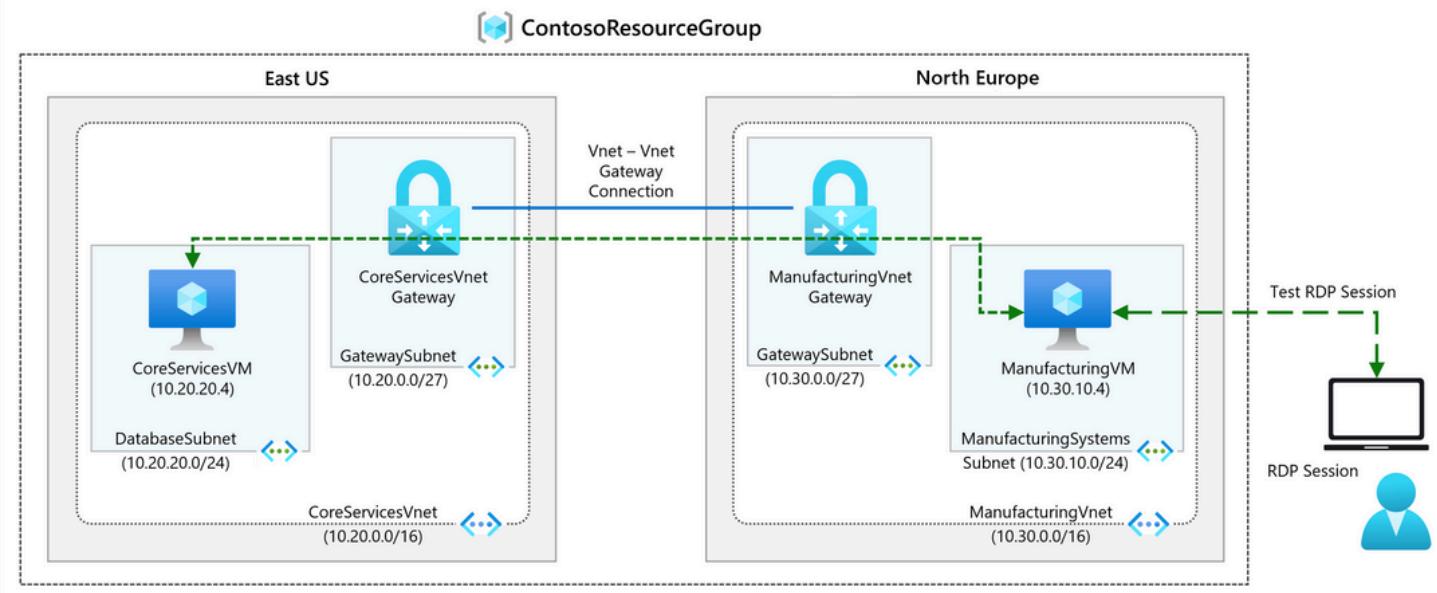


# Azure Hybrid Networking Lab: Create and configure a virtual network gateway



In this exercise, you will:

- + Task 1: Create CoreServicesVnet and ManufacturingVnet
- + Task 2: Create CoreServicesVM
- + Task 3: Create ManufacturingVM
- + Task 4: Connect to the VMs using RDP
- + Task 5: Test the connection between the VMs
- + Task 6: Create CoreServicesVnet Gateway
- + Task 7: Create ManufacturingVnet Gateway
- + Task 8: Connect CoreServicesVnet to ManufacturingVnet
- + Task 9: Connect ManufacturingVnet to CoreServicesVnet
- + Task 10: Verify that the connections connect
- + Task 11: Test the connection between the VMs

## ## Task 1: Create CoreServicesVnet and ManufacturingVnet

Deploy the following ARM templates to create the virtual network and subnets needed for this exercise via the ARM templates. What is an Azure Resource Manager (ARM) Template ??

