Imagen que contiene exterior, agua, hombre, vuelo

Descripción generada automáticamente

**Lab Details**

1. In this lab we will get to know about what are the different access tiers in Azure Blob storage and how to work with them.
2. Duration: **1 hour 30 minutes**

**Introduction**

**What is Azure Blob Storage Tiers?**

* Azure Storage is the Azure platform's managed service for providing cloud storage. Azure Storage is composed of several core services and supporting features. It is highly available, secure, durable, scalable, and redundant.
* Azure offers three storage tiers to store data in blob storage: Hot Access tier, Cool Access tier, and Archive tier. These tiers target data at different stages of its lifecycle and offer cost-effective storage options for different use cases.
* Hot access tier: This tier should be used for the data frequently accessed by applications, and that is read or written very often. The data storage costs for this tier are higher than other tiers, but access charges are lower, thus suiting the target use case.
* Cool access tier: This storage tier is suitable for data that is not accessed frequently by applications and is expected to be stored for a minimum of 30 days; for example, for short term storage of backup, telemetry data, media files, etc. The cost of using the cool access tier is lower than using the hot tier, however access costs and availability are not the same.
* Archive tier: As the name indicates, this tier is intended to be used to store rarely accessed or archival data. Its storage rate is the cheapest on Azure, but the data retrieval charges are the highest. This tier is intended as Azure archive storage for data that is expected to be stored for a minimum of 180 days and that can tolerate a larger retrieval window. The Archive tier is useful storage for large amounts of inactive data, such as data required to be stored for compliance purpose, long-term backup, archived datasets, etc.
* These three data tiers are supported in General Purpose storage V2 and Blob storage accounts.

**Architecture Diagram**

Interfaz de usuario gráfica, Aplicación

Descripción generada automáticamente

**Task Details**

1. Sign in to Azure Portal
2. Create a Storage Account (Cool Tier)
3. Create a Storage Account (Hot Tier)
4. Validation test
5. Delete the resources.

# ****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 URL [https://portal.azure.com](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 logout of it and clear cache.
3. Sign in with your given **username** and **password** on Azure portal.
4. If login is not working. Click on the **End Lab** and start the lab again.

Interfaz de usuario gráfica, Texto, Aplicación, Chat o mensaje de texto

Descripción generada automáticamente

## ****Task 2: Create a Storage Account (Cool Tier)****

1. At the top of the Azure portal, in the search box, search **Storage account**. Select **Storage accounts** in the search results.

Interfaz de usuario gráfica, Texto, Aplicación, Chat o mensaje de texto

Descripción generada automáticamente

1. In **Storage accounts**, select **+ Create**.

Diagrama

Descripción generada automáticamente

1. In **Create a storage account** page, enter or select the following information in the **Basics** tab:

* Project details:
  + Subscription: Select **Pay-As-You-Go**
  + Resource group: Select **rg\_eastus\_XXXXX**

Interfaz de usuario gráfica, Texto, Aplicación

Descripción generada automáticamente

* Instance details:
  + Storage account name: Enter a unique name.
  + Region: Select **(US) East US**
  + Performance: Select **Standard**
  + Redundancy: Select **Locally-redundant storage (LRS)**

Texto

Descripción generada automáticamente con confianza baja

1. Click on the **Advanced** tab, scroll down and select the following information:

* Access tier: Select **Cool**

Interfaz de usuario gráfica, Texto, Aplicación

Descripción generada automáticamente

1. Leave all the settings as default and click on **Review**button. Then, click on **Create**button. Your deployment will be completed after a few minutes.
2. Now, click on **Go to resource** and on the **overview** page of your storage account you will see that the performance tier for your account is **Standard** and under the **Properties** tab you can see that the **Default access tier** is set to **Cool**.

Escala de tiempo

Descripción generada automáticamente

Interfaz de usuario gráfica, Texto, Aplicación

Descripción generada automáticamente

1. On the overview page of your storage account, in the **Data storage** section, select **Containers**.

Interfaz de usuario gráfica, Texto, Aplicación

Descripción generada automáticamente

1. Click on **+ Container**.

Interfaz de usuario gráfica

Descripción generada automáticamente con confianza media

1. Now, on the **New Container** page, enter or select the following information:

* Name: Enter **mycontainer25**
* Public access level: Select **Private (no anonymous access)**
* Click on **Create**.

Interfaz de usuario gráfica, Texto, Aplicación

Descripción generada automáticamente

1. Your container will be created and displayed in the containers section.

Interfaz de usuario gráfica, Texto, Aplicación

Descripción generada automáticamente

1. Now, go to the container you created. Here, in the overview page of your container, click on **Upload**.

Interfaz de usuario gráfica, Aplicación

Descripción generada automáticamente

1. On the **Upload blob** page, browse a file on your local computer and select the file. Then, click on **Upload**.

Interfaz de usuario gráfica, Texto, Aplicación, Correo electrónico

Descripción generada automáticamente

1. You can now see that you have your file in place and also the access tier is Cool.

Interfaz de usuario gráfica, Texto, Aplicación, Chat o mensaje de texto

Descripción generada automáticamente

## ****Task 3: Create a Storage Account (Hot Tier)****

1. At the top of the Azure portal, in the search box, search **Storage account**. Select **Storage accounts** in the search results.

