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# Lab 03c - Manage Azure resources by Using Azure PowerShell

## Student lab manual

### Lab scenario

Now that you explored the basic Azure administration capabilities associated with provisioning resources and organizing them based on resource groups by using the Azure portal and Azure Resource Manager templates, you need to carry out the equivalent task by using Azure PowerShell. To avoid installing Azure PowerShell modules, you will leverage PowerShell environment available in Azure Cloud Shell.

**Note:** An [interactive lab simulation](#) is available that allows you to click through this lab at your own pace. You may find slight differences between the interactive simulation and the hosted lab, but the core concepts and ideas being demonstrated are the same.

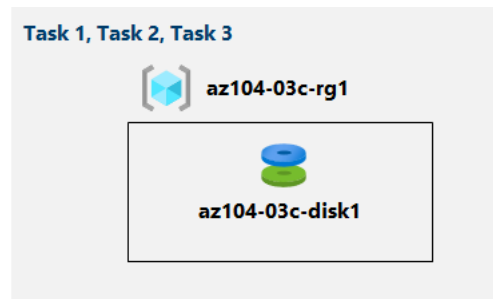
### Objectives

In this lab, you will:

- Task 1: Start a PowerShell session in Azure Cloud Shell
- Task 2: Create a resource group and an Azure managed disk by using Azure PowerShell
- Task 3: Configure the managed disk by using Azure PowerShell

Estimated timing: 20 minutes

### Architecture diagram



### Instructions


**Note:** Always create your own secure password for any virtual machine or user account you create. If the virtual machine is created for you, use **Reset password** in the Portal to update the password.

#### Exercise 1

##### Task 1: Start a PowerShell session in Azure Cloud Shell

In this task, you will open a PowerShell session in Cloud Shell.

1. In the portal, open the **Azure Cloud Shell** by clicking on the icon in the top right of the Azure Portal.
2. If prompted to select either **Bash** or **PowerShell**, select **PowerShell**.


 **Note:** If this is the first time you are starting **Cloud Shell** and you are presented with the **You have no storage mounted** message, select the subscription you are using in this lab, and click **Create storage**.

3. If prompted, click **Create storage**, and wait until the Azure Cloud Shell pane is displayed.
4. Ensure **PowerShell** appears in the drop-down menu in the upper-left corner of the Cloud Shell pane.


## Task 2: Create a resource group and an Azure managed disk by using Azure PowerShell

In this task, you will create a resource group and an Azure managed disk by using Azure PowerShell session within Cloud Shell

1. To create a resource group in the same Azure region as the **az104-03b-rg1** resource group you created in the previous lab, from the PowerShell session within Cloud Shell, run the following:

Code	 Copy
<pre>\$location = (Get-AzResourceGroup -Name az104-03b-rg1).Location  \$rgName = 'az104-03c-rg1'  New-AzResourceGroup -Name \$rgName -Location \$location</pre>	


2. To retrieve properties of the newly created resource group, run the following:

Code	 Copy
<pre>Get-AzResourceGroup -Name \$rgName</pre>	

3. To create a new managed disk with the same characteristics as those you created in the previous labs of this module, run the following:

Code	 Copy
<pre>\$diskConfig = New-AzDiskConfig `     -Location \$location `     -CreateOption Empty `     -DiskSizeGB 32 `     -Sku Standard_LRS  \$diskName = 'az104-03c-disk1'  New-AzDisk `     -ResourceGroupName \$rgName `     -DiskName \$diskName `     -Disk \$diskConfig</pre>	


4. To retrieve properties of the newly created disk, run the following:

Code	 Copy
<pre>Get-AzDisk -ResourceGroupName \$rgName -Name \$diskName</pre>	


## Task 3: Configure the managed disk by using Azure PowerShell

In this task, you will be managing the configuration of the Azure managed disk by using Azure PowerShell session within Cloud Shell.


1. To increase the size of the Azure managed disk to **64 GB**, from the PowerShell session within Cloud Shell, run the following:

Code	 Copy
<pre>New-AzDiskUpdateConfig -DiskSizeGB 64   Update-AzDisk -ResourceGroupName \$rgName -DiskName \$diskName</pre>	


2. To verify that the change took effect, run the following:

Code	 Copy
<pre>Get-AzDisk -ResourceGroupName \$rgName -Name \$diskName</pre>	


3. To verify the current SKU as **Standard\_LRS**, run the following:

Code	 Copy
<pre>(Get-AzDisk -ResourceGroupName \$rgName -Name \$diskName).Sku</pre>	


4. To change the disk performance SKU to **Premium\_LRS**, from the PowerShell session within Cloud Shell, run the following:

Code	 Copy
<pre>New-AzDiskUpdateConfig -Sku Premium_LRS   Update-AzDisk -ResourceGroupName \$rgName -DiskName \$diskName</pre>	

5. To verify that the change took effect, run the following:

Code	 Copy
<pre>(Get-AzDisk -ResourceGroupName \$rgName -Name \$diskName).Sku</pre>	

### Clean up resources

 **Note:** Do not delete resources you deployed in this lab. You will reference them in the next lab of this module.

### Review

In this lab, you have:

- Started a PowerShell session in Azure Cloud Shell
- Created a resource group and an Azure managed disk by using Azure PowerShell
- Configured the managed disk by using Azure PowerShell