An ARM Template is a JSON file designed to deploy multiple virtual networks (VNets) and their associated subnets across different Azure regions. It follows a modular and parameterized approach, allowing flexibility in naming and configuration.

```
$RGName = "CHM412LAB"
```

```
New-AzResourceGroup -Name $RGName -Location "eastus"
```

```
New-AzResourceGroupDeployment -ResourceGroupName $RGName -TemplateFile azuredeploy.json -TemplateParameterFile azuredeploy.parameters.json
```

```

APPLICATION BROWSER
PROBLEMS OUTPUT TERMINAL PORTS GITLENS CODE REFERENCE LOG AZURE DEBUG CONSOLE
+ - x
Azure Cloud... Azure Cloud...
pwsh

PS /home/kvng> az account show --output table
EnvironmentName HomeTenantId IsDefault Name State TenantId
Azurecloud 8... True Azure subscription 1 Enabled f...
PS /home/kvng> $RGName = "CHM412LAB"
PS /home/kvng> az account set --subscription "$RGName"
PS /home/kvng> New-AzResourceGroupDeployment -ResourceGroupName $RGName -TemplateFile azuredeploy.json -TemplateParameterFile azuredeploy.parameters.json
New-AzResourceGroupDeployment: 12:23:15 PM - Error: Code=ResourceGroupNotFound; Message=Resource group 'CHM412LAB' could not be found.
New-AzResourceGroupDeployment: The deployment validation failed
PS /home/kvng> New-AzResourceGroup -Name $RGName -Location "eastus"

ResourceGroupName : CHM412LAB
Location : eastus
ProvisioningState : Succeeded
Tags :
ResourceId : /subscriptions/bd79b60f-58fb-4efb-ac...<...>/resourceGroups/CHM412LAB
DeploymentName : azuredelay
ResourceGroupName : CHM412LAB
ProvisioningState : Succeeded
Timestamp : 4/25/2025 12:28:39 PM
Mode : Incremental
TemplateLink :
Parameters :
    Name Type Value
    --- -- -
    virtualNetworks_ResearchVnet_name String "ResearchVnet"
    virtualNetworks_CoreServicesVnet_name String "CoreServicesVnet"
    virtualNetworks_ManufacturingVnet_name String "ManufacturingVnet"
Outputs :
DeploymentLogLevel :

PS /home/kvng>

```

## ## Task 2&3: Create CoreServicesVM & ManufacturingVM

Deploy the following ARM templates to create the VMs needed for this exercise:

>\*\*Note\*\*: You will be prompted to provide an Admin password.

\$RGName = "CHM412LAB"

**New-AzResourceGroupDeployment -ResourceGroupName \$RGName -TemplateFile CoreServicesVMazuredeploy.json -TemplateParameterFile CoreServicesVMazuredeploy.parameters.json**

**New-AzResourceGroupDeployment -ResourceGroupName \$RGName -TemplateFile ManufacturingVMazuredeploy.json -TemplateParameterFile ManufacturingVMazuredeploy.parameters.json**

When the deployment is complete, go to the Azure portal home page, and then select \*\*Virtual Machines\*\*. Verify that the virtual machine has been created.

To effectively query me for creating ARM templates like the ones you've shared, you can use a structured and concise prompt that includes the following key elements:

```

PS /home/kvng> New-AzResourceGroupDeployment -ResourceGroupName $RGName -TemplateFile azuredeploy.json -TemplateParameterFile azuredeploy.parameters.json
DeploymentName : azuredeploy
ResourceGroupName : CHM412LAB
ProvisioningState : Succeeded
Timestamp : 4/25/2025 12:28:39 PM
Mode : Incremental
TemplateLink :
Parameters :
Name Type Value
=====
virtualNetworks_ResearchVnet_name String "ResearchVnet"
virtualNetworks_CoreServicesVnet_name String "CoreServicesVnet"
virtualNetworks_ManufacturingVnet_name String "ManufacturingVnet"

Outputs DeploymentLogLevel :

PS /home/kvng> New-AzResourceGroupDeployment -ResourceGroupName $RGName -TemplateFile CoreServicesVMazuredploy.json -TemplateParameterFile CoreServicesVMazuredploy.parameters.json
cmdlet New-AzResourceGroupDeployment at command pipeline position 1
Supply values for the following parameters:
(Type !? for Help.)
adminPassword: ****

DeploymentName : CoreServicesVMazuredploy
ResourceGroupName : CHM412LAB
ProvisioningState : Succeeded
Timestamp : 4/25/2025 12:50:05 PM
Mode : Incremental
TemplateLink :
Parameters :
Name Type Value
=====
vmName1 String "CoreServicesVM"
nicName1 String "CoreServicesVM-nic"
vmSize String "Standard_D2s_v3"
adminUsername String "TestUser"
adminPassword SecureString null

Outputs DeploymentLogLevel :

PS /home/kvng> New-AzResourceGroupDeployment -ResourceGroupName $RGName -TemplateFile ManufacturingVMazuredploy.json -TemplateParameterFile ManufacturingVMazuredploy.parameters.json
cmdlet New-AzResourceGroupDeployment at command pipeline position 1
Supply values for the following parameters:
(Type !? for Help.)
adminPassword: ****

DeploymentName : ManufacturingVMazuredploy
ResourceGroupName : CHM412LAB
ProvisioningState : Succeeded
Timestamp : 4/25/2025 12:52:50 PM
Mode : Incremental
TemplateLink :
Parameters :
Name Type Value
=====
vmName1 String "ManufacturingVM"
nicName1 String "ManufacturingVM-nic"
vmSize String "Standard_D2s_v3"
adminUsername String "TestUser"
adminPassword SecureString null

Outputs DeploymentLogLevel :

