

CONFIGURATION OF VNET, VM & PEERING

Step 1: Create the First Virtual Network (VNet1) and its Subnets

- Log in to Azure Portal
- Search for Virtual Networks
- Create a New Virtual Network

- **Basics Tab**

- 1.Subscription: Ensure your Azure for Students subscription is selected.
- 2.Resource Group: Click Create new and enter a name. This group will hold all our resources. Click OK.
- 3.Virtual network name: Enter VNet-App1.
- 4.Region: Choose a region close to you, e.g., Central India.

The screenshot shows the 'Create virtual network' page in the Azure Portal, specifically the 'Basics' tab. The page is titled 'Create virtual network' and has a breadcrumb trail: 'Home > Create a resource >'. Below the title, there are tabs for 'Basics', 'Security', 'IP addresses', 'Tags', and 'Review + create'. The 'Basics' tab is active. Under 'Project details', there is a description: 'Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.' Below this, there are two dropdown menus: 'Subscription' (set to 'Azure for Students') and 'Resource group' (set to '(New) Reso-test'). A 'Create new' link is visible below the 'Resource group' dropdown. Under 'Instance details', there are two input fields: 'Virtual network name' (set to 'Vnet-App1') and 'Region' (set to '(Asia Pacific) Central India'). At the bottom, there are three buttons: 'Previous', 'Next', and 'Review + create'. A 'Give feedback' link is also present in the bottom right corner.

Brave Web Browser Tue Jun 24 14:25

LMS Create virtual network - 1 x +

https://portal.azure.com/#create/Microsoft.VirtualNetwork

Microsoft Azure Search resources, services, and docs (G+/I) Copilot dev.sambit@gmail.com DEFAULT DIRECTORY (DEVSSAM...)

Home > Create a resource >

Create virtual network

Basics Security IP addresses Tags Review + create

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 for Students

Resource group * (New) Reso-test

Create new

Instance details

Virtual network name * Vnet-App1

Region * (Asia Pacific) Central India

Previous Next Review + create

Give feedback

BASICS TAB

- **IP Addresses Tab:**

IPv4 address space: Enter 10.1.0.0/16.

This gives your VNet a large block of private IPs.

Subnets: You'll see a default subnet. Let's configure ours:

1. Click on the default subnet row.
2. Name: Change it to Subnet-Web.
3. Address range (CIDR block): Change it to 10.1.1.0/24. This will create 256 IPs, with 5 reserved by Azure, leaving 251 usable IPs.
4. Click Save.
5. Click + Add subnet.
6. Name: Enter Subnet-DB.
7. Address range (CIDR block): Enter 10.1.2.0/24.
8. Click Add.
9. Click Review + create.

Brave Web Browser Tue Jun 24 14:37

LMS Add a subnet - Microsoft

https://portal.azure.com/#create/Microsoft.VirtualNetwork

Microsoft Azure Search resources, services, and docs (G+/)

Home > Create a resource >

Create virtual network

Basics Security IP addresses Tags Review + create

assigns the resource an IP address from the subnet. [Learn more](#)

+ Add a subnet

Subnets	IP address range	Size	NAT gateway
10.1.0.0/16	10.1.0.0 - 10.1.255.255	65,536 addresses	

Add IPv4 address space

Add a subnet

Select an address space and configure your subnet. You can customize a default subnet or select from subnet templates if you plan to add select services later. [Learn more](#)

Subnet purpose

Name

IPv4

Include an IPv4 address space ☒

IPv4 address range
10.1.0.0 - 10.1.255.255

Starting address

Size

Subnet address range

IPv6

Include an IPv6 address space ☐ This virtual network has no IPv6 address ranges.

Add Cancel

Give feedback

Previous Next Review + create

IP ADDRESSES TAB : SUBNET-WEB

Brave Web Browser Tue Jun 24 14:41

LMS Add a subnet - Microsoft

https://portal.azure.com/#create/Microsoft.VirtualNetwork

Microsoft Azure Search resources, services, and docs (G+)

Home > Create a resource >

Create virtual network

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

assigns the resource an IP address from the subnet. [Learn more](#)

+ Add a subnet

10.1.0.0/16 [Delete address space](#)

10.1.0.0 /16 10.1.0.0 - 10.1.255.255 65,536 addresses

Subnets	IP address range	Size	NAT gateway
Subnet-Web	10.1.1.0 - 10.1.1.255	/24 (256 addresses)	-

Add a subnet

Select an address space and configure your subnet. You can customize a default subnet or select from subnet templates if you plan to add select services later. [Learn more](#)

Subnet purpose

Name

IPv4

Include an IPv4 address space ☒

IPv4 address range
10.1.0.0 - 10.1.255.255

Starting address

Size

Subnet address range

IPv6

Include an IPv6 address space ☐ This virtual network has no IPv6 address ranges.

[Add](#) [Cancel](#) [Give feedback](#)

Previous Next [Review + create](#)

IP ADDRESSES TAB: SUBNET-DB

Brave Web Browser Tue Jun 24 14:46

LMS Vnet-App1-1750756479038

https://portal.azure.com/#view/HubsExtension/DeploymentDetailsBlade/~/overview/id/%2Fsubscription...

Microsoft Azure Search resources, services, and docs (G+)

Home >

Vnet-App1-1750756479038 | Overview

Deployment

Search Delete Cancel Redeploy Download Refresh

Overview

Inputs

Outputs

Template

Your deployment is complete

Deployment name : Vnet-App1-1750756479038 Start time : 24/06/2025, 14:44:45

Subscription : Azure for Students Correlation ID : b817713f-4adf-4cdc-9840-0715a9ffbd4a

Resource group : Reso-test

> Deployment details

> Next steps

[Go to resource](#)

Give feedback

[Tell us about your experience with deployment](#)

Cost management

Get notified to stay within your budget and prevent unexpected charges on your bill. [Set up cost alerts >](#)

Microsoft Defender for Cloud

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Free Microsoft tutorials

[Start learning today >](#)

Work with an expert

Azure experts are service provider partners who can help manage your assets on Azure and be your first line of support.

