

# Manage Azure Virtual Machines that Run Windows Server

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# Overview



**Manage data disks**

**Resize Azure virtual machines**

**Configure continuous delivery for Azure virtual machines**

**Configure connections to VMs**

**Manage Azure virtual machine network configuration**



# Manage Virtual Machines and Containers

**Configure Hyper-V**

**Manage Hyper-V**

**Administer Hyper-V Guest VMs**

**Create and Manage Containers**

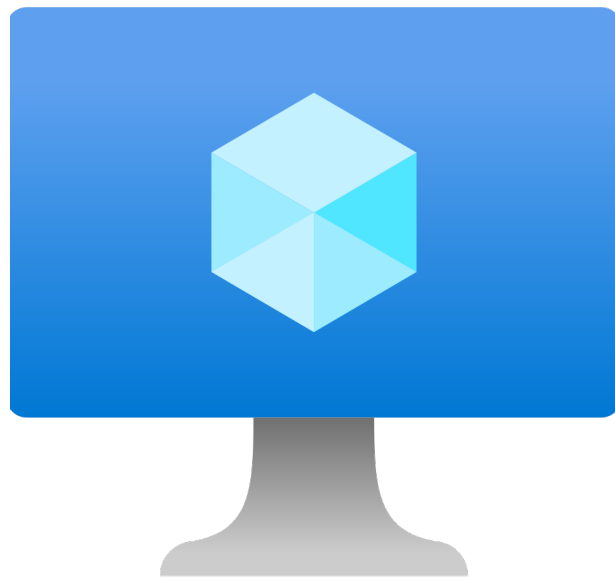
**Manage Azure VMs that Run Windows Server**



# Azure VM Sizes and Storage



# Azure VM Sizes



**Balance between vCPU, RAM, # data disks, IOPS, temp storage, storage type, features like nested virtualization**

**Azure Compute Unit = ACU**

**Types: General Purpose, Compute-, Memory-, and Storage-Optimized, GPU, High Performance Compute**

**Sizes are versioned**

- DSv2, DSv3, DDSv4
- B2ms
- Family, sub-family, # vCPU, special features, version



# Resizing an Azure VM with PowerShell

```
$resourceGroup = "az800"  
$vmName = "vm1"
```

```
Get-AzVMSize -ResourceGroupName $resourceGroup -VMName $vmName
```

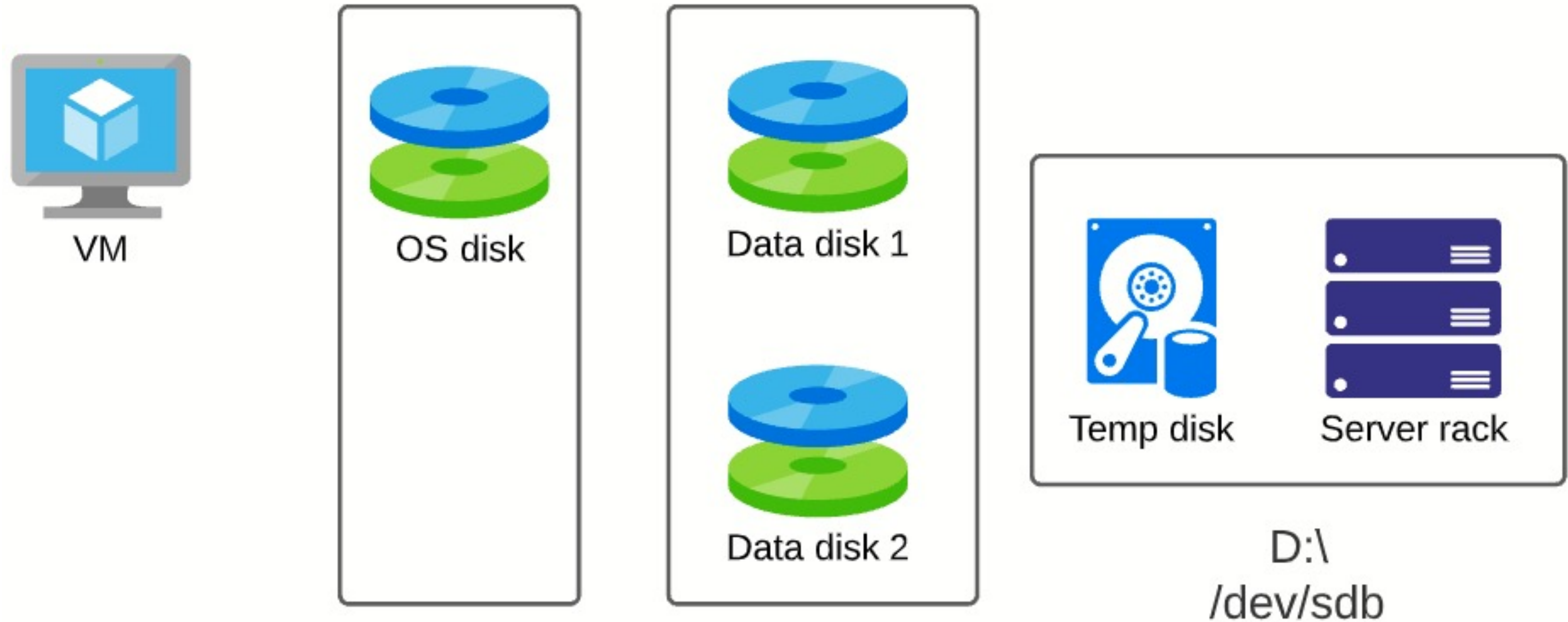
```
$vm = Get-AzVM -ResourceGroupName $resourceGroup -VMName $vmName
```

```
$vm.HardwareProfile.VmSize = "<newVMsize>"
```

```
Update-AzVM -VM $vm -ResourceGroupName $resourceGroup
```



