



Module 6: Hands-On: Create and Configure VNet to VNet Peering

Step 1: Create two virtual networks as mentioned in the diagram

[Home](#) > [Virtual networks](#) >

Create virtual network ...

Basics Security IP addresses Tags Review + create

Azure Virtual Network (VNet) is the fundamental building block for your private network in Azure. VNet enables many types of Azure resources, such as Azure Virtual Machines (VM), to securely communicate with each other, the internet, and on-premises networks. VNet is similar to a traditional network that you'd operate in your own data center, but brings with it additional benefits of Azure's infrastructure such as scale, availability, and isolation. [Learn more.](#)

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 * [Create new](#)

Instance details

Virtual network name *

Region ⓘ * [Deploy to an edge zone](#)

Step 2: Now review the IP address range. Then click on Review + create

[Home](#) > [Virtual networks](#) >

Create virtual network ...

Basics Security **IP addresses** Tags Review + create

Configure your virtual network address space with the IPv4 and IPv6 addresses and subnets you need. [Learn more](#)

Define the address space of your virtual network with one or more IPv4 or IPv6 address ranges. Create subnets to segment the virtual network address space into smaller ranges for use by your applications. When you deploy resources into a subnet, Azure assigns the resource an IP address from the subnet. [Learn more](#)

[Add an IP address space](#)

Gateway transit ↑↓

Disabled

10.0.0.0/16 [+ Add a subnet](#) ...

10.0.0.0 - 10.0.255.255 (65536 addresses)

Subnets	IP address range	Size	NAT gateway
default	10.0.0.0 - 10.0.0.255	/24 (256 addresses)	-

Step 3: Create the second virtual network and also check the IP address range which should not be overlapped

[Home](#) > [Virtual networks](#) >

Create virtual network

[Basics](#) [Security](#) [IP addresses](#) [Tags](#) [Review + create](#)

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[Learn more.](#)

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Subscription *

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Instance details

Virtual network name *

Region

[Deploy to an edge zone](#)

[Home](#) > [Virtual networks](#) >

Create virtual network

[Basics](#) [Security](#) [IP addresses](#) [Tags](#) [Review + create](#)

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[Add an IP address space](#)

gateway transit ☐ Disabled

20.0.0.0/16 [+ Add a subnet](#)


20.0.0.0 - 20.0.255.255 (65536 addresses)

Subnets	IP address range	Size	NAT gateway
default	20.0.0.0 - 20.0.0.255	/24 (256 addresses)	-

Step 4: Now create two VMs. Also choose the appropriate virtual network in the Networking section

[Home](#) > [Virtual machines](#) >

Create a virtual machine

 Changing Basic options may reset selections you have made. Review all options prior to creating the virtual machine.

Basics Disks Networking Management Monitoring Advanced Tags Review + create












Create a virtual machine that runs Linux or Windows. Select an image from Azure marketplace or use your own customized image. Complete the Basics tab then Review + create to provision a virtual machine with default parameters or review each tab for full customization. [Learn more](#)

Project details

Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription *  Azure Pass - Sponsorship (4362042a-1e87-43ca-83aa-3c7ebc545a78) 
 Resource group *  Az-104 
[Create new](#)

Instance details

Virtual machine name *  VM1 
 Region *  (US) East US 
 Availability options  No infrastructure redundancy required 
 Security type  Standard 
 Image *   Ubuntu Server 20.04 LTS - x64 Gen2 

[Home](#) > [Virtual machines](#) >

Create a virtual machine



Set

OS

Act

Acc

Tag





Dis

Basics Disks **Networking** Management Monitoring Advanced Tags Review + create

Define network connectivity for your virtual machine by configuring network interface card (NIC) settings. You can control ports, inbound and outbound connectivity with security group rules, or place behind an existing load balancing solution. [Learn more](#)

Network interface

When creating a virtual machine, a network interface will be created for you.

Virtual network *  Vnet1 
[Create new](#)
 Subnet *  default (10.0.0.0/24) 
[Manage subnet configuration](#)
 Public IP  (new) VM1-ip 
[Create new](#)


ay transit ↑↓

ed

Step 5: Fill in the details of the second VM and also review the Networking section. Then click on Review + create.

[Home](#) > [Virtual machines](#) >

Create a virtual machine ...