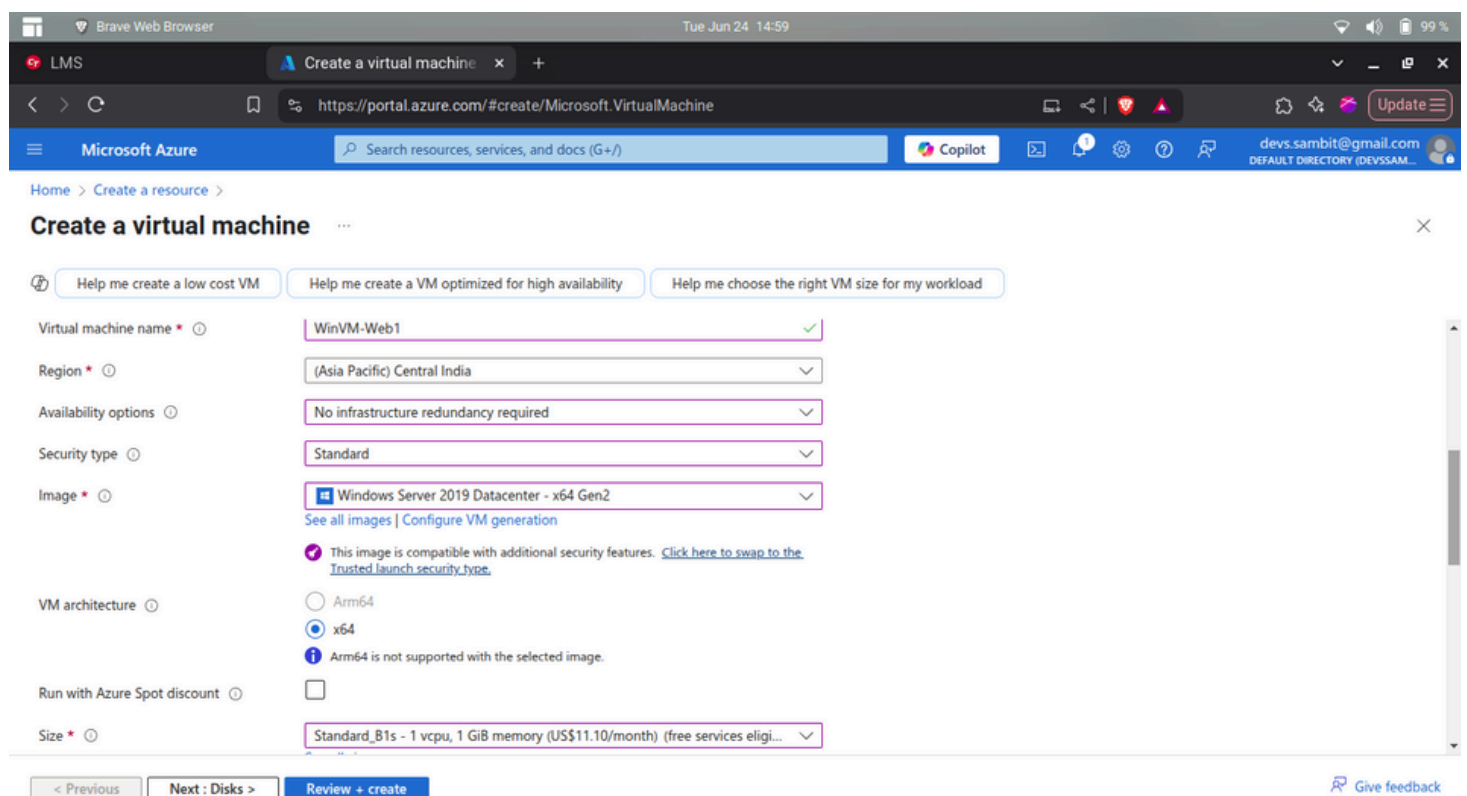
Add or remove favorites by pressing Ctrl+Shift+F

OVERVIEW PAGE

Step 2: Launch a Windows Virtual Machine (VM1) in Subnet-Web

We'll create WinVM-Web1 in VNet-App1's Subnet-Web.

- Search for Virtual Machines
- Create a New Virtual Machine
- On the Virtual machines page, click + Create > Azure virtual machine.
- Basics Tab:
- Subscription: Select your student subscription.
- Resource Group: Choose the existing RG-AzureNetworkingLab you created.
- Virtual machine name: Enter WinVM-Web1.
- Region: Select the same region you used for VNet-App1.
- Image: Select Windows Server 2019 Datacenter - Gen2.
- Size: Click See all sizes and search for B1s or B2s. Select B1s (it's very cheap for testing).



The screenshot shows the 'Create a virtual machine' page in the Microsoft Azure portal. The browser is Brave Web Browser, and the URL is <https://portal.azure.com/#create/Microsoft.VirtualMachine>. The page is titled 'Create a virtual machine' and has a 'Basics' tab selected. The form contains the following fields and options:

- Virtual machine name:** WinVM-Web1
- Region:** (Asia Pacific) Central India
- Availability options:** No infrastructure redundancy required
- Security type:** Standard
- Image:** Windows Server 2019 Datacenter - x64 Gen2
- VM architecture:** x64 (selected). Arm64 is not supported with the selected image.
- Run with Azure Spot discount:** ☐
- Size:** Standard_B1s - 1 vcpu, 1 GiB memory (US\$11.10/month) (free services eligi...)

At the bottom, there are navigation buttons: '< Previous', 'Next : Disks >', and 'Review + create'. A 'Give feedback' link is also present in the bottom right corner.