# Azure VM Storage Configuration



# Adding a Data Disk to an Azure VM



**Ensure your  
VM size  
supports a  
data disk**

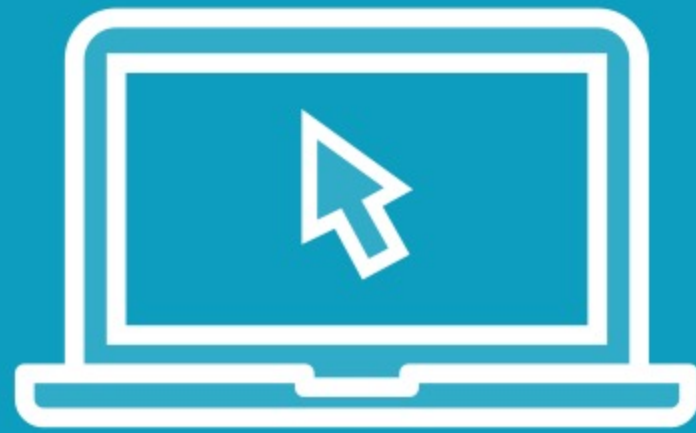
**Add the disk  
to your VM**

**Initialize and  
create  
volumes from  
the guest OS**





# Demo



1

## Resize VM

### Add and initialize a new data disk

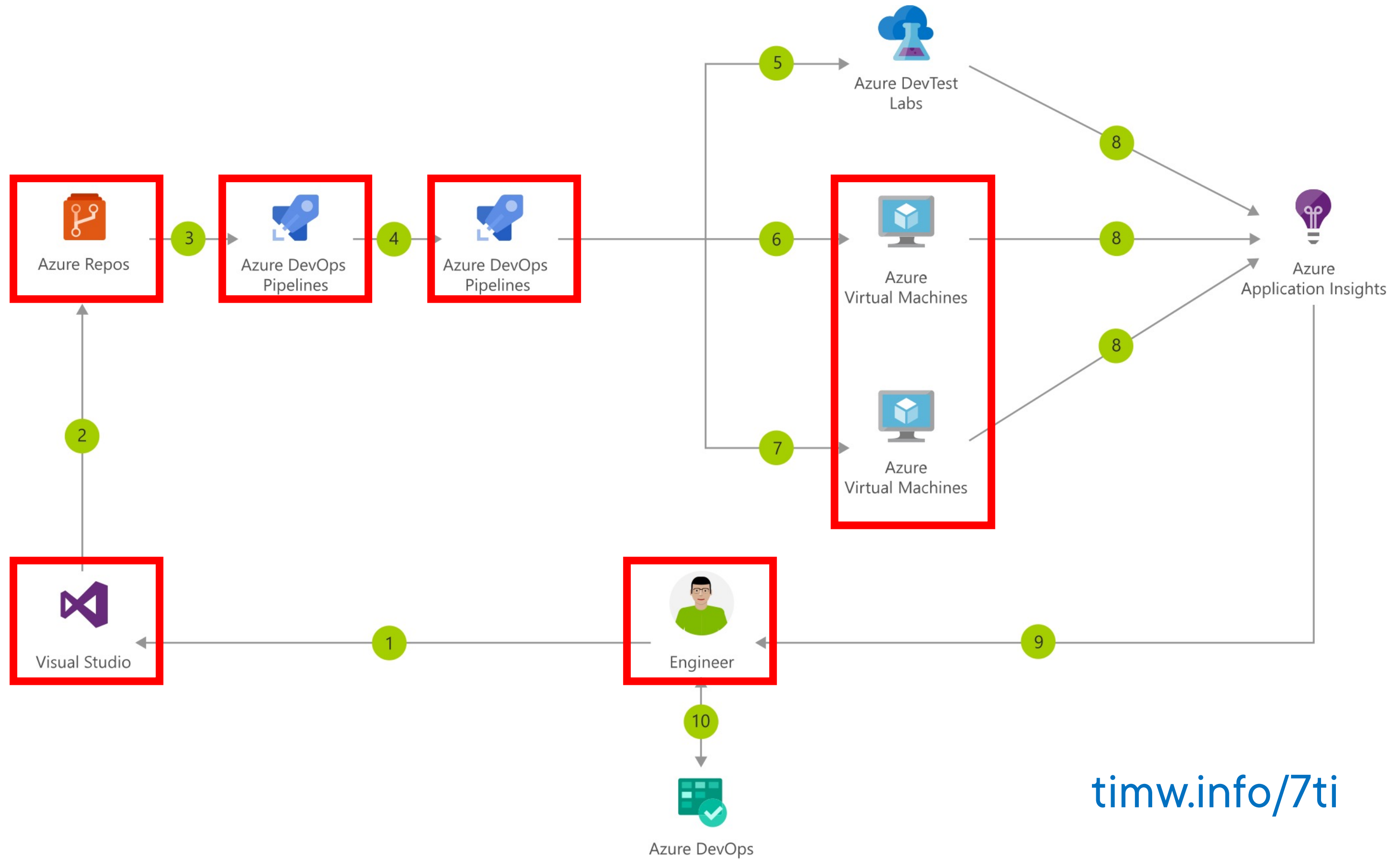
- Change storage type
- Change size



