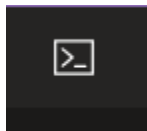# Lab 03c- Manage Azure resources by Using Azure PowerShell
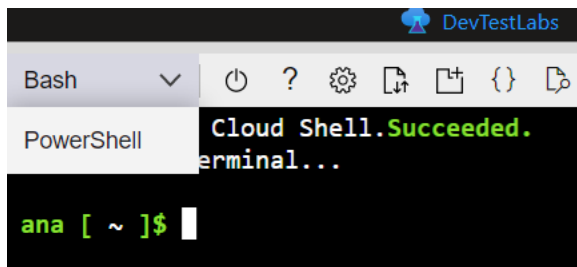
Exercise 1

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

In this task, we will open a PowerShell session in Cloud Shell. We open the Azure Cloud Shell by clicking on the icon in the top right of the Azure Portal.

We then select PowerShell instead of Bash, from the dropdown menu.

After we select PowerShell, we are prompted, in our case, to switch form Bash to PowerShell. We confirm it.
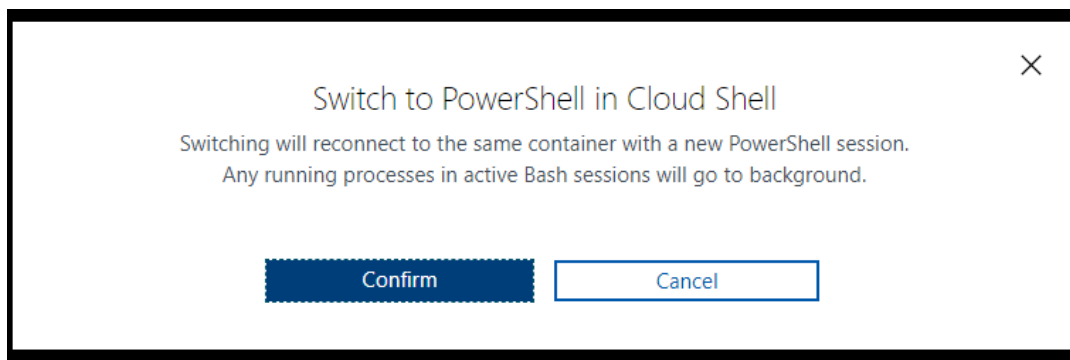
Then we get the PowerShell screen.

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

Every number corresponds to the subtask in the Lab.

1. To create a resource group.

2. To retrieve properties of the newly created resource group.

3. To create a new managed disk.


```
PS /home/ana> $diskConfig = New-AzDiskConfig `
>> -Location $location `
>> -CreateOption Empty `
>> -DiskSizeGB 32 `
>> -Sku Standard_LRS
PS /home/ana> $diskName = 'az104-03c-disk1'
PS /home/ana> New-AzDisk `
>> -ResourceGroupName $rgName `
>> -DiskName $diskName `
>> -Disk $diskConfig
WARNING: Upcoming breaking changes in the cmdlet 'New-AzDisk' :
Starting in May 2023 the "New-AzDisk" cmdlet will deploy with the Trusted Launch configuration by default. This includes defaulting the "HyperVGeneration" parameter to "v2"
. To know more about Trusted Launch, please visit https://learn.microsoft.com/en-us/azure/virtual-machines/trusted-launch
Note : Go to https://aka.ms/azps-changewarnings for steps to suppress this breaking change warning, and other information on breaking changes in Azure PowerShell.

ResourceGroupName           : cloud-shell-storage-westeurope
ManagedBy                   :
ManagedByExtended           : {}
Sku                         : Microsoft.Azure.Management.Compute.Models.DiskSku
Zones                       :
TimeCreated                 : 3/10/2023 4:31:17 PM
OsType                      :
HyperVGeneration            :
CreationData                : Microsoft.Azure.Management.Compute.Models.CreationDa
                              ta
DiskSizeGB                  : 32
DiskSizeBytes               : 34359738368
UniqueId                    : 83187020-88b0-4b7c-bce6-c30809e77ed2
EncryptionSettingsCollection :
ProvisioningState           : Succeeded
DiskIOPSReadWrite           : 500
DiskMBpsReadWrite           : 60
```



```
UniqueId                     : 83187020-88b0-4b7c-bce6-c30809e77ed2
EncryptionSettingsCollection :
ProvisioningState            : Succeeded
DiskIOPSReadWrite            : 500
DiskMBpsReadWrite            : 60
DiskIOPSReadOnly             :
DiskMBpsReadOnly             :
DiskState                    : Unattached
Encryption                   : Microsoft.Azure.Management.Compute.Models.Encryption
MaxShares                    :
ShareInfo                    : {}
Id                           : /subscriptions/a97fb497-0035-40f2-ad68-f32f4b21efd8/
                               resourceGroups/cloud-shell-storage-westeurope/provid
                               ers/Microsoft.Compute/disks/az104-03c-disk1
Name                         : az104-03c-disk1
Type                         : Microsoft.Compute/disks
Location                     : westeurope
ExtendedLocation             :
Tags                         : {}
NetworkAccessPolicy          : AllowAll
DiskAccessId                 :
Tier                         :
BurstingEnabled              :
PurchasePlan                 :
SupportsHibernation          :
SecurityProfile              :
PublicNetworkAccess          : Enabled
SupportedCapabilities        :
DataAccessAuthMode           :
CompletionPercent            :


PS /home/ana>
```