BASICS TAB

- **Administrator account:**

Username: Enter a username (e.g., AzureTestUser).

Password: Create a strong password and confirm it. Remember this username and password!

Inbound port rules: Public inbound ports: Choose Allow selected ports.

Select inbound ports: Check RDP (3389).

Brave Web Browser Tue Jun 24 15:02

LMS Create a virtual machine x +

https://portal.azure.com/#create/Microsoft.VirtualMachine

Microsoft Azure Search resources, services, and docs (G+/I) Copilot Update

Home > Create a resource >

Create a virtual machine

Help me create a low cost VM Help me create a VM optimized for high availability Help me choose the right VM size for my workload

Administrator account

Username * AzureTestUser ✓

Password * ✓

Confirm password * ✓

Inbound port rules

Select which virtual machine network ports are accessible from the public internet. You can specify more limited or granular network access on the Networking tab.

Public inbound ports * ☐ None ☒ Allow selected ports

Select inbound ports * RDP (3389)

⚠ This will allow all IP addresses to access your virtual machine. This is only recommended for testing. Use the Advanced controls in the Networking tab to create rules to limit inbound traffic to known IP addresses.

< Previous Next : Disks > Review + create Give feedback

ADMINISTRATOR TAB

- **Disks Tab:**

Leave defaults for OS disk type.

- **Networking Tab:**

1. Virtual network: Select VNet-App1.
2. Subnet: Select Subnet-Web (10.1.1.0/24).
3. Public IP: Leave as (new) WinVM-Web1-ip. Azure will create a public IP for you to connect to the VM.
4. NIC network security group: Select Basic.
5. Click Review + create.

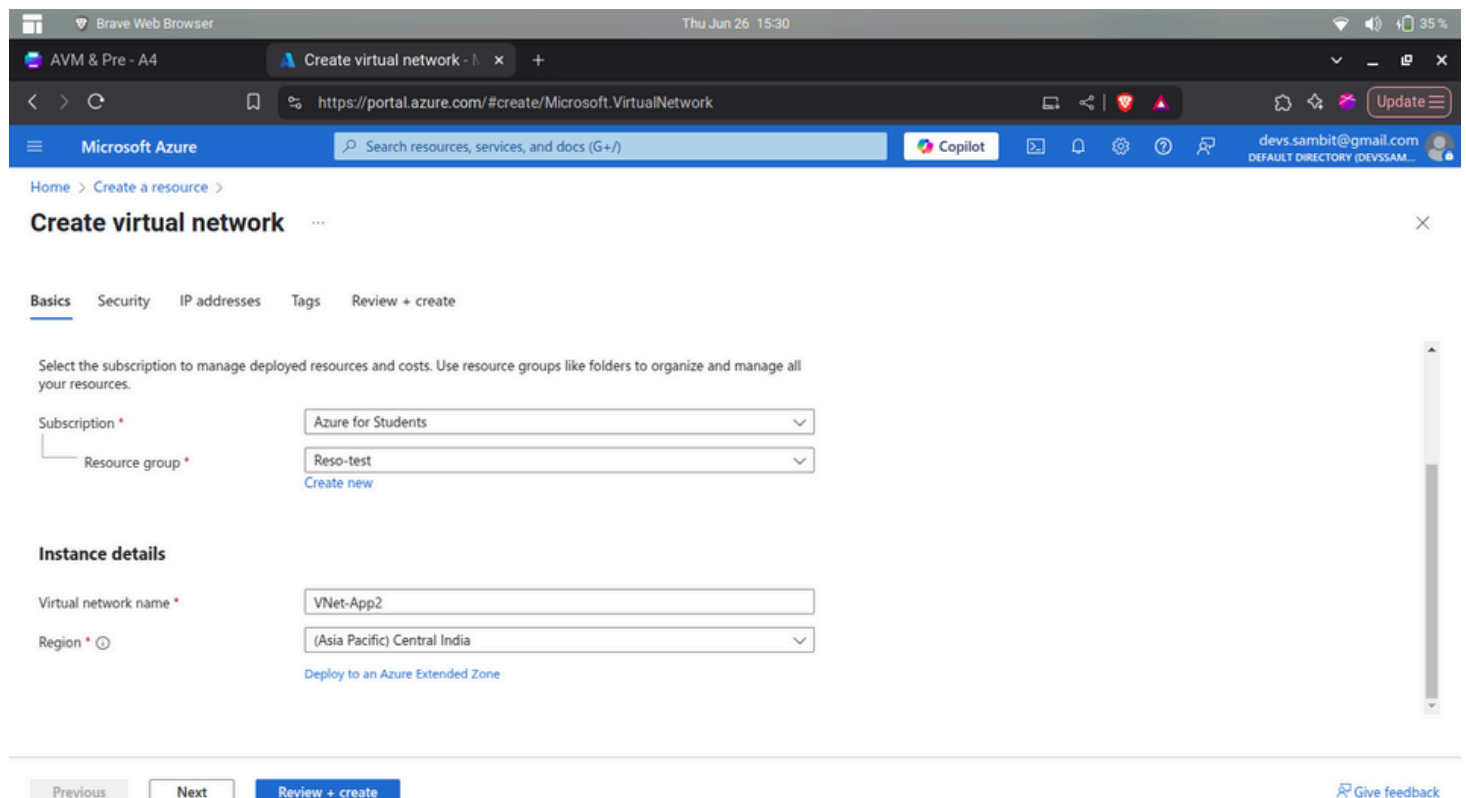
Step 3: Create the Second Virtual Network (VNet2) and its Subnets

Now, let's create VNet-App2 with Subnet-Linux and Subnet-Analytics.

Repeat Steps 1.2 to 1.3: Go back to Virtual networks and click + Create.