```

	Name	Type	Resource Group	Location	Subscription
<input type="checkbox"/>	CoreServicesVM	Virtual machine	CHM412LAB	East US	Azure subscription 1
<input type="checkbox"/>	CoreServicesVM-ip	Public IP address	CHM412LAB	East US	Azure subscription 1
<input type="checkbox"/>	CoreServicesVM-nic	Network Interface	CHM412LAB	East US	Azure subscription 1
<input type="checkbox"/>	CoreServicesVM-nsg	Network security group	CHM412LAB	East US	Azure subscription 1
<input type="checkbox"/>	CoreServicesVM_disk1_5f5dbe984324de799486adb6dc7dbda	Disk	CHM412LAB	East US	Azure subscription 1
<input type="checkbox"/>	<> CoreServicesNet	Virtual network	CHM412LAB	East US	Azure subscription 1
<input type="checkbox"/>	ManufacturingVM	Virtual machine	CHM412LAB	North Europe	Azure subscription 1
<input type="checkbox"/>	ManufacturingVM-ip	Public IP address	CHM412LAB	North Europe	Azure subscription 1
<input type="checkbox"/>	ManufacturingVM-nic	Network Interface	CHM412LAB	North Europe	Azure subscription 1
<input type="checkbox"/>	ManufacturingVM-nsg	Network security group	CHM412LAB	North Europe	Azure subscription 1
<input type="checkbox"/>	ManufacturingVM_disk1_10182b13978c4285a922a7a93906ca3b	Disk	CHM412LAB	North Europe	Azure subscription 1
<input type="checkbox"/>	<> ManufacturingVnet	Virtual network	CHM412LAB	North Europe	Azure subscription 1
<input type="checkbox"/>	NetworkWatcher_eastus	Network Watcher	NetworkWatcherRG	East US	Azure subscription 1
<input type="checkbox"/>	NetworkWatcher_northEurope	Network Watcher	NetworkWatcherRG	North Europe	Azure subscription 1
<input type="checkbox"/>	NetworkWatcher_southeastAsia	Network Watcher	NetworkWatcherRG	Southeast Asia	Azure subscription 1
<input type="checkbox"/>	<> ResearchVnet	Virtual network	CHM412LAB	Southeast Asia	Azure subscription 1

## ### Suggested Query Format for ARM Template Creation using Copilot

### 1. Purpose of the Template

Clearly state the purpose of the template, such as creating VNets and their subnets with virtual machines, virtual networks, or other Azure resources.

### 2. Resource Details

Provide a list of resources to include, such as VMs, NSGs, subnets, public IPs, etc., along with any specific configurations (e.g., VM size, region, number of instances).

### 3. Parameters and Variables

Specify any parameters (e.g., `vmName`, `adminUsername`) and variables (e.g., `subnetRef`, `nsgName`) you want to use for flexibility and reusability.

## 4. Best Practices

Mention that Azure best practices should be followed, such as using secure strings for sensitive data, defining dependencies, and ensuring modularity.

## 5. Output Requirements

Indicate if you need outputs, such as resource IDs or connection strings.

### ### Example Query for Future Use: Create an Azure Resource Manager (ARM) template to deploy the following resources:

1. A virtual network named `CoreServicesVnet` with a subnet named `DatabaseSubnet`.

2. A virtual machine named `CoreServicesVM` with the following:

- Size: `Standard\_D2s\_v3`
- Admin username and password as parameters
- A public IP address and a network interface
- A Network Security Group (NSG) allowing RDP (port 3389)

3. Follow Azure best practices, including secure strings for sensitive data, modular design, and explicit dependencies.

4. Include outputs for the VM's public IP address and NIC ID.

The screenshot shows the Azure portal interface for the `CoreServicesVM` virtual machine. The left sidebar lists various resources under the `All resources` category. The main pane displays the `Overview` tab for `CoreServicesVM`, which is a `Virtual machine`. Key details shown include:

- Resource group:** CHM412LAB
- Status:** Running
- Location:** East US
- Subscription:** Azure subscription 1
- Subscription ID:** bd79b60f-58fb-abab-a27fdecc0753
- Operating system:** Windows (Windows Server 2019 Datacenter)
- Size:** Standard D2s v3 (2 vcpus, 8 GiB memory)
- Public IP address:** 172.191.203.143
- Virtual network/subnet:** CoreServicesVnet/DatabaseSubnet
- DNS name:** Not configured
- Health state:** -
- Time created:** 4/25/2025, 12:49 PM UTC

The `Networking` section shows:

- Public IP address:** 172.191.203.143 (Network interface CoreServicesVM-nic)
- Private IP address (IPv6):** -
- Private IP address (IPv4):** 10.20.20.4
- Virtual network/subnet:** CoreServicesVnet/DatabaseSubnet
- DNS name:** Configure

