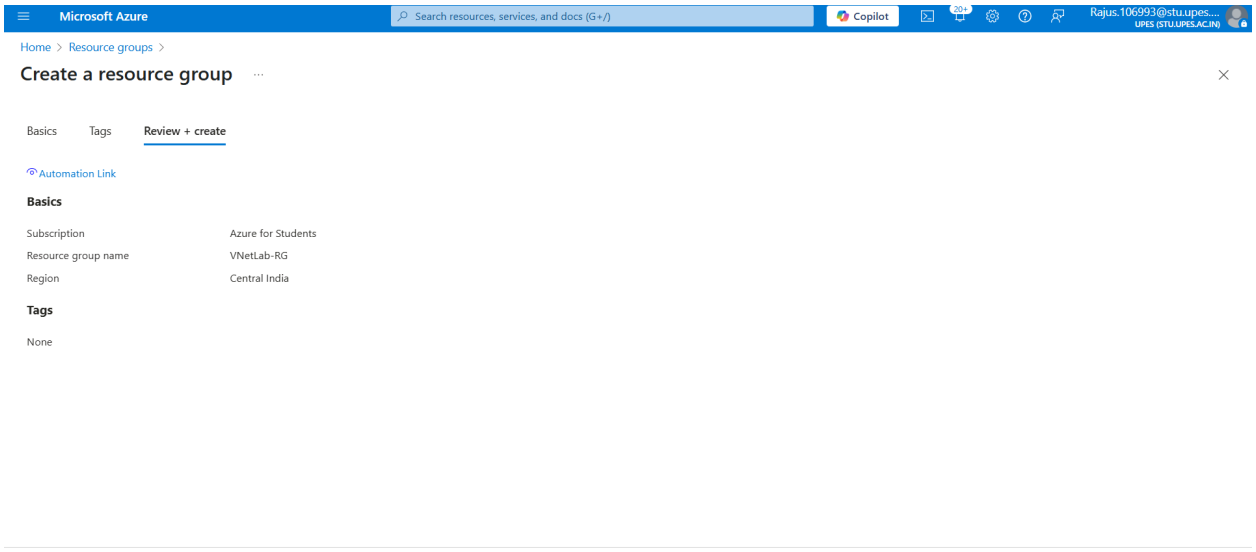
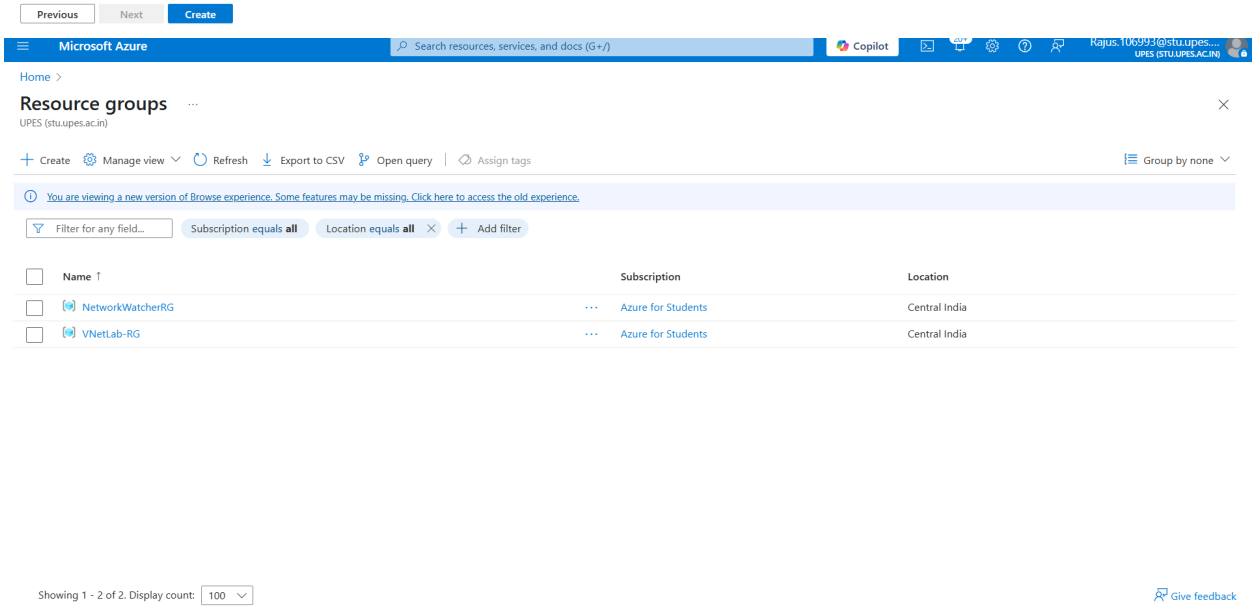
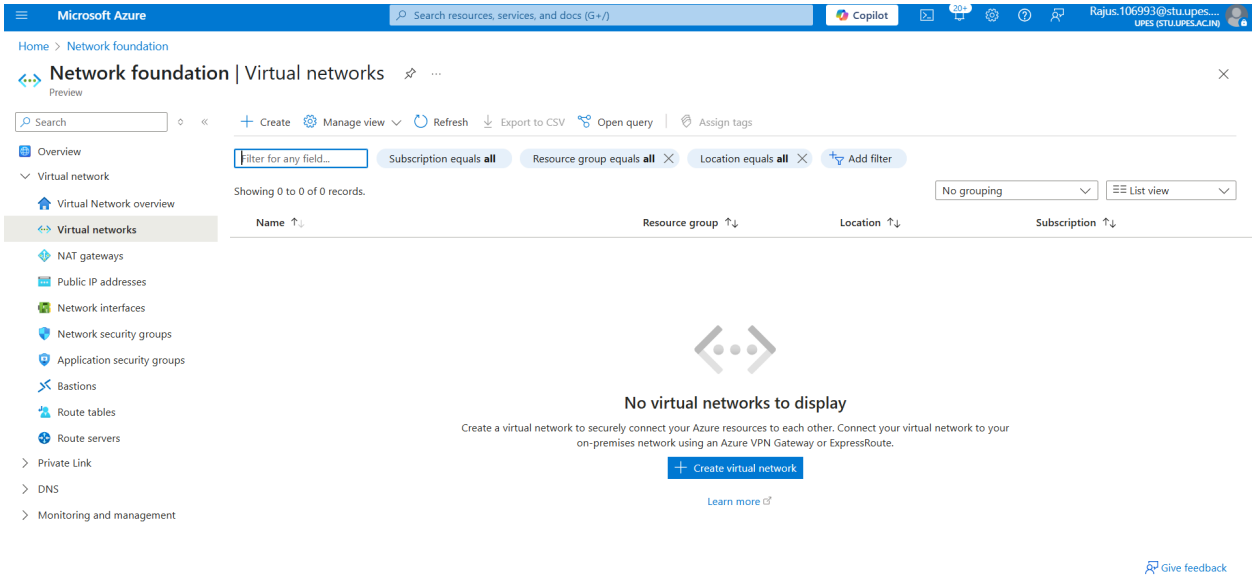
Step 1: Create a Resource Group
Go to Azure Portal.
On the left sidebar → Click on "Resource Groups" → "+ Create".
Fill:
Resource Group Name: VNetLab-RG
Region: Example → Central India (or your preferred region)
Click Review + Create → Create





Step 2: Create VNet-1 with Subnets (For Windows and Linux VMs)