 Changing Basic options may reset selections you have made. Review all options prior to creating the virtual machine.

Basics Disks Networking Management Monitoring Advanced Tags Review + create

Create a virtual machine that runs Linux or Windows. Select an image from Azure marketplace or use your own customized image. Complete the Basics tab then Review + create to provision a virtual machine with default parameters or review each tab for full customization. [Learn more](#)

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 * ⓘ
[Create new](#)

Instance details

Virtual machine name * ⓘ

Region * ⓘ

Availability options ⓘ

Security type ⓘ

Image * ⓘ

Basics Disks **Networking** Management Monitoring Advanced Tags Review + create

Define network connectivity for your virtual machine by configuring network interface card (NIC) settings. You can control ports, inbound and outbound connectivity with security group rules, or place behind an existing load balancing solution. [Learn more](#)

Network interface

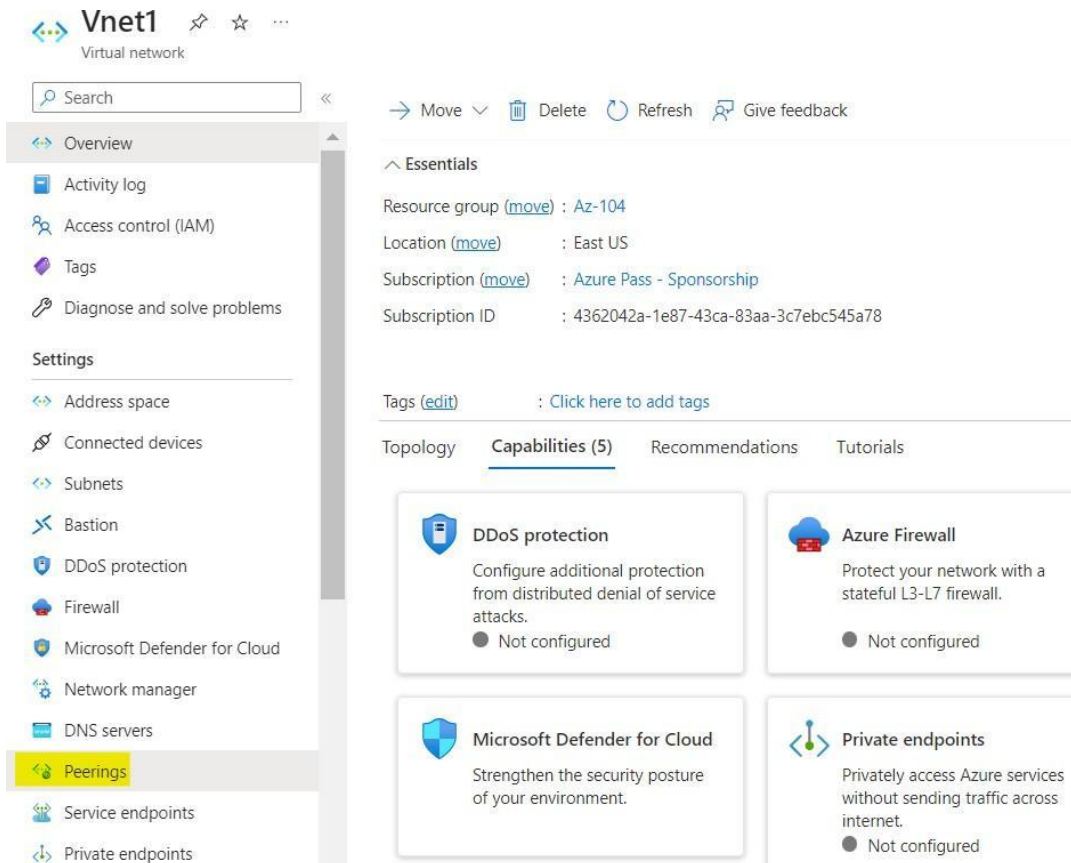
When creating a virtual machine, a network interface will be created for you.