**ManufacturingVM** Virtual machine

**Overview**

**Essentials**

Resource group (move)	: CHM412LAB	Operating system	: Windows (Windows Server 2019 Datacenter)
Status	: Running	Size	: Standard D2s v3 (2 vcpus, 8 GiB memory)
Location	: North Europe	Public IP address	: 13.79.82.224
Subscription (move)	: Azure subscription 1	Virtual network/subnet	: ManufacturingVnet/ManufacturingSystemSubnet
Subscription ID	: bd79b60f-58fb-4efb-aba9-a27fdcc0753	DNS name	: Not configured
		Health state	: -
		Time created	: 4/25/2025, 12:52 PM UTC

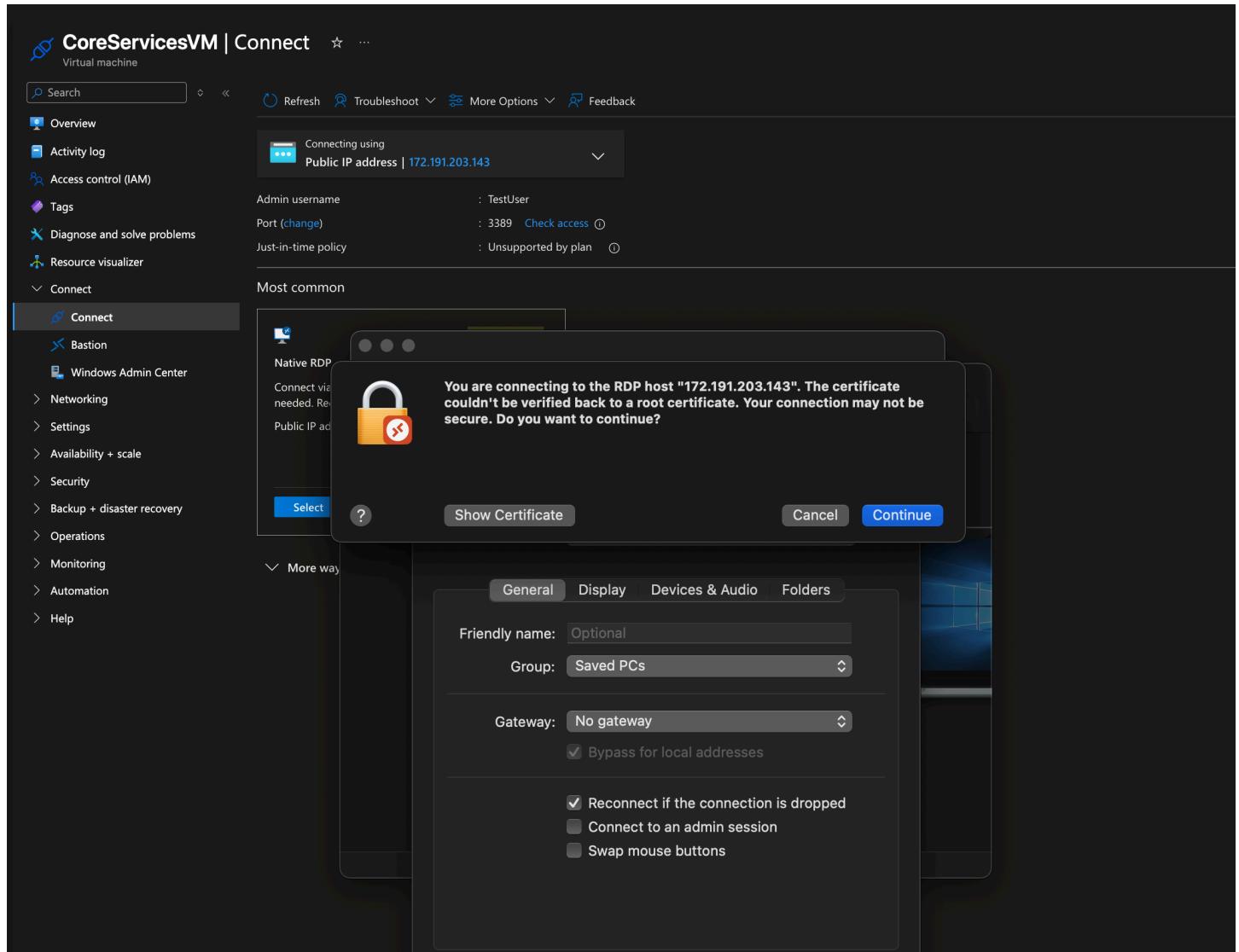
**Properties** **Monitoring** **Capabilities (8)** **Recommendations (1)** **Tutorials**