Go to "Virtual Networks" → "+ Create"
Under Basics Tab:
Resource Group: VNetLab-RG
Name: VNet-1
Region: Same as resource group (Example: Central India)
Under IP Addresses Tab:
Address Space: 10.0.0.0/16
Add Two Subnets:
Subnet-Windows 10.0.1.0/24
Subnet-Linux 10.0.2.0/24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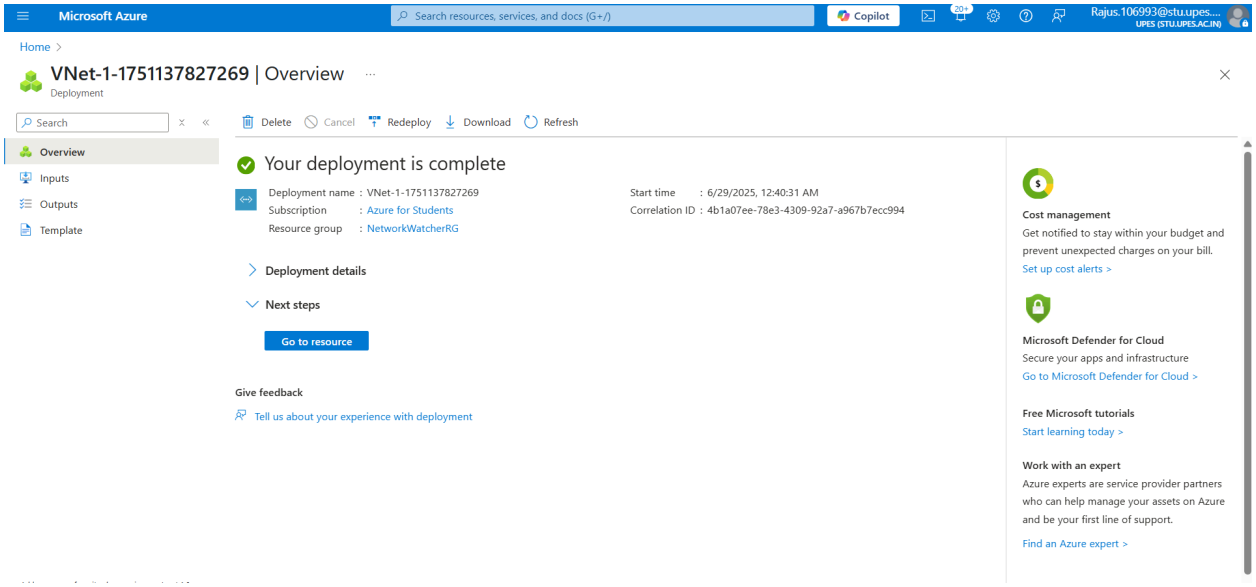
Copilot
Rajus.106993@stu.upes....