Interfaz de usuario gráfica, Texto, Aplicación, Chat o mensaje de texto

Descripción generada automáticamente

1. In **Storage accounts**, select **+ Create**.

Diagrama

Descripción generada automáticamente

1. In **Create a storage account** page, enter or select the following information in the **Basics** tab:

* Project details:
  + Subscription: Select **Pay-As-You-Go**
  + Resource group: Select **rg\_eastus\_XXXXX**

Interfaz de usuario gráfica, Texto, Aplicación

Descripción generada automáticamente

* Instance details:
  + Storage account name: Enter a unique name.
  + Region: Select **(US) Central US**
  + Performance: Select **Standard**
  + Redundancy: Select **Locally-redundant storage (LRS)**

Escala de tiempo

Descripción generada automáticamente

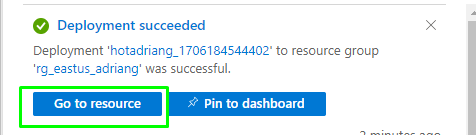
1. Click on the **Advanced** tab and select the following information:

* Access tier: Select **Hot**

Texto, Aplicación

Descripción generada automáticamente con confianza media

1. Leave all the settings as default and click on **Review**. Then, click on **Create**. Your deployment will be completed after a few minutes.
2. Now, click on **Go to resource** and on the**overview** page of your storage account you will see that the performance tier for your account is **Standard**and under the **Properties**tab you can see that the **Default access tier** is set to **Hot**.



1. On the overview page of your storage account, in the **Data storage** section, select **Containers**.

Interfaz de usuario gráfica, Texto, Aplicación

Descripción generada automáticamente

1. Click on **+ Container**.

Interfaz de usuario gráfica, Aplicación

Descripción generada automáticamente

1. Now, on the **New Container** page, enter or select the following information:

* Name: Enter **mycontainer23**
* Public access level: Select **Private (no anonymous access)**
* Click on **Create**.

Interfaz de usuario gráfica, Texto, Aplicación

Descripción generada automáticamente

1. Your container will be created and displayed in the containers section.

Interfaz de usuario gráfica, Aplicación

Descripción generada automáticamente

1. Now, go to the container you created. Here, in the overview page of your container, click on **Upload**.

Interfaz de usuario gráfica, Aplicación

Descripción generada automáticamente

1. On the **Upload blob** page, browse a file on your local computer and select the file. Then, click on **Upload**.

Interfaz de usuario gráfica, Texto, Aplicación, Chat o mensaje de texto, Correo electrónico

Descripción generada automáticamente

1. You can now see that you have your file in place and also the access tier is Hot.

Interfaz de usuario gráfica, Texto, Aplicación

Descripción generada automáticamente

1. Now, open the file which you uploaded. Here, you can see the **Change tier** option.

Interfaz de usuario gráfica, Aplicación

Descripción generada automáticamente

1. In the **change tier** section, you will see the three options of access tiers. You can choose any one of them as per your needs or requirements. Let’s choose the **Archive tier** and see what happens.

Imagen que contiene Interfaz de usuario gráfica

Descripción generada automáticamente

1. As soon as you change the access tier to **Archive**, you will see that you won’t be able to download the blob as the download option is grayed out.

Interfaz de usuario gráfica, Texto, Aplicación, Chat o mensaje de texto

Descripción generada automáticamente

Interfaz de usuario gráfica, Texto, Aplicación, Chat o mensaje de texto

Descripción generada automáticamente

1. Also, if you click on the **Edit** section, you won’t be able to see the file contents as it cannot be accessed because now your file is in the archive tier.

Interfaz de usuario gráfica, Texto, Aplicación, Chat o mensaje de texto

Descripción generada automáticamente

Interfaz de usuario gráfica, Texto, Chat o mensaje de texto

Descripción generada automáticamente

1. If you want to access your file contents, then you need to change the access tier again to **Hot**. Click on **Change tier** and then select **Hot** tier and click on **save**.

Interfaz de usuario gráfica, Texto, Aplicación, Word

Descripción generada automáticamente

Imagen que contiene Interfaz de usuario gráfica

Descripción generada automáticamente

1. Wait for about 5-10 minutes for tier to get updated to Hot and now then you will be able to access the contents of your file. If it is taking too long to get updated, try clicking on the Refresh button.

Interfaz de usuario gráfica, Texto, Aplicación, Chat o mensaje de texto

Descripción generada automáticamente

### **Do you know?**

Azure Blob Storage's tiering options enable seamless integration with other Azure services like Azure Functions, Azure Logic Apps, and Azure Event Grid, allowing you to build powerful, scalable, and automated data workflows.

## ****Task 4: Deleting the resources****

1. In the search box at the top of the Azure portal, enter **Resource Groups**. Select Resource groups from the results.
2. Click on the name of the resource group.

Imagen que contiene Diagrama

Descripción generada automáticamente

1. Select all the resources in that Resource group by clicking on the**Name checkbox**.
2. Go to the three dots on right and click **Delete**.
3. Now type Delete to confirm deletion.
4. Confirm Deletion.

Interfaz de usuario gráfica, Aplicación

Descripción generada automáticamente

# ****Completion and Conclusions****

1. You have successfully signed into Azure Portal.
2. You have successfully created a Storage Account (Cool Tier).
3. You have successfully created a Storage Account (Hot Tier).
4. You have successfully deleted the resources.