**Azure VM via Portal, PowerShell and ARM Template**

Before you begin the tasks, review the following articles:

* [Export Template](https://docs.microsoft.com/en-us/azure/virtual-machines/windows/quick-create-portal)
* [Create a Windows virtual machine in Azure with PowerShell](https://docs.microsoft.com/en-us/azure/virtual-machines/windows/quick-create-powershell)
* [Create a Windows virtual machine from a Resource Manager template](https://docs.microsoft.com/en-us/azure/virtual-machines/windows/ps-template)

1. Login Microsoft Azure
2. Create virtual machines and all needed resources for Virtual machine then export ARM template from portal
3. Create VM using Azure PowerShell

Connect-AzAccount

New-AzResourceGroup -Name testRG -Location EastUS

New-AzVm `

>> -ResourceGroupName "testRG" `

>> -Name "myVM" `

>> -Location "East US" `

>> -VirtualNetworkName "myVnet" `

>> -SubnetName "mySubnet" `

>> -SecurityGroupName "myNetworkSecurityGroup" `

>> -PublicIpAddressName "myPublicIpAddress" `

>> -OpenPorts 80,3389

1. Create VM using ARM template (Visual studio code or Visual studio)

$resourceGroupName = Read-Host -Prompt "Enter the Resource Group name"

$location = Read-Host -Prompt "Enter the location (i.e. centralus)"

$adminUsername = Read-Host -Prompt "Enter the administrator username"

$adminPassword = Read-Host -Prompt "Enter the administrator password" -AsSecureString

$dnsLabelPrefix = Read-Host -Prompt "Enter an unique DNS name for the public IP"

New-AzResourceGroup -Name $resourceGroupName -Location "$location"

New-AzResourceGroupDeployment `

-ResourceGroupName $resourceGroupName `

-TemplateUri “ azuredeploy.json" `

-adminUsername $adminUsername `

-adminPassword $adminPassword `

-dnsLabelPrefix $dnsLabelPrefix

(Get-AzVm -ResourceGroupName $resourceGroupName).name