- Basics Tab:

- 1.Subscription: Your student subscription.
- 2.Resource Group: Select RG-AzureNetworkingLab.
- 3.Virtual network name: Enter VNet-App2.
- 4.Region: Select the same region you used for VNet-App1.



The screenshot shows the 'Create virtual network' page in the Azure portal, specifically the 'Basics' tab. The page is titled 'Create virtual network' and has a breadcrumb trail 'Home > Create a resource >'. Below the title, there are tabs for 'Basics', 'Security', 'IP addresses', 'Tags', and 'Review + create'. The 'Basics' tab is active. The page contains two main sections: 'Subscription' and 'Instance details'. In the 'Subscription' section, there is a dropdown menu for 'Subscription' with 'Azure for Students' selected, and a dropdown menu for 'Resource group' with 'Reso-test' selected. Below the 'Resource group' dropdown is a link 'Create new'. In the 'Instance details' section, there is a text input field for 'Virtual network name' with 'VNet-App2' entered, and a dropdown menu for 'Region' with '(Asia Pacific) Central India' selected. Below the 'Region' dropdown is a link 'Deploy to an Azure Extended Zone'. At the bottom of the page, there are three buttons: 'Previous', 'Next', and 'Review + create'. The 'Review + create' button is highlighted in blue. In the bottom right corner, there is a link 'Give feedback'.

BASICS TAB OF VNET 2

- IP Addresses Tab:

IPv4 address space: Enter 10.2.0.0/16. Crucially, this must NOT overlap with 10.1.0.0/16 from VNet-App1.

- **Subnets:**

1. Click on the default subnet row.
2. Name: Change it to Subnet-Linux.
3. Address range (CIDR block): Change it to 10.2.1.0/24.
4. Click Save.
5. Click + Add subnet.
6. Name: Enter Subnet-Analytics.
7. Address range (CIDR block): Enter 10.2.2.0/24.
8. Click Add.
9. Click Review + create.

The screenshot shows the Microsoft Azure portal interface. The main heading is "VNet-App2-1750932526019 | Overview". Below this, a green checkmark icon and the text "Your deployment is complete" are displayed. To the right of this message, the deployment details are listed: "Deployment name : VNet-App2-1750932526019", "Subscription : Azure for Students", and "Resource group : Reso-test". Further right, the "Start time" is "26/06/2025, 15:38:51" and the "Correlation ID" is "89ead715-b10c-4d2a-948f-bfd6bc2fdb...". Below the deployment details, there are sections for "Deployment details" and "Next steps", each with a right-pointing arrow. A blue button labeled "Go to resource" is positioned below the "Next steps" section. At the bottom left, there is a "Give feedback" link with the text "Tell us about your experience with deployment". On the right side of the page, there is a sidebar with several sections: "Cost management" (with a green checkmark icon), "Microsoft Defender for Cloud" (with a green shield icon), "Free Microsoft tutorials" (with a green checkmark icon), and "Work with an expert" (with a green checkmark icon). Each section in the sidebar has a brief description and a link to learn more or go to the resource.

OVERVIEW PAGE OF VNET 2

Step 4: Launch a Linux Virtual Machine (VM2) in Subnet-Linux

Create LinuxVM-Analytics1 in VNet-App2's Subnet-Linux.

Repeat Steps 2.1 to 2.2: Go back to Virtual machines and click + Create > Azure virtual machine.

- **Basics Tab:**

1.Virtual machine name: Enter LinuxVM-Analytics1.

2.Region: Select the same region as your VNets.

3.Image: Select Ubuntu Server 24.04 LTS - Gen2.

4.Size: Select B1s or B2s.

Brave Web Browser Thu Jun 26 15:48

AVM & Pre - A4 Create a virtual machine x +

https://portal.azure.com/#create/Microsoft.VirtualMachine

Microsoft Azure Search resources, services, and docs (G+)

Home > Create a resource >

Create a virtual machine

Help me create a low cost VM Help me create a VM optimized for high availability Help me choose the right VM size for my workload

Instance details

Virtual machine name *

Region *

Availability options

Security type

Image *
[See all images](#) | [Configure VM generation](#)

☒ This image is compatible with additional security features. [Click here to swap to the Trusted launch security type.](#)

VM architecture ☐ Arm64 ☒ x64

Run with Azure Spot discount ☐

Size *

< Previous Next : Disks > Review + create

[Give feedback](#)

