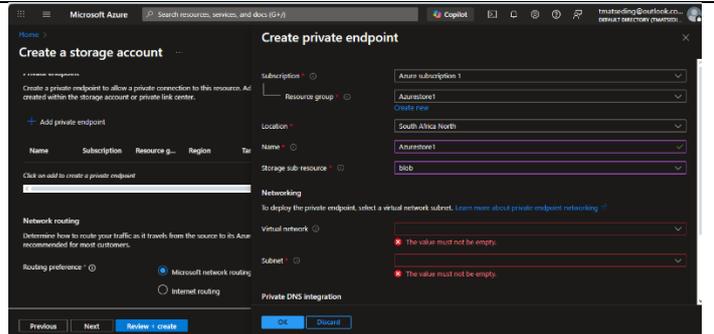
Choose Blob Storage as the file type for storing documents. For redundancy, select Geo-Redundant Storage Zone (GRSZ) this option replicates your data across multiple Azure regions and availability zones, ensuring it remains accessible and protected even during regional outages.



## Storage Account Creation

(Create a private endpoint)

Go to the Networking section and choose Private Endpoint as the connectivity option. This means your storage account will only communicate through your private Azure network, improving data security and privacy.



## Storage Account Created

After reviewing all the settings, click Create. Azure will deploy your new storage account under Azurestore1. Once created, it's ready to store Jane's important papers securely in the Azure Cloud environment.