UPES (STU.UPES.AC.IN)
Home > Network foundation
Network foundation | Virtual networks
Preview
Search
Overview
Virtual network
Virtual Network overview
Virtual networks
NAT gateways
Public IP addresses
Network interfaces
Network security groups
Application security groups
Bastions
Route tables
Route servers
Private Link
DNS
Monitoring and management
Create
Manage view
Refresh
Export to CSV
Open query
Assign tags
Filter for any field...
Subscription equals all
Resource group equals all
Location equals all
Add filter
Showing 0 to 0 of 0 records.
No grouping
List view
Name
Resource group
Location
Subscription
No virtual networks to display
Create a virtual network to securely connect your Azure resources to each other. Connect your virtual network to your on-premises network using an Azure VPN Gateway or ExpressRoute.
Create virtual network
Learn more
Give feedback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Copilot
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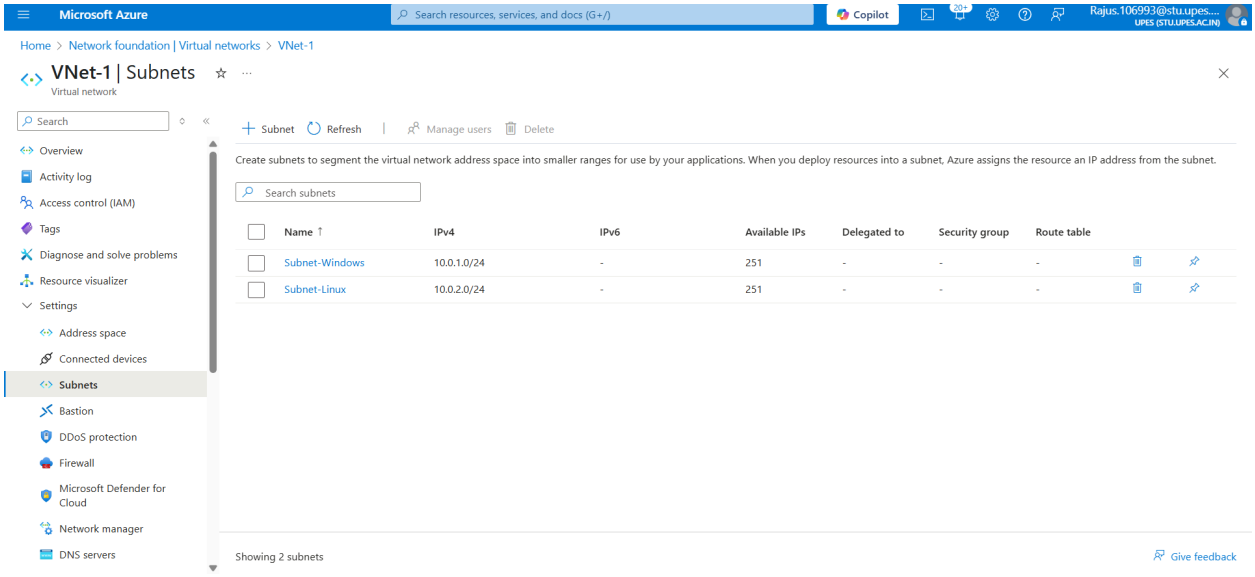
UPES (STU.UPES.AC.IN)
Home >
VNet-1-1751137827269 | Overview
Deployment
Search
Overview
Inputs
Outputs
Template
Delete
Cancel
Redeploy
Download
Refresh
Your deployment is complete
Deployment name : VNet-1-1751137827269
Subscription : Azure for Students
Resource group : NetworkWatcherRG
Start time : 6/29/2025, 12:40:31 AM
Correlation ID : 4b1a07ee-78e3-4309-92a7-a967b7ecc994
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
Secure your apps and infrastructure
Go to Microsoft Defender for Cloud >
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.