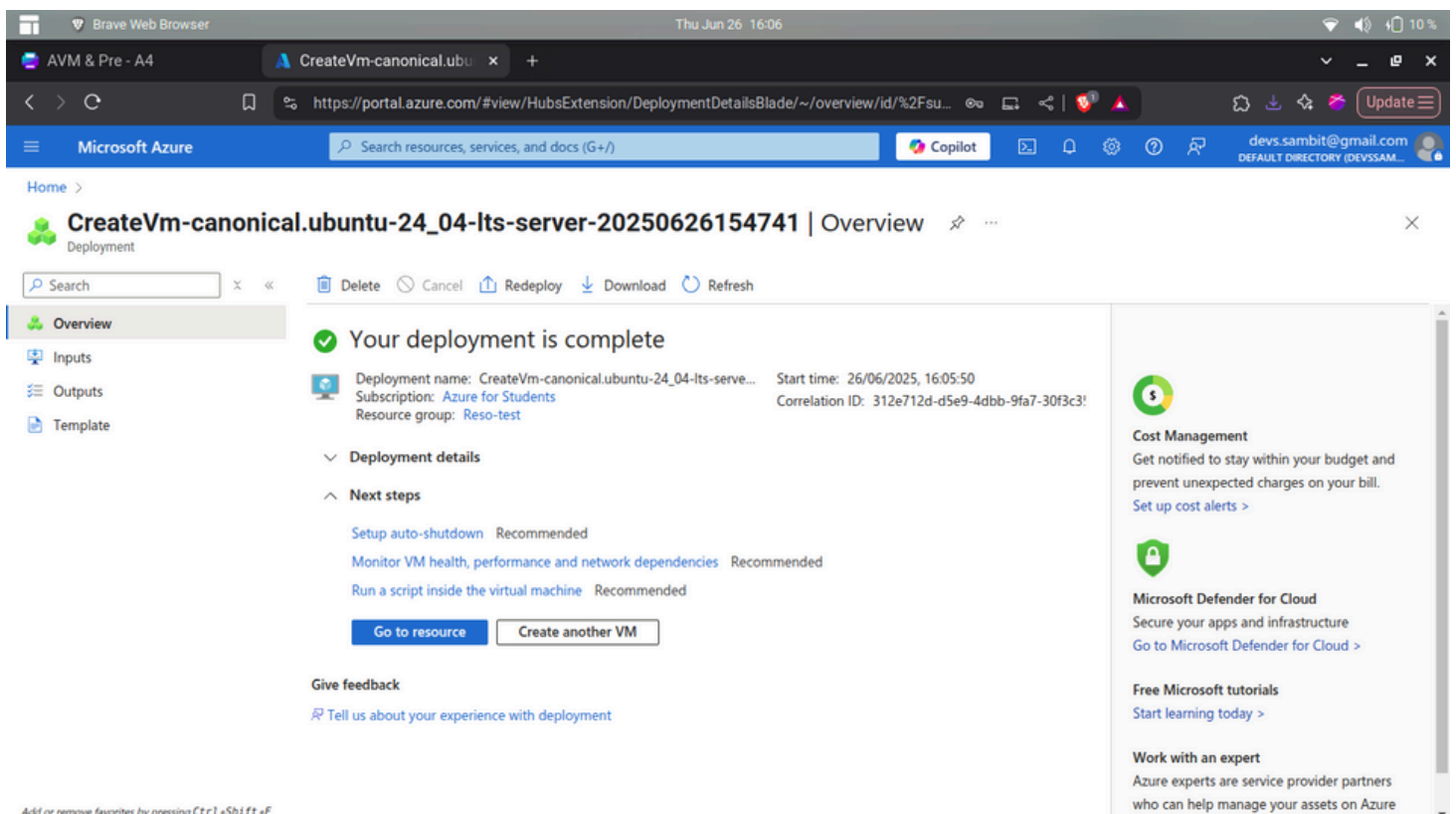
BASICS TAB OF LINUX VM

- **Administrator account:**

1. Authentication type: Choose SSH public key.
2. Username: Enter a username (e.g., azureuser).
3. SSH public key source: Select Generate new key pair.
4. Key pair name: Enter my-linux-ssh-key.
5. Important: Download private key and create resource. You'll need it to connect via SSH.

- **Networking Tab:**

1. Virtual network: Select VNet-App2. **2.362**
2. Subnet: Select Subnet-Linux (10.2.1.0/24).
3. Public IP: Leave as (new) LinuxVM-Analytics1-ip.
4. NIC network security group: Select Basic.
5. Click Review + create.



OVERVIEW PAGE OF LINUX VM

Step 5: Establish VNet Peering between VNet-App1 and VNet-App2

This will allow WinVM-Web1 and LinuxVM-Analytics1 to communicate directly using their private IPs.

Go to VNet-App1:

- In the Azure portal search bar, type VNet-App1 and select it from the results.
- In the left-hand menu, under Settings, click Peerings.

Add Peering:

- Click + Add.
- This creates a two-way connection, so you define both sides here:
 1. Local or Remote virtual network gateway: Leave defaults.
 2. Peering link name from VNet-App1 to VNet-App2: Enter VNet1-to-VNet2.
 3. Allow VNet-App1 to access VNet-App2: Ensure this is checked (default).
 4. Allow VNet-App1 to receive forwarded traffic from VNet-App2: Check this.
- Remote virtual network:
 - Peering link name from VNet-App2 to VNet-App1: Enter VNet2-to-VNet1.
 - Subscription: Select your student subscription.
 - Virtual network: Select VNet-App2.
 - Allow VNet-App2 to access VNet-App1: Ensure this is checked (default).
 - Allow VNet-App2 to receive forwarded traffic from VNet-App1: Check this.
 - Enable VNet-App2 to use VNet-App1's remote gateway or route server:
Leave unchecked for now.
- Click Add.

Brave Web Browser Thu Jun 26 16:22

AVM & Pre - A4 Add peering - Microsoft / x +

https://portal.azure.com/#view/Microsoft_Azure_Network/AddEditPeering.ReactView/isAdd~/... Update

Microsoft Azure Search resources, services, and docs (G+/) Copilot devs.sambit@gmail.com DEFAULT DIRECTORY (DEVSSAM...)

Home > Vnet-App1 | Peerings >

Add peering

Vnet-App1

Virtual network peering enables you to seamlessly connect two or more virtual networks in Azure. This will allow resources in either virtual network to directly connect and communicate with resources in the peered virtual network.

Remote virtual network summary

Peering link name * VNet1-to-VNet2

Virtual network deployment model ☒ Resource manager ☐ Classic

I know my resource ID ☐

Subscription * Azure for Students

Virtual network * VNet-App2 (Reso-test)

Remote virtual network peering settings

Add Cancel

[Give feedback](#)

CONFIGURATION OF VNET PEERING

Brave Web Browser Thu Jun 26 16:25

AVM & Pre - A4 Vnet-App1 - Microsoft A x +

https://portal.azure.com/#@devssambitgmail.onmicrosoft.com/resource/subscriptions/bd428... Update

Microsoft Azure Search resources, services, and docs (G+/) Copilot devs.sambit@gmail.com DEFAULT DIRECTORY (DEVSSAM...)