# Continuous Delivery for Azure Virtual Machines



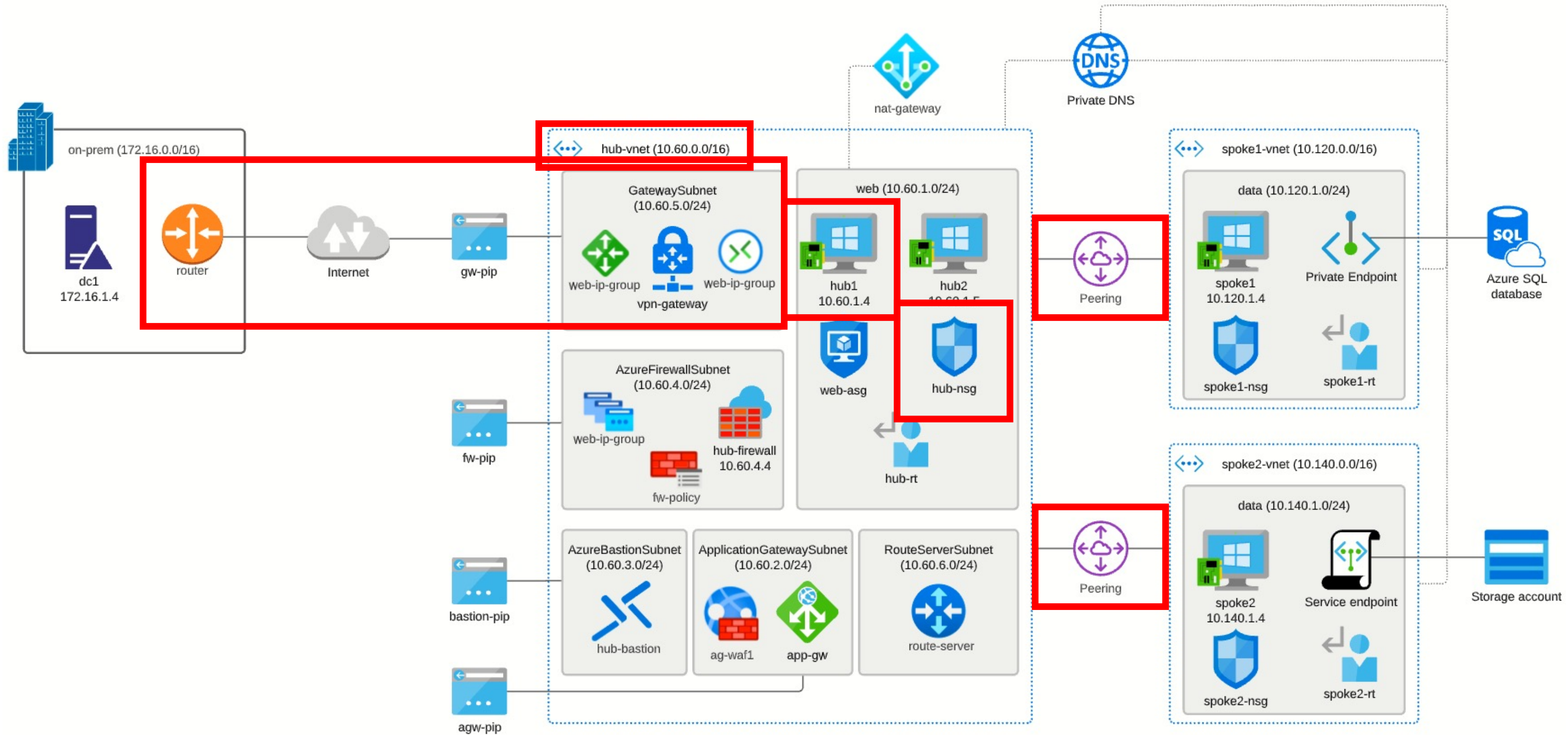
# Azure DevOps CI/CD Pipelines



# Azure VM Networking and Connectivity



# Azure VM Networking



# Azure VM Connectivity Options

**RDP or SSH (public  
IP address)**

**RDP or SSH (S2S  
VPN or  
ExpressRoute)**

**Bastion**

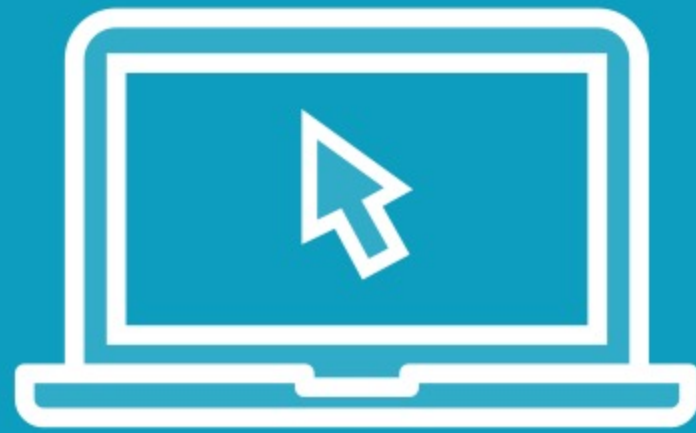
**Serial Console**

**Azure  
PowerShell/CLI**

**ARM REST API**



# Demo



# 2

## Existing Azure VM

- Continuous Delivery
- Add to deployment group

## Configure TCP/IP on Windows Server VM

### Connect via:

- Bastion
- Azure PowerShell / remoting
- Serial console



## Summary



**Don't forget to configure Azure VM networking from Azure Resource Manager and not from within the guest OS**

**Consider the Azure Administrator and Azure Network Engineer certifications if you're up to the challenge**

**Thanks so much!**

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