

Limit Access to Azure Storage Account Using SAS URI

Introduction

In this lab, you will have an opportunity to create a SAS token for access to an Azure Storage account and then test the SAS-based access by working with the storage account from a separate environment. Students with at least some Azure experience will have the best opportunity to complete the lab without assistance, but the lab guide and solution videos provide a full walkthrough if you get stuck.

Solution

Log in to the Azure portal using the credentials provided on the lab page. Be sure to use an incognito or private browser window to ensure you're using the lab account rather than your own.

Create two sample text files for use later in the lab. Save them to your Desktop or a location you can easily access.

Prepare Testing Environment

Connect to RDP

Use the Remote Desktop client (available from Microsoft for Windows clients natively and [Mac clients here](#)).

1. From the **Resources** list of the resource group **Overview** page, click the listed **vm** virtual machine.
2. Click **Connect**.
3. Click **Download RDP File**.
4. Open the file in your Remote Desktop app.
5. Log in to the virtual machine using the following credentials:
 - **User Name:** Enter *cloud_user*.
 - **Password:** Use the password for the **vm** found in your lab credentials.
6. If you are prompted to make your VM discoverable, click **Yes**. If the **Server Manager** appears, close it.

Install and Configure Azure Storage Explorer

1. Open the **Edge** browser. Navigate through the browser setup prompts.
2. From Edge, download the [Azure Storage Explorer](#) software on the VM.
 - On the Azure Storage Explorer web page, click the **Operating system** button, and select **Windows**.
 - Once the file is downloaded, open it to initiate the installation process.
3. Follow all the installation prompts, including accepting license agreements. It may take a few minutes to install.
4. Once the installation process is complete, ensure **Launch Microsoft Azure Storage Explorer** is checked, and click **Finish**. The Explorer will start up in a new window.
5. From Azure Storage Explorer, click **Attach to a resource**.
6. On the **Select Resource** dialog page, select **Storage account or service**.
7. On the **Select Connection Method** dialog page, select **Shared access signature URL (SAS)** for how you will connect to the storage account. Then, click **Next**.
8. On the **Enter Connection Info** dialog page, for **Display name**, enter *MyLabCnx*.

Prepare Two Text Files and a Container

1. Minimize your RDP session, **but don't log out of or close it**. Go back to the Azure portal.
2. You should still be on the RDP screen. Use the breadcrumb navigation to go back to the resource group.
3. From the **Resources** list, click the link for the **Storage account** that was pre-provisioned for you. (It begins with **pslab**.)
4. From the left navigation pane, under **Data storage**, select **Containers**.
5. Click + **Container**.
6. In the **New container** pop-up, enter *container1* for **Name**.
7. Click **Create**. Then, select the new container from the list to open it.
8. Upload the two text files you created at the beginning of the lab. If you did not create them, create two sample files now, and click **Upload** to upload them.

Create and Test a SAS Token

Create the SAS Token

1. Click the last link in the breadcrumb navigation to go back to the storage account.
2. From the left navigation, under **Settings**, click **Configuration**.
3. Change the **Allow storage account key access** setting to **Enabled**.
4. Click **Save**.
5. In the left navigation menu, scroll up to the **Security + networking** section, and click **Shared access signature**.
6. On the **Shared access signature** page, configure the following settings:
 - For **Allowed services**, ensure only **Blob** is checked.
 - For **Allowed resource types**, select **Service**, **Container**, and **Object**.
 - For **Allowed permissions**, select only **Read** and **List**.
 - For **Allowed protocols**, ensure only **HTTPS only** is selected.
7. Click **Generate SAS and connection string**.

Test the Token

1. Copy the generated **Blob service SAS URL**. Paste it to a secure location, as this URL is displayed only one time.
2. Go back to the RDP session. Paste the copied token to the **Service URL** box. Then, click **Next**.
3. Click **Connect**.
4. Look for **MyLabCnx** to show up in the Explorer pane of Storage Explorer.
5. Expand **MyLabCnx > Blob Containers**, and then double click **container1**.
6. You should see both items that you uploaded. Try deleting a file:
 - Select a file from the list.
 - Click **More > Delete > Yes**.
 - Observe in the **Activities** section that the delete action fails. This is based on the permissions you set. The only actions you should be able to complete are to see a list of available blobs and read the blobs.