Home > Vnet-App1

Vnet-App1 | Peerings

Virtual network

Search

+ Add Refresh Export to CSV Delete Sync

Virtual network peering enables you to seamlessly connect two or more virtual networks in Azure. The virtual networks appear as one for connectivity purposes. [Learn more](#)

Filter by name...

Showing all 1 items

<input type="checkbox"/>	Name	Peering sync status	Peering...	Remo...	Virtu...	Cross-tenant
<input type="checkbox"/>	VNet1-to-VNet2	Fully Synchronized	Connect ed	VNet-Ap...	Disabled	No

[Give feedback](#)

Add or remove favorites by pressing Ctrl+Shift+F

OVERVIEW PAGE OF VNET PEERING

Step 6: Test Connectivity (Ping between VMs)

IMP: There might be some variations in the whole step 6 as this version is specifically for systems running Linux OS.

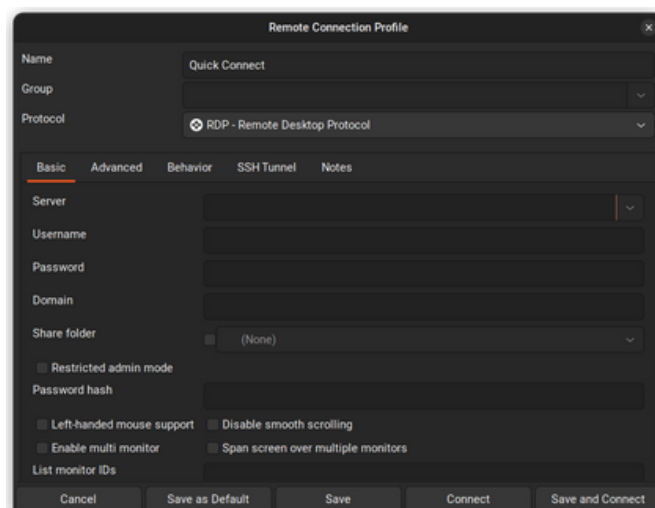
Now, let's verify if your VMs can ping each other. You'll need their private IP addresses.

To find VM Private IPs:

- Go to Virtual machines in the portal.
- Click on WinVM-Web1. On the Overview page, find its Private IP address. Note it down (e.g., 10.1.1.4).
- Go back to Virtual machines.
- Click on LinuxVM-Analytics1. On the Overview page, find its Private IP address. Note it down (e.g., 10.2.1.4).

6.a: Connect to Windows VM (WinVM-Web1) via RDP

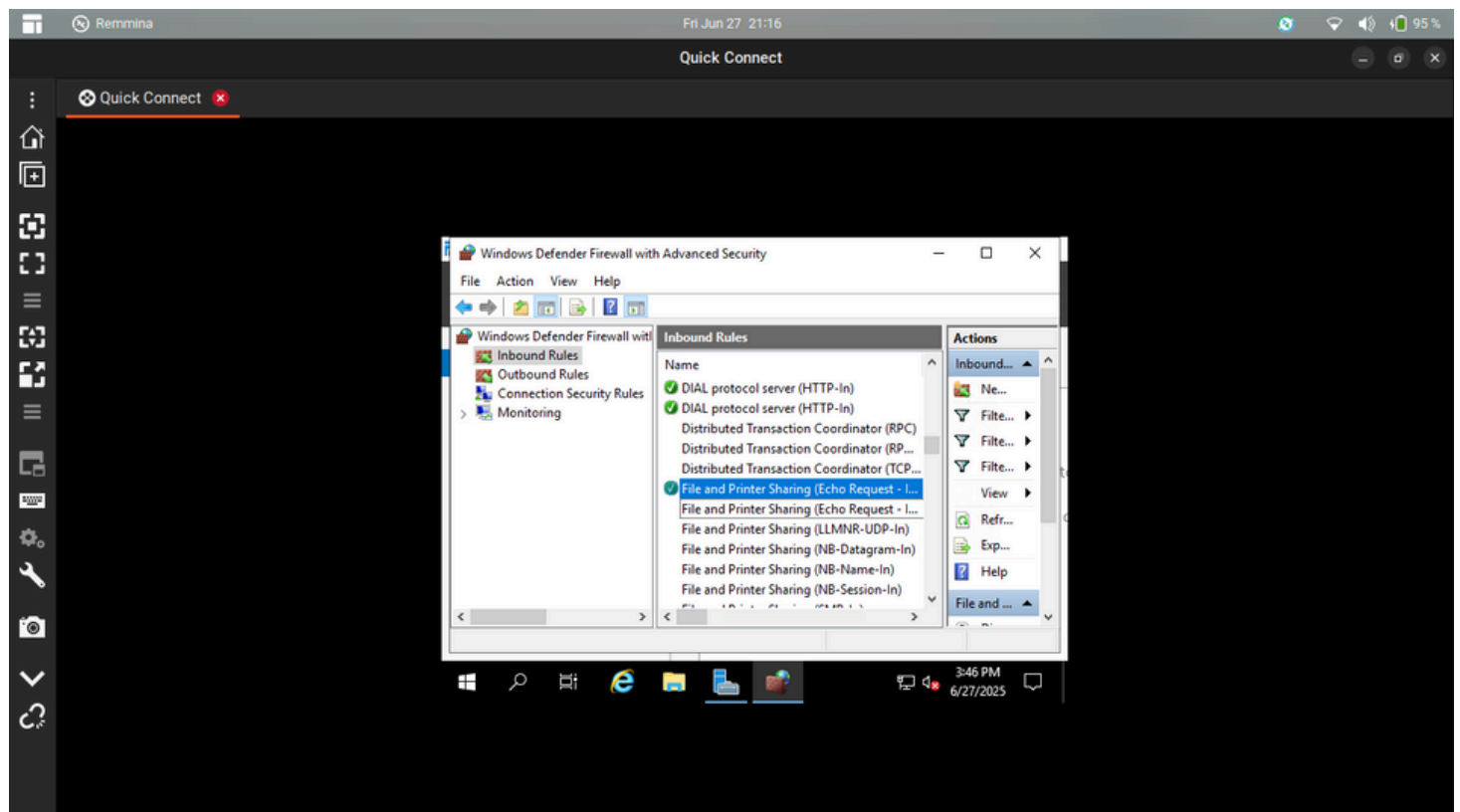
1. On WinVM-Web1's Overview page, copy its Public IP address.
2. Open Remote Desktop Connection on your local machine.
3. Paste the Public IP address and click Connect.
4. Enter the username and password you set during VM creation.
5. Accept any certificate warnings.



