**How to create an Azure VM (virtual machine) using PowerShell**

Above, we discussed **How to Create Azure VM (Virtual Machine)** using Azure Portal. Let’s see here how to to **create an Azure VM** (virtual machine) by using [PowerShell](https://www.enjoysharepoint.com/poweshell-sharepoint-examples/).

**Azure Create VM PowerShell**

To start with make sure you have installed**Azure PowerShell Az 1.0 or later version**. You can use the below command

Install-Module Az

Now Login to your Azure account

Login-AzAccount

user object creation

$credentials = Get-Credential -Message "Enter your username and password for the virtual machine."

Resource group creation

$vmresourceGroup = "MyDev"

$location = "(Asia pacific) Central India"

New-AzureRmResourceGroup -Name $vmresourceGroup -Location $location

Subnet configuration

$SubnetName = "Mydevsubnet"

$subnetConfiguration = New-AzureRmVirtualNetworkSubnetConfig -Name $SubnetName -AddressPrefix 10.50.1.0/24

Virtual Network creation

$Networkname = "DevNet"

$vmresourceGroup = "MyDev"

$Devnet = New-AzureRmVirtualNetwork -ResourceGroupName $vmresourceGroup-Location $location -Name $Networkname -AddressPrefix 10.50.1.0/24 -Subnet $subnetConfiguration

Public IP Address creation

$vmresourceGroup = "MyDev"

$location = "(Asia pacific) Central India"

$publicdn = "dev-cdn"

$publicIP = New-AzureRmPublicIpAddress -ResourceGroupName $vmresourceGroup -Location $location -Name "$publicdn$(Get-Random)" -AllocationMethod Static -IdleTimeoutInMinutes 5

Rule for Port 3389

$NameRDP = "Default-RDP"

$location = "(Asia pacific) Central India"

$portRule = New-AzureRmNetworkSecurityRuleConfig -Name $NameRDP -Protocol Tcp -Direction Inbound -Priority 1000 -SourceAddressPrefix \* -SourcePortRange \* -DestinationAddressPrefix \* -DestinationPortRange 3389 -Access Allow

Network security group creation

$SecurityGroupName = "DevNetworkSecurity"

$location = "(Asia pacific) Central India"

$securitygroup = New-AzureRmNetworkSecurityGroup -ResourceGroupName $vmresourceGroup -Location $location

-Name $SecurityGroupName -SecurityRules $portRule

Virtual network card creation

$NameNetworkCard = "DevNetworkCard"

$location = "(Asia pacific) Central India"

$networkcard = New-AzureRmNetworkInterface -Name $NameNetworkCard -ResourceGroupName $vmresourceGroup -Location $location -SubnetId $Devnet.Subnets[0].Id -PublicIpAddressId $publicIP.Id -NetworkSecurityGroupId $securitygroup.Id

Virtual machine configuration

$vmName = "MyAzureVM"

$MYVMSize = "Standard\_D1\_v2"

$vmConfiguration = New-AzureRmVMConfig -VMName $vmName -VMSize $MYVMSize | Set-AzureRmVMOperatingSystem -Windows -ComputerName $vmName -Credential $credentials | Set-AzureRmVMSourceImage -PublisherName MicrosoftWindowsServer - WindowsServer -Skus 2019 -Datacenter -Version latest | Add-AzureRmVMNetworkInterface -Id $networkcard.Id

VM Creation

New-AzureRmVM -ResourceGroupName $vmresourceGroup -Location $location -VM $vmConfiguration

Now here is the complete Script

$vmresourceGroup = "MyDev"

$location = "(Asia pacific) Central India"

$SubnetName = "Mydevsubnet"

$NameRDP = "Default-RDP"

$SecurityGroupName = "DevNetworkSecurity"

$vmName = "MyAzureVM"

$MYVMSize = "Standard Ds1\_v2"

$Networkname = "DevNet"

$NameNetworkCard = "DevNetworkCard"

$publicdn = "dev-cdn"

$credentials = Get-Credential -Message "Enter your username and password for the virtual machine."

New-AzureRmResourceGroup -Name $vmresourceGroup -Location $location

$subnetConfiguration = New-AzureRmVirtualNetworkSubnetConfig -Name $SubnetName -AddressPrefix 10.50.1.0/24

$Devnet = New-AzureRmVirtualNetwork -ResourceGroupName $vmresourceGroup-Location $location -Name $Networkname -AddressPrefix 10.50.1.0/24 -Subnet $subnetConfiguration

$publicIP = New-AzureRmPublicIpAddress -ResourceGroupName $vmresourceGroup -Location $location -Name "$publicdn$(Get-Random)" -AllocationMethod Static -IdleTimeoutInMinutes 5

$portRule = New-AzureRmNetworkSecurityRuleConfig -Name $NameRDP -Protocol Tcp -Direction Inbound -Priority 1000 -SourceAddressPrefix \* -SourcePortRange \* -DestinationAddressPrefix \* -DestinationPortRange 3389 -Access Allow

$securitygroup = New-AzureRmNetworkSecurityGroup -ResourceGroupName $vmresourceGroup -Location $location

-Name $SecurityGroupName -SecurityRules $portRule

$networkcard = New-AzureRmNetworkInterface -Name $NameNetworkCard -ResourceGroupName $vmresourceGroup -Location $location -SubnetId $Devnet.Subnets[0].Id -PublicIpAddressId $publicIP.Id -NetworkSecurityGroupId $securitygroup.Id

$vmConfiguration = New-AzureRmVMConfig -VMName $vmName -VMSize $MYVMSize | Set-AzureRmVMOperatingSystem -Windows -ComputerName $vmName -Credential $credentials | Set-AzureRmVMSourceImage -PublisherName MicrosoftWindowsServer - WindowsServer -Skus 2019 -Datacenter -Version latest | Add-AzureRmVMNetworkInterface -Id $networkcard.Id

New-AzureRmVM -ResourceGroupName $vmresourceGroup -Location $location -VM $vmConfiguration