**Virtual machine**

Computer name	ManufacturingVM	Networking	Public IP address	13.79.82.224 ( Network interface ManufacturingVM-nic )
Operating system	Windows (Windows Server 2019 Datacenter)	Public IP address (IPv6)	-	
VM generation	V1	Private IP address	10.30.10.4	
VM architecture	x64	Private IP address (IPv6)	-	
Agent status	Ready	Virtual network/subnet	ManufacturingVnet/ManufacturingSystemSubnet	
Agent version	2.7.41491.1149	DNS name	Configure	
Hibernation	Disabled			

## ## Task 4: Connect to the VMs using RDP

On the Azure Portal home page, select Virtual Machines >> Select ManufacturingVM / CoreServicesVM >> On ManufacturingVM/CoreServicesVM, select Connect and then RDP. >> Select Download RDP file >> Save the RDP file to your desktop >> Connect to ManufacturingVM/CoreServicesVM using the RDP file, and the username \*\*TestUser\*\* and the password you provided during deployment. After connecting, minimize the RDP session >> On both VMs, in Choose privacy settings for your device, select \*\*Accept\*\*.



**Note the IPv4 address.**

## ## Task 5: Test the connection between the VMs

On the \*\*ManufacturingVM\*\*, open PowerShell. Use the following command to verify that there is no connection to CoreServicesVM on CoreServicesVnet. Be sure to use the IPv4 address for CoreServicesVM. The test connection should fail, and you will see a result similar to the following. However you will notice that, we get a connection via their public IP, But no connection via their private-IP address.

**Test-NetConnection “Private-IP” -port 3389**

```
PS C:\Users\TestUser> Test-NetConnection 172.191.203.143 -port 3389
```

```
ComputerName      : 172.191.203.143
RemoteAddress    : 172.191.203.143
RemotePort       : 3389
InterfaceAlias   : Ethernet
SourceAddress    : 10.30.10.4
TcpTestSucceeded : True
```

```
PS C:\Users\TestUser> Test-NetConnection 10.20.20.4 -port 3389
```

```
WARNING: TCP connect to (10.20.20.4 : 3389) failed
WARNING: Ping to 10.20.20.4 failed with status: TimedOut
```

```
ComputerName      : 10.20.20.4
RemoteAddress    : 10.20.20.4
RemotePort       : 3389
InterfaceAlias   : Ethernet
SourceAddress    : 10.30.10.4
PingSucceeded    : False
PingReplyDetails (RTT) : 0 ms
TcpTestSucceeded : False
```

```
PS C:\Users\TestUser> ■
```

```
PS C:\Users\TestUser> ipconfig
```

```
Windows IP Configuration
```

```
Ethernet adapter Ethernet:
```

```
Connection-specific DNS Suffix . : fol25ml2ofcuje3w0w44e3lmif.bx.internal.cloudapp.net
Link-local IPv6 Address . . . . . : fe80::465:21e3:3e2f:c559%6
IPv4 Address . . . . . : 10.20.20.4
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 10.20.20.1
```

```
PS C:\Users\TestUser> Test-NetConnection 13.79.82.224 -port 3389
```

```
ComputerName      : 13.79.82.224
RemoteAddress    : 13.79.82.224
RemotePort       : 3389
InterfaceAlias   : Ethernet
SourceAddress    : 10.20.20.4
TcpTestSucceeded : True
```

```
PS C:\Users\TestUser> Test-NetConnection 10.30.10.4 -port 3389
```

```
WARNING: TCP connect to (10.30.10.4 : 3389) failed
WARNING: Ping to 10.30.10.4 failed with status: TimedOut
```

```
ComputerName      : 10.30.10.4
RemoteAddress    : 10.30.10.4
RemotePort       : 3389
InterfaceAlias   : Ethernet
SourceAddress    : 10.20.20.4
PingSucceeded    : False
PingReplyDetails (RTT) : 0 ms
TcpTestSucceeded : False
```

```
PS C:\Users\TestUser> ■
```

## ## Task 6&7: Create CoreServicesVnet Gateway & Create ManufacturingVnet Gateway

In Search resources, services, and docs (G+), enter Virtual network gateway, and then select Virtual network gateways from the results. In Virtual network gateways, select + Create. Use the information in the following table to create the virtual network gateway:

**Create virtual network gateway** ...

**Project details**

Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources. [?](#)

Subscription \*  [?](#)

Resource group [?](#) CHM412LAB (derived from virtual network's resource group)

**Instance details**

Name \*  [?](#)

Region \*  [?](#)  
[Deploy to an Azure Extended Zone](#) [?](#)

Gateway type \* [?](#)  VPN  ExpressRoute

SKU \* [?](#)  [?](#)

Generation [?](#)  [?](#)

Virtual network \* [?](#)  [Create virtual network](#) [?](#)

Subnet [?](#)  [?](#)

[?](#) Only virtual networks in the currently selected subscription and region are listed.