6.b: Prepare Windows VM for Ping (Inside WinVM-Web1)

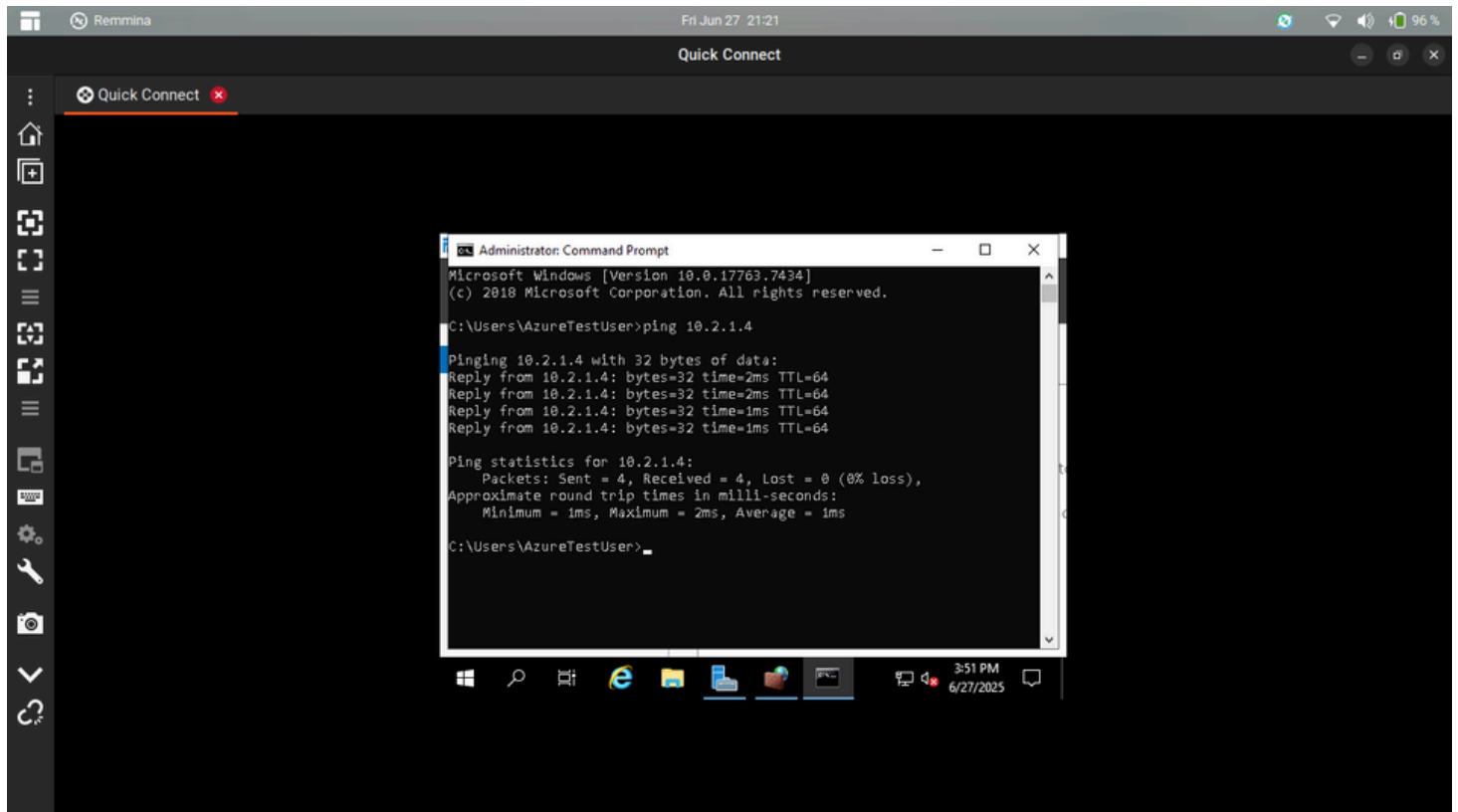
By default, Windows Firewall blocks incoming ICMP (ping) requests. You need to enable the rule for ping or temporarily disable the firewall from inside the Windows VM.

1. Once RDP'd into WinVM-Web1, open Server Manager.
2. Go to Tools > Windows Defender Firewall with Advanced Security.
3. In the left pane, select Inbound Rules.
4. Look for rules named "File and Printer Sharing (Echo Request - ICMPv4-In)".
There might be several for different profiles (Domain, Private, Public).
5. Enable the rules that are disabled by right-clicking them and selecting "Enable Rule".



6.c: Ping Linux VM from Windows VM (Inside WinVM-Web1)

1. On WinVM-Web1, open Command Prompt or PowerShell.
2. Type `ping <LinuxVM-Analytics1_Private_IP_Address>` (e.g., `ping 10.2.1.4`).
3. You should see replies, indicating successful communication from Windows to Linux. If not, recheck peering status and firewall rules.