Virtual network * ⓘ
[Create new](#)

Subnet * ⓘ
[Manage subnet configuration](#)

Public IP ⓘ
[Create new](#)

Step 6: Now go to any of the created virtual networks and in the left pane click on Peerings. After that click on Add



Vnet1
Virtual network

Search

Move Delete Refresh Give feedback

Essentials

Resource group (move) : Az-104
Location (move) : East US
Subscription (move) : Azure Pass - Sponsorship
Subscription ID : 4362042a-1e87-43ca-83aa-3c7ebc545a78

Tags (edit) : Click here to add tags

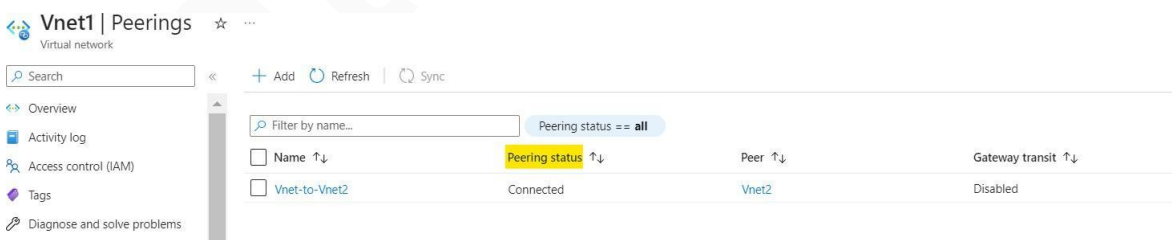
Topology Capabilities (5) Recommendations Tutorials

DDoS protection
Configure additional protection from distributed denial of service attacks.
● Not configured

Azure Firewall
Protect your network with a stateful L3-L7 firewall.
● Not configured

Microsoft Defender for Cloud
Strengthen the security posture of your environment.

Private endpoints
Privately access Azure services without sending traffic across internet.
● Not configured



Vnet1 | Peerings
Virtual network

Search + Add Refresh Sync

Filter by name... Peering status == all

Name ↑↓	Peering status ↑↓	Peer ↑↓	Gateway transit ↑↓
<input type="checkbox"/> Vnet-to-Vnet2	Connected	Vnet2	Disabled

Step 7: Add peering details as mentioned in the diagram and then select the virtual network for peering

Home > Virtual networks > Vnet1 | Peerings >

Add peering ...

Vnet1

i For peering to work, two peering links must be created. By selecting remote virtual network, Azure will create both peering links.

This virtual network

Peering link name *

Vnet-to-Vnet2

Traffic to remote virtual network ⓘ

☒ Allow (default)

☐ Block all traffic to the remote virtual network

Traffic forwarded from remote virtual network ⓘ

☒ Allow (default)

☐ Block traffic that originates from outside the remote virtual network

Virtual network gateway or Route Server ⓘ

☐ Use this virtual network's gateway or Route Server

☐ Use the remote virtual network's gateway or Route Server

☒ None (default)

Remote virtual network

Peering link name *

Vnet2-to-Vnet1

Vnet1 | Peerings ☆ ...
Virtual network

Search + Add Refresh Sync

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Filter by name...

Peering status == all

☐ Name ↑↓

Peering status ↑↓

Peer ↑↓

Gateway transit ↑↓

☐ Vnet-to-Vnet2

Connected

Vnet2

Disabled

Step 8: After filling all the details click on Add

Virtual network deployment model ⓘ

☒ Resource manager

☐ Classic

☐ I know my resource ID ⓘ

Subscription * ⓘ

Azure Pass - Sponsorship (4362042a-1e87-43ca-83aa-3c7ebc545a78) ▼

Virtual network * ⓘ

Vnet2 ▼

Traffic to remote virtual network ⓘ

☒ Allow (default)

☐ Block all traffic to the remote virtual network

Traffic forwarded from remote virtual network ⓘ

☒ Allow (default)

☐ Block traffic that originates from outside the remote virtual network

Virtual network gateway or Route Server ⓘ

☐ Use this virtual network's gateway or Route Server

☐ Use the remote virtual network's gateway or Route Server

☒ None (default)

Add

Step 9: Now you can check the peering status. It's connected successfully.

Vnet1 | Peerings ☆ ...

Virtual network

Search

+ Add Refresh Sync

Filter by name...

Peering status == all

Name ↑↓	Peering status ↑↓	Peer ↑↓	Gateway transit ↑↓
<input type="checkbox"/> Vnet-to-Vnet2	Connected	Vnet2	Disabled