**Public IP address**

Public IP address \* [?](#)  Create new  Use existing

Public IP address name \*  [?](#)

Public IP address SKU Standard

Assignment  Dynamic  Static

Enable active-active mode \* [?](#)  Enabled  Disabled

Configure BGP \* [?](#)  Enabled  Disabled

**Authentication Information (Preview)**

Enable Key Vault Access [?](#)  Enabled  Disabled

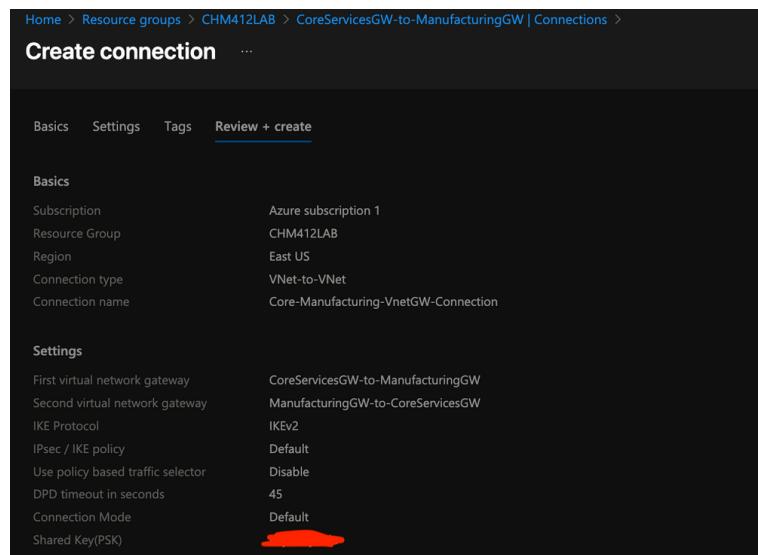
Azure recommends using a validated VPN device with your virtual network gateway. To view a list of validated devices and instructions for configuration, refer to Azure's [documentation](#) regarding validated VPN devices.

**Note:** It can take up to 15 - 30 minutes to create a virtual network gateway. You don't need to wait for the deployment to complete. Proceed to creating the next gateway.

## ## Task 8&9: Connect CoreServicesVnet to ManufacturingVnet and ViceVersa

In Search resources, services, and docs (G+), enter Virtual network gateway, and then select Virtual network gateways from the results. In Virtual network gateways, select CoreServicesVnetGateway. In CoreServicesGateway, select Connections, and then select + Add. *Note: You will not be able to complete this configuration until the virtual network gateways are fully deployed.* Use this information and the Settings tab to create the virtual network gateway.

- | Option                         | Value                    |
|--------------------------------|--------------------------|
| Name                           |                          |
| Connection type                | VNet-to-VNet             |
| Location                       |                          |
| First virtual network gateway  | ManufacturingVnetGateway |
| Second virtual network gateway | CoreServicesVnetGateway  |
| Shared key (PSK)               | abc123                   |
| Use Azure Private IP Address   | Not selected             |
| Enable BGP                     | Not selected             |
| IKE Protocol                   | IKEv2                    |
| Subscription                   | No changes required      |
| Resource group                 | No changes required      |



**Basics**

Subscription	Azure subscription 1
Resource Group	CHM412LAB
Region	North Europe
Connection type	VNet-to-VNet
Connection name	ManufacturingGW-to-CoreServicesGW-connection

**Settings**

First virtual network gateway	ManufacturingGW-to-CoreServicesGW
Second virtual network gateway	CoreServicesGW-to-ManufacturingGW
IKE Protocol	IKEv2
IPSec / IKE policy	Default
Use policy based traffic selector	Disable
DPD timeout in seconds	45
Connection Mode	Default
Shared Key(PSK)	[REDACTED]

## ## Task 10: Verify that the connections connect

In Search resources, services, and docs (G+), enter vpn, and then select connections from the results. Wait until the status of both connections is Connected. You may need to refresh your screen.

Name	Status	Peer 1	Peer 2	Resource group	Location	Subscription
ManufacturingGW-to-CoreServicesGW-connection	Connected	manufacturi...	coreservices...	CHM412LAB	North Europe	Azure subscription 1
Core-Manufacturing-VnetGW-Connection	Connected	coreservices...	manufacturi...	CHM412LAB	East US	Azure subscription 1

**ManufacturingGW-to-CoreServicesGW-connection**

**Overview**

- Activity log
- Access control (IAM)
- Tags
- Resource visualizer
- Settings
  - Authentication
  - Configuration
  - NAT Rules
  - Properties

**Essentials**

Resource group (move)	: CHM412LAB	Data in	: 0 B
Status	: Connected	Data out	: 0 B
Location	: North Europe	Virtual network	: CoreServicesVnet_ManufacturingVnet
Subscription (move)	: Azure subscription 1	Virtual network gateway 1	: ManufacturingGW-to-CoreServicesGW
Subscription ID	: bd79b60f-58fb-4efb-aba9-a27fdccc0753	Virtual network gateway 2	: CoreServicesGW-to-ManufacturingGW
Tags (edit)	: Add tags		

