

Practice - Creating Storage Accounts

In this practice, we will look at creating storage accounts.

Create a storage account in the portal

1. In the Azure portal, select **All services**. In the list of resources, type Storage Accounts. As you begin typing, the list filters based on your input. Select **Storage Accounts**.
2. On the Storage Accounts window that appears, choose **Add**.
3. Select the **subscription** in which to create the storage account.
4. Under the Resource group field, select **Create new**. Enter a name for your new resource group.
5. Enter a **name** for your storage account. The name you choose must be unique across Azure. The name also must be between 3 and 24 characters in length, and can include numbers and lowercase letters only.
6. Select a **location** for your storage account, or use the default location.
7. Leave these fields set to their default values:
 - Deployment model: **Resource Manager**
 - Performance: **Standard**
 - Account kind: **StorageV2 (general-purpose v2)**
 - Replication: **Locally redundant storage (LRS)**
 - Access tier: **Hot**
8. Select **Review + Create** to review your storage account settings and create the account.
9. Select **Create**.

Create a storage account using PowerShell

Use the following code to create a storage account using PowerShell. Swap out the storage types and names to suit your requirements.

```
Get-AzLocation | select Location
$location = "westus"
$resourceGroup = "storage-demo-resource-group"
New-AzResourceGroup -Name $resourceGroup -Location $location
New-AzStorageAccount -ResourceGroupName $resourceGroup -Name "storagedemo" -Location $location -SkuName Standard_LRS -Kind StorageV2
```

Create a storage account using Azure CLI

Use the following code to create a storage account using Azure CLI. Change the storage types and names to suit your requirements.

```
az group create --name storage-resource-group --location westus

az account list-locations --query "[].{Region:name}" --out table

az storage account create --name storagedemo --resource-group storage-resource-group --location westus --sku Standard_LRS --kind StorageV2
```

Practice - Storage Explorer

Note: If you have an older version of the Storage Explorer, be sure to upgrade. These steps use version 1.6.2.

Note: For the demonstration we will only do a basic storage account connection.

In this demonstration, we will look at several common Azure Storage Explorer tasks.

Download and install Storage Explorer

1. Download and install Azure Storage Explorer - <https://azure.microsoft.com/en-us/features/storage-explorer/>
2. After the installation, launch the tool.
3. Review the Release Notes and menu options.

Connect to an Azure subscription

1. In Storage Explorer, select **Manage Accounts**, second icon top left. This will take you to the Account Management Panel.
2. The left pane now displays all the Azure accounts you've signed in to. To connect to another account, select **Add an account**.
3. If you want to sign into a national cloud or an Azure Stack, click on the Azure environment dropdown to select which Azure cloud you want to use.
4. Once you have chosen your environment, click the **Sign in...** button.
5. After you successfully sign in with an Azure account, the account and the Azure subscriptions associated with that account are added to the left pane.
6. Select the Azure subscriptions that you want to work with, and then select **Apply**.
7. The left pane displays the storage accounts associated with the selected Azure subscriptions.

Note: This next section requires an Azure storage account.

Attach an Azure storage account

1. Access the Azure portal, and your storage account.
2. Explore the choice for **Storage Explorer**, which is now in preview.
3. Select **Access keys** and read the information about using the keys.
4. To connect in Storage Explorer, you will need the **Storage account name** and **Key1** information.
5. In Storage Explorer, **Add an account**.
6. Paste your account name in the Account name text box, and paste your account key (the key1 value from the Azure portal) into the Account key text box, and then select **Next**.

7. Verify your storage account is available in the navigation pane. You may need to refresh the page.
8. Right-click your storage account and notice the choices including **Open in portal**, **Copy primary key**, and **Add to Quick Access**.

Practice - AzCopy

In this practice, we will explore AzCopy.

Install the AzCopy tool

1. Download the Windows 8.1 version - <https://docs.microsoft.com/en-us/azure/storage/common/storage-use-azcopy?toc=%2fazure%2fstorage%2ftables%2ftoc.json#download-and-install-azcopy-on-windows>.
2. Install and launch the tool.

Explore the help

1. Launch the Microsoft Azure Storage AzCopy tool.
2. View the help.

```
azcopy /?
```

3. Scroll to the top of the Help information and read about the **Common options**, like: source, destination, source key, and destination key.
4. Scroll down the **Samples** section. We will be trying several of these examples. Does anything look particularly interesting?

Download a blob from Blob storage to the file system

Note: This example requires an Azure storage account with blob container and blob file. You will also need to capture parameters in a text editor like Notepad.

1. Access the Azure portal.
2. Access your storage account with the blob you want to download.
3. Select **Access keys** and copy the **Key Key1** value. This will be the *sourcekey*: value.
4. Drill down to the blob of interest, and view the file **Properties**.
5. Copy the **URL** information. This will be the *source*: value.
6. Locate a local destination directory. This will be the *dest*: value. A filename is also required.
7. Construct the command using your values.

```
azcopy /source:sourceURL  
/dest:destinationdirectoryandfilename /sourcekey:"key"
```

8. If you have errors, read them carefully and make corrections.
9. Verify the blob was downloaded to your local directory.

Upload files to Azure blob storage

Note: The example continues from the previous example and requires a local directory with files.

1. The *source:* for the command will be a local directory with files.
2. The *dest:* will be the blob URL used in the previous example. Be sure to remove the filename, just include the storage account and container.
3. The *destkey:* will be the key used in the previous example.
4. Construct the command using your values.

```
azcopy /source:source /dest:destinationcontainer /destkey:key
```

5. If you have errors, read them carefully and make corrections.
6. Verify your local files were copied to the Azure container.
7. Notice there are switches to recurse subdirectories and pattern match.

Practice - Set Azure CDN caching rules

<https://docs.microsoft.com/en-us/azure/cdn/cdn-caching-rules-tutorial>