Create and Manage Azure VMs using PowerShell and AZ CLI

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Connect to Azure using PowerShell

- Install-Module -Name AzureRM -AllowClobber
- Import-Module AzureRM
- Connect-AzureRmAccount

Connect to Azure using AZ CLI

- az login -u <username> -p <password>

Create Resource Group using PowerShell

- New-AzureRmResourceGroup -Name AZRG01 -Location "Central US"

Create Resource Group using AZ CLI

- az group create --name azrg --location "central us"

Create Storage Account using PowerShell

- New-AzureRmStorageAccount -ResourceGroupName AZRG01 -AccountName azbiglab01 -Location "Central US" -SkuName Standard_GRS

Create Storage Account using AZ CI

- az storage account create -n MyStorageAccount -g MyResourceGroup -l westus --sku Standard_LRS

Create Virtual Network using PowerShell

- New-AzureRmVirtualNetwork -ResourceGroupName "AZRG001" -Name "AZVN01" -Location "Central US" -AddressPrefix 200.200.200.0/24

Create Virtual Network using AZ CLI

- az network vnet create --name "AZVN02" --resource-group "AZRG002" --subnet-name "default"

Create VM using PowerShell

- New-AzureRmVM -ResourceGroupName AZRG001 -Location "Central US" -Name "AZVM002" -PublicIpAddressName "AZVMIP02" -AllocationMethod "static"

Note: you can also create VM using only New-AzureRmVM and all resources (resource group, virtual network, storage account) will created automatic with the same virtual machine name

Create Centos VM using Azure Cli

- az vm create --resource-group "azrg" --name azbiglabvm04 --image centos --size Standard_A1 --admin-username user01 --admin-password password --public-ip-address AZVMIP01 --public-ip-address-allocation static

Get VMs info using PowerShell

- Get -AzureRmVM

Resize VMs using AZ CLI

- az vm list-sizes --location eastus --output table
- az vm resize --resource-group azrg01 --name azbiglabvm01 --size Standard_A1

List vm image list using AZ CLI

- az vm image list --output table
- az vm image list --offer CentOS --all --output table

Assign permission to manage VM

- New-AzureRmRoleAssignment -RoleDefnitionName “Contributor” -SignInName aabdulwahed@outlook.com -ResourceGroupName AZRG01

Get the public VM IP address assigned using PowerShell

- ```
  Get-AzureRmPublicIpAddress `
   -ResourceGroupName "AZRG001" `
   -Name "AZVMIP01" `
   | Select "IpAddress", "PublicIpAllocationMethod" `
   | Format-Table
  ```

Get storage account using PowerShell

- Get-AzureRMStorageAccount | Select StorageAccountName, Location
  ```

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Start and Stop and Restart and Remove VMs using PowerShell

- Start-AzureVM -ResourceGroupName AZRG01 -Name AZVM01
- Stop-AzureVM -ResourceGroupName AZRG01 -Name AZVM01
- Restart-AzureVM -ResourceGroupName AZRG01 -Name AZVM01
- Remove-AzureVM -ResourceGroupName AZRG01 -Name AZVM01 -Force

Delete VMs using Az CLI

- az vm delete --resource-group azrg01 --name azbiglabvm01

Delete resource group using PowerShell

- Remove-AzureRmResourceGroup -Name AZLABRG01
  Note: removing resource group also remove resources related to is (storage accounts and VNets)

Delete Storage Account using AZ CLI

- az storage account delete --name azbiglab01

Logout from connected PowerShell

- Disconnect-AzureRmAccount

Logout from connected AZ CLI

- az logout