PING FROM WINDOWS TO LINUX

6.d: Connect to Linux VM (LinuxVM-Analytics1) via SSH from Ubuntu

1. `chmod 400 /path/to/your/my-linux-ssh-key.pem`
2. `ssh -i /path/to/your/my-linux-ssh-key.pem azureuser@<LinuxVM-Analytics1_Public_IP_Address>`
3. The first time you connect, you might be asked to confirm the host's authenticity; type `yes` and press `Enter`.

```
Terminal
Fri Jun 27 21:35
azureuser@LinuxVM-Analytics1: ~

Please type 'yes', 'no' or the fingerprint: yes
Warning: Permanently added '13.71.23.114' (ED25519) to the list of known hosts.
Welcome to Ubuntu 24.04.2 LTS (GNU/Linux 6.11.0-1015-azure x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/pro

System information as of Fri Jun 27 16:05:37 UTC 2025

System load: 0.0          Processes:            110
Usage of /:   5.5% of 28.02GB Users logged in:          0
Memory usage: 27%        IPv4 address for eth0: 10.2.1.4
Swap usage:   0%

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

azureuser@LinuxVM-Analytics1:~$
```

LINUX LOGIN FROM TERMINAL

6.e: Ping Windows VM from Linux VM (Inside LinuxVM-Analytics1)

- 1.ping <WinVM-Web1_Private_IP_Address> (e.g., ping 10.1.1.4)
- 2.You should see replies, confirming bidirectional communication from Linux to Windows across the peered VNets. Press Ctrl+C to stop the ping.

```
Terminal
Fri Jun 27 21:37
azureuser@LinuxVM-Analytics1: ~

azureuser@LinuxVM-Analytics1:~$ ping 10.1.1.4
PING 10.1.1.4 (10.1.1.4) 56(84) bytes of data.
64 bytes from 10.1.1.4: icmp_seq=1 ttl=128 time=2.80 ms
64 bytes from 10.1.1.4: icmp_seq=2 ttl=128 time=2.20 ms
64 bytes from 10.1.1.4: icmp_seq=3 ttl=128 time=1.65 ms
64 bytes from 10.1.1.4: icmp_seq=4 ttl=128 time=2.05 ms
64 bytes from 10.1.1.4: icmp_seq=5 ttl=128 time=2.96 ms
64 bytes from 10.1.1.4: icmp_seq=6 ttl=128 time=1.98 ms
64 bytes from 10.1.1.4: icmp_seq=7 ttl=128 time=1.83 ms
64 bytes from 10.1.1.4: icmp_seq=8 ttl=128 time=1.46 ms
64 bytes from 10.1.1.4: icmp_seq=9 ttl=128 time=1.60 ms
64 bytes from 10.1.1.4: icmp_seq=10 ttl=128 time=2.11 ms
64 bytes from 10.1.1.4: icmp_seq=11 ttl=128 time=2.61 ms
64 bytes from 10.1.1.4: icmp_seq=12 ttl=128 time=2.15 ms
^C
--- 10.1.1.4 ping statistics ---
12 packets transmitted, 12 received, 0% packet loss, time 11017ms
rtt min/avg/max/mdev = 1.459/2.115/2.964/0.452 ms
azureuser@LinuxVM-Analytics1:~$
```

PING FROM LINUX TO WINDOWS

Step 7: Clean Up Your Azure Resources (VERY IMPORTANT!)

To avoid consuming your credits unnecessarily, delete the resources when you are finished. The easiest way to do this is to delete the entire resource group.

1. Go to Resource Groups:

- In the Azure portal search bar, type Resource groups and select it from the results.

2. Delete Your Lab Resource Group:

- Find and click on RG-AzureNetworkingLab.
- On the Resource Group's Overview page, click Delete resource group at the top.
- You will be prompted to type the resource group name (RG-AzureNetworkingLab) to confirm deletion. Type it exactly as shown and click Delete.
- This process can take several minutes as Azure deletes all resources within that group (VNets, VMs, Public IPs, etc.).

NOTE: If the resources are needed for further even after the performed task, deactivating each of them rather than deleting is a good choice.

But, it surely might keep on incurring small charges in the background due to some cost factors like disks, transfers over peerings, reserved IP addresses.

CONCLUSION

Throughout our discussion, we've explored the foundational elements of networking in Microsoft Azure:

- Azure Virtual Networks (VNETs): Your isolated and secure private network in the cloud, defined by logical CIDR ranges that dictate its IP address space.
- Subnets: Smaller, segmented portions of a VNet's address space, crucial for organizing resources, applying granular security, and hosting specific Azure services.
- VNet Peering: A powerful mechanism to connect disparate VNETs, allowing secure, high-bandwidth communication across the Microsoft backbone, whether within the same region (Regional Peering) or across different regions (Global Peering).

Submitted by:

Sambit Kumar Panda

References:

<https://learn.microsoft.com/en-us/azure/virtual-network/virtual-networks-overview>

<https://learn.microsoft.com/en-us/azure/virtual-network/ip-services/public-ip-addresses>

[https://learn.microsoft.com/en-us/azure/virtual-network/virtual-network-manage-subnet?
tabs=azure-portal](https://learn.microsoft.com/en-us/azure/virtual-network/virtual-network-manage-subnet?tabs=azure-portal)

<https://learn.microsoft.com/en-us/azure/virtual-network/virtual-network-peering-overview>

[https://learn.microsoft.com/en-us/azure/azure-resource-manager/management/manage-
resource-groups-portal](https://learn.microsoft.com/en-us/azure/azure-resource-manager/management/manage-resource-groups-portal)

[https://www.google.com/search?q=https://learn.microsoft.com/en-
us/troubleshoot/windows-server/networking/configure-firewall-windows-server](https://www.google.com/search?q=https://learn.microsoft.com/en-us/troubleshoot/windows-server/networking/configure-firewall-windows-server)