The screenshot shows the Azure portal interface for a resource named "Core-Manufacturing-VnetGW-Connection". The left sidebar lists "All resources" and "Core-Manufacturing-VnetGW-Connection". The main area is titled "Core-Manufacturing-VnetGW-Connection" and shows the "Overview" tab selected. The "Essentials" section displays the following information:

	:	
Resource group	(move)	: CHM412LAB
Status	:	Connected
Location	:	East US
Subscription	(move)	: Azure subscription 1
Subscription ID	:	bd79b60f-58fb-4efb-aba9-a27fdecc0753
Tags (edit)	:	Add tags
Data in	:	0 B
Data out	:	0 B
Virtual network	:	CoreServicesVnet, ManufacturingVnet
Virtual network gateway 1	:	CoreServicesGW-to-ManufacturingGW
Virtual network gateway 2	:	ManufacturingGW-to-CoreServicesGW

## ## Task 11: Test the connection between the VMs

On the ManufacturingVM, open PowerShell. Use the following command to verify that there is now a connection to CoreServicesVM on CoreServicesVnet. Be sure to use the IPv4 address for CoreServicesVM. The test connection should succeed, and you will see a result similar to the following: Close the Remote Desktop connection windows.

**Test-NetConnection 10.20.20.4 -port 3389**

```
PS C:\Users\TestUser> Test-NetConnection 10.30.10.4 -port 3389

ComputerName      : 10.30.10.4
RemoteAddress     : 10.30.10.4
RemotePort        : 3389
InterfaceAlias    : Ethernet
SourceAddress     : 10.20.20.4
TcpTestSucceeded  : True
```

```
PS C:\Users\TestUser> Test-NetConnection 10.20.20.4 -port 3389

ComputerName      : 10.20.20.4
RemoteAddress     : 10.20.20.4
RemotePort        : 3389
InterfaceAlias    : Ethernet
SourceAddress     : 10.30.10.4
TcpTestSucceeded  : True
```

## Learn more with self-paced training and Extend your learning with Copilot

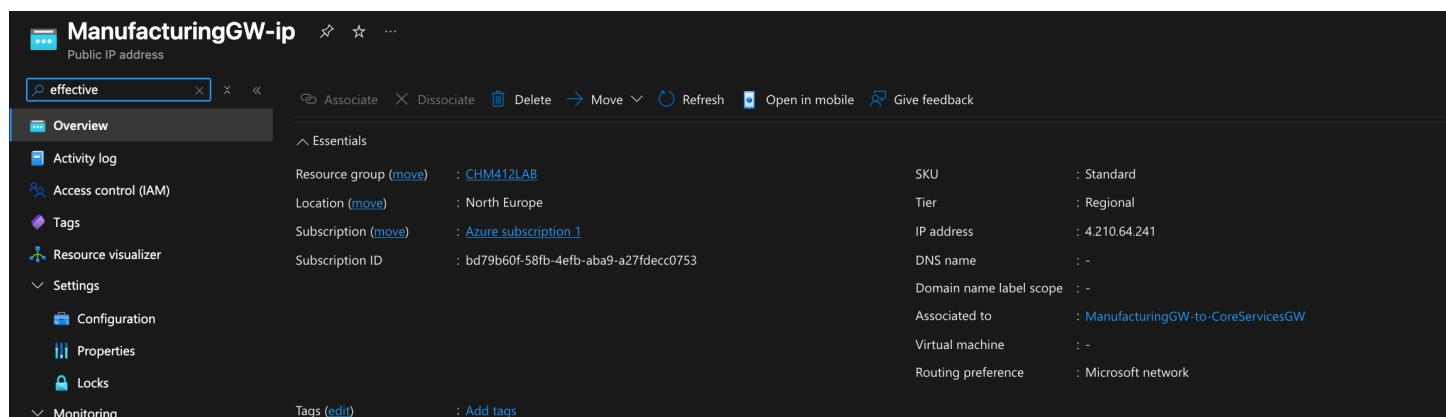
+ [Connect your on-premises network to Azure with VPN Gateway]  
(<https://learn.microsoft.com/training/modules/connect-on-premises-network-with-vpn-gateway/>). In this module, you will learn how to use CLI to provision VPN gateways.

## + [Troubleshoot VPN gateways in Microsoft Azure]

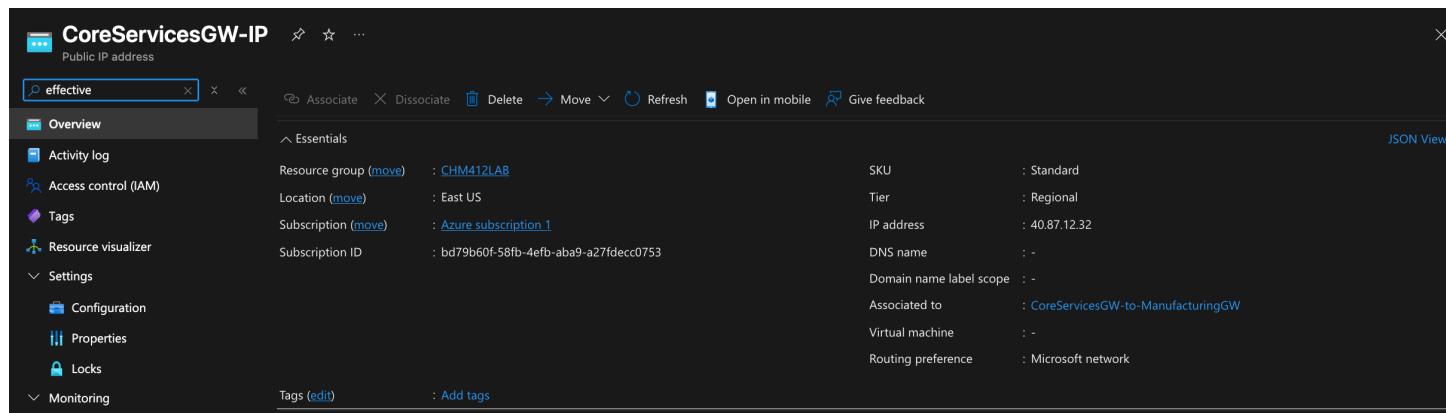
(<https://learn.microsoft.com/training/modules/troubleshoot-vpn-gateways/>). In this module, you learn how to monitor and troubleshoot site-to-site and point-to-site VPNs.

Free Pointer. During Setup, i thought to myself, how possible is it for all this to work, so i dived in deeper. *When setting up a Virtual Network Gateway, it is essential to create a dedicated subnet, known as the GatewaySubnet, within the virtual network where the gateway will be deployed. This subnet is specifically reserved for the gateway's resources and must be configured before proceeding with the gateway setup. Additionally, ensure that the location of the subnet matches the region of the virtual network, as this alignment is required during the initial configuration of the Virtual Network Gateway. Proper planning of the subnet's size and location is critical to ensure a smooth deployment process.*

Finally the Screenshots below confirms my suspicion that Azure adds Optional default routes to either specific subnets or all subnets within a VNet. When you add a VNet Gateway to a VNet, Azure adds one or more routes with Virtual Network Gateway as the next hop type. The Gateway adds the Routes to the subnet. Viewing the effective Routes for each network Interface created and you will find a route for the VNet Gateway: via the Azure portal.



Route	Next hop type	Next hop address	Link state
Virtual Network Gateway	Virtual Network Gateway	Virtual Network Gateway	Up



Route	Next hop type	Next hop address	Link state
Virtual Network Gateway	Virtual Network Gateway	Virtual Network Gateway	Up

**CoreServicesVM-nic | Effective routes**

Network interface

effective

Download Refresh Give feedback

Showing only top 200 records, click Download above to see all.

Scope Network interface (CoreServicesVM-nic)

Associated route table: ⓘ

Effective routes

Source	State	Address Prefixes	Next Hop Type	Next Hop IP Address	User Defined Route Name
Default	Active	10.20.0.0/16	Virtual network	-	-
Virtual netwo...	Active	10.30.0.0/16	Virtual network gateway	40.87.12.32	-
Default	Active	0.0.0.0/0	Internet	-	-
Default	Active	10.0.0.0/8	None	-	-

**ManufacturingVM-nic | Effective routes**

Network interface

effective

Download Refresh Give feedback

Showing only top 200 records, click Download above to see all.

Scope Network interface (ManufacturingVM-nic)

Associated route table: ⓘ

Effective routes

Source	State	Address Prefixes	Next Hop Type	Next Hop IP Address	User Defined Route Name
Default	Active	10.30.0.0/16	Virtual network	-	-
Virtual netwo...	Active	10.20.0.0/16	Virtual network gateway	4.210.64.241	-
Default	Active	0.0.0.0/0	Internet	-	-
Default	Active	10.0.0.0/8	None	-	-
Default	Active	127.0.0.0/8	None	-	-
Default	Active	100.64.0.0/10	None	-	-

## ## Key takeaways

Finally, the key takeaways summarize the main concepts, such as the types of Azure VPN connections (Site-to-Site, Point-to-Site, and VNet-to-VNet), their use cases, and the importance of selecting the appropriate VPN Gateway SKU based on performance and requirements. This structured guide is ideal for learners aiming to understand and implement hybrid networking solutions in Azure.