**Lab Details**

1. In this lab we will go through various steps to create Azure Blob storage and store files in it.
2. Duration: **30 minutes**

**Introduction**

**What is Azure Blob Storage?**

* 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.
* The word ‘Blob’ expands to a Binary Large Object. Blobs include images, text files, videos and audios.
* Azure Blob storage is Microsoft's object storage solution for the cloud and it is optimized for storing massive amounts of unstructured data.
* Unstructured data is data that doesn't adhere to a particular data model or definition, such as text or binary data.
* With Azure Blob Storage, the files (photos, videos, training documents, etc.), which are known as blobs, are put in containers which function similar to directories. These are then linked to the storage account.
* One of the big advantages for businesses is that Azure Blob storage allows them to collect all of their content assets in one place. These will then be available all across their different departments and internationally. The speed, scalability, ease of access, and security make such cloud storage very attractive for all mid-sized and large organizations.

**Architecture Diagram**

Interfaz de usuario gráfica, Aplicación

Descripción generada automáticamente

**Task Details**

1. Sign into Azure Portal.
2. Create a Storage Account.
3. Create a Container.
4. Upload a Blob object.
5. Change access level.
6. Delete the resources.

# ****Lab Steps****

## ****Task 1: Sign into Azure Portal****

1. Go to the Azure portal 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. Sign in with your given **username** and **password** on Azure portal.

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## ****Task 2: Create a Storage Account****

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

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

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

* Resource group: Create New: **RG-003**
* Instance details:
  + Storage account name : Enter **mystorageacc[your name]**
  + Region: Select **(US) Central US**
  + Performance: Select **Standard**
  + Redundancy: Select **Locally-redundant storage (LRS)**

Interfaz de usuario gráfica, Texto, Aplicación, Correo electrónico

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1. Now go to the **Advanced**tab and enable **Allow enabling anonymous access on individual containers.**Enabling this will allow you to modify a container's anonymous access setting to enable anonymous access to the data in that container. You will also be able to make changes in the blobs.

Interfaz de usuario gráfica, Diagrama

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Interfaz de usuario gráfica, Texto, Aplicación

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1. After this, leave all the settings as default and click on **Review + create**. Then, click on **Create**. Your deployment will be completed after a few minutes.

Interfaz de usuario gráfica, Texto, Aplicación

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## ****Task 3: Create a Container****

1. In the Azure portal, go to the Storage account you created earlier. On the overview page of your storage account, in the **Data storage** section, select **Containers**.

Interfaz de usuario gráfica, Aplicación

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1. Click on **+ Container**.

Diagrama

Descripción generada automáticamente

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**.

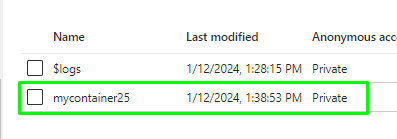
Imagen que contiene Diagrama

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Imagen que contiene Interfaz de usuario gráfica

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



## ****Task 4: Upload a Blob object****

1. First, let us create a simple HTML file. Open **Notepad** on your local computer and enter **<h1>This is a sample document!</h1>**.
2. Then, click on **Save as** and enter **sample.html** and click on **Save**.
3. Now, if you try to open the sample.html file, you will see the page displaying the contents in it.

Interfaz de usuario gráfica, Texto, Aplicación

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

Interfaz de usuario gráfica, Texto, Aplicación

Descripción generada automáticamente

1. On the **Upload blob** page, browse the file you created previously named **sample.html** on your local computer and select the file. Then, click on **Upload**.

Interfaz de usuario gráfica, Texto, Aplicación

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1. You can now see that you have your file in place.

Interfaz de usuario gráfica, Texto

Descripción generada automáticamente

1. Now, click on the file which is uploaded to your container. You can see on the **overview** page, there are various properties shown. You can go ahead and click on the **Edit** section and, also, edit the file here itself.

Texto

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1. You can make some changes in your file if you want and then click on **Save**.

Interfaz de usuario gráfica, Texto, Aplicación

Descripción generada automáticamente

1. Now, go to the **overview** section and copy the **URL**. Then, paste it on your browser.

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Descripción generada automáticamente

Interfaz de usuario gráfica, Texto, Aplicación

Descripción generada automáticamente

1. You can see that we are getting an error message of a resource not found. And the reason for this is, when you go to a new tab and try to access this blob, you are trying to access this blob as an anonymous user. And by default, anonymous access is not allowed for the blobs in your container.

Interfaz de usuario gráfica, Texto, Aplicación, Correo electrónico

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1. So, let’s change the access level of our container.

## ****Task 5: Change access level****

As we saw in the previous step, that we were not able to access the resource as an anonymous user. So, in order to access the resource we need to change the access level to **Blob (anonymous read access for blobs only).**

1. Go to the **overview** section of your container and click on **Change access level**.

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

Descripción generada automáticamente

1. Now, select the following information on the **Change access level** section:

* Public access level: Select **Blob (anonymous read access for blobs only)**
* Click on **OK**.

Interfaz de usuario gráfica, Texto, Aplicación, Correo electrónico

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1. Now, go back to your browser, and refresh the page. You will now be able to see the contents of the file on the web page displayed.

Interfaz de usuario gráfica, Texto, Aplicación

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1. So, finally you accessed the blob within your container.

### **Do you know?**

Azure Blob Storage offers a powerful feature called lifecycle management, allowing you to automatically transition and manage the lifecycle of your data by moving it between different storage tiers, archiving it, or even deleting it based on customizable rules, optimizing costs and storage efficiency.

## ****Task 6: Deleting the resources****

1. In the search box at the top of the Azure portal, enter **Resource Groups**. Select Resource groups from the results.

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1. Click on the name of the resource group.  
   Select all the resources in that Resource group by clicking on the **Name checkbox**.

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1. Go to the three dots on right and click **Delete**.
2. Now type Delete to confirm deletion.
3. Confirm Deletion.

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Interfaz de usuario gráfica, Texto

Descripción generada automáticamente

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

1. You have successfully signed into Azure Portal.
2. You have successfully created a Storage Account.
3. You have successfully created a Container.
4. You have successfully uploaded a Blob object.
5. You have successfully changed the access level.
6. You have successfully deleted the resources.