Find an Azure expert >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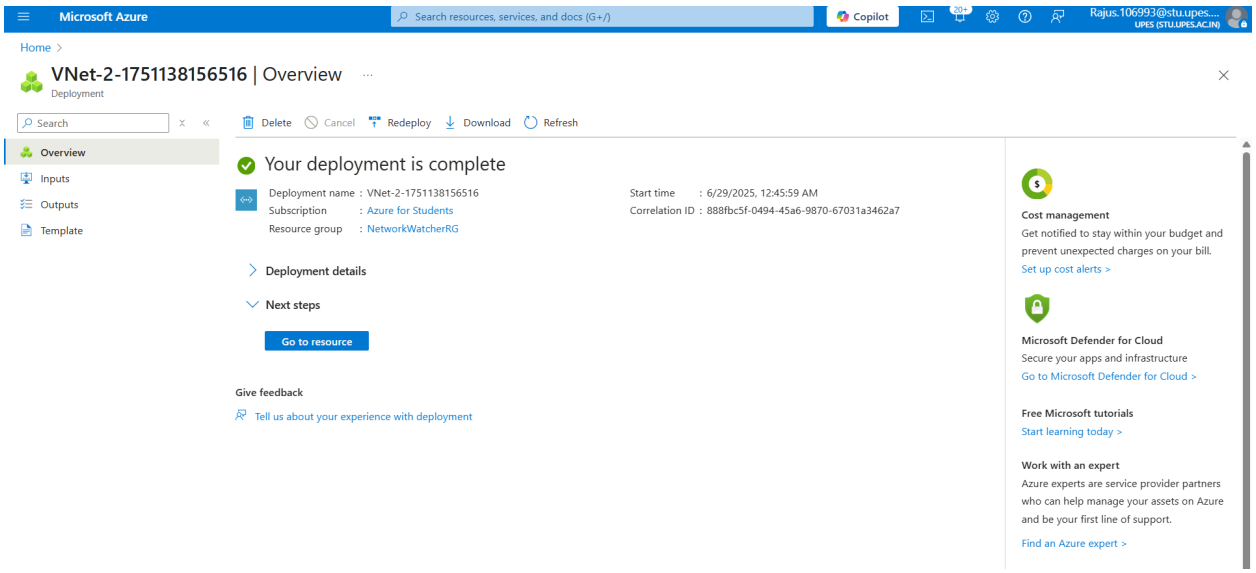
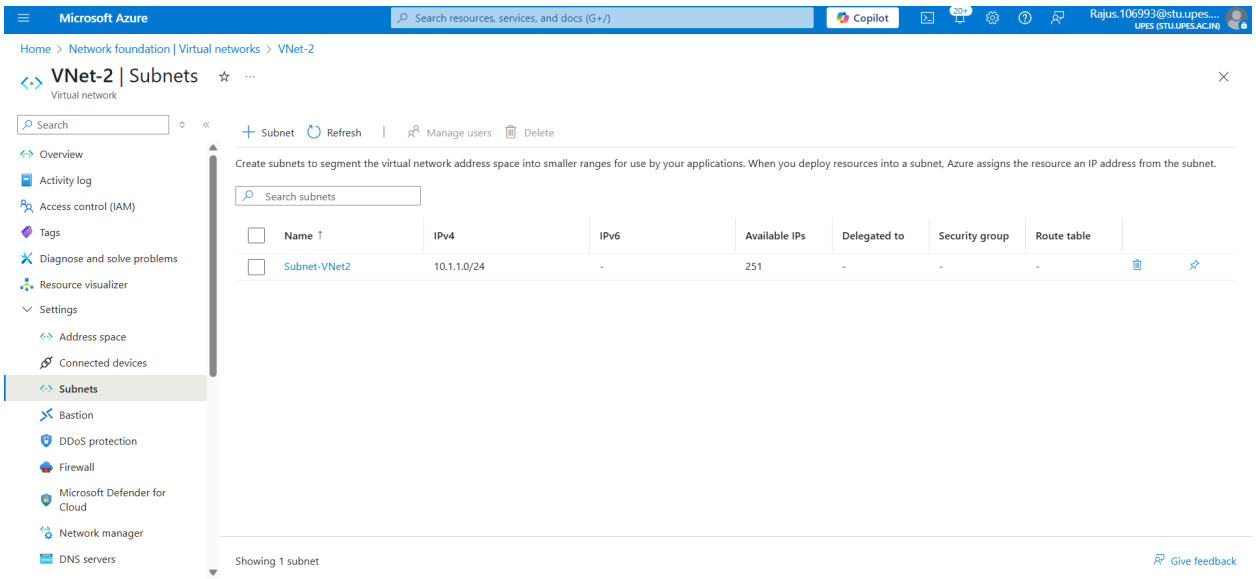