4. To retrieve properties of the newly created disk.

Task 3: Configure the managed disk by using Azure PowerShell

In this task, we 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.

2. To verify that the change took effect.

3. To verify the current SKU as Standard_LRS.

```
PS /home/ana> (Get-AzDisk -ResourceGroupName $rgName -Name $diskName).Sku

Name          Tier
----          ----
Standard_LRS  Standard

PS /home/ana>
```

4. To change the disk performance SKU to Premium_LRS.

```
PS /home/ana> New-AzDiskUpdateConfig -Sku Premium_LRS | Update-AzDisk -ResourceGroupName $rgName -DiskName $diskName

ResourceGroupName              : cloud-shell-storage-westeurope
ManagedBy                      :
ManagedByExtended              : {}
Sku                            : Microsoft.Azure.Management.Compute.Models.DiskSku
Zones                          :
TimeCreated                    : 3/10/2023 4:31:17 PM
OsType                         :
HyperVGeneration               :
CreationData                   : Microsoft.Azure.Management.Compute.Models.CreationData
DiskSizeGB                     : 64
DiskSizeBytes                  : 68719476736
UniqueId                       : 83187020-88b0-4b7c-bce6-c30809e77ed2
EncryptionSettingsCollection   :
ProvisioningState              : Succeeded
DiskIOPSReadWrite              : 240
DiskMBpsReadWrite              : 50
DiskIOPSReadOnly               :
DiskMBpsReadOnly               :
DiskState                      : Unattached
Encryption                     : Microsoft.Azure.Management.Compute.Models.Encryption
MaxShares                      :
ShareInfo                      : {}
Id                             : /subscriptions/a97fb497-0035-40f2-ad68-f32f4b21efd8/resourceGroups/cloud-shell-storage-westeurope/providers/Microsoft.Compute/disks/az104-03
                                 c-disk1
Name                           : az104-03c-disk1
Type                           : Microsoft.Compute/disks
Location                       : westeurope
ExtendedLocation               :
Tags                           : {}
NetworkAccessPolicy            : AllowAll
```

```
Tags                      : {}
NetworkAccessPolicy       : AllowAll
DiskAccessId              :
Tier                      : P6
BurstingEnabled           :
PurchasePlan              :
SupportsHibernation       :
SecurityProfile           :
PublicNetworkAccess       : Enabled
SupportedCapabilities     :
DataAccessAuthMode        :
CompletionPercent         :


PS /home/ana>
```

5. To verify that the change took effect.

```
PS /home/ana> (Get-AzDisk -ResourceGroupName $rgName -Name $diskName).Sku

Name        Tier
----        ----
Premium_LRS Premium

PS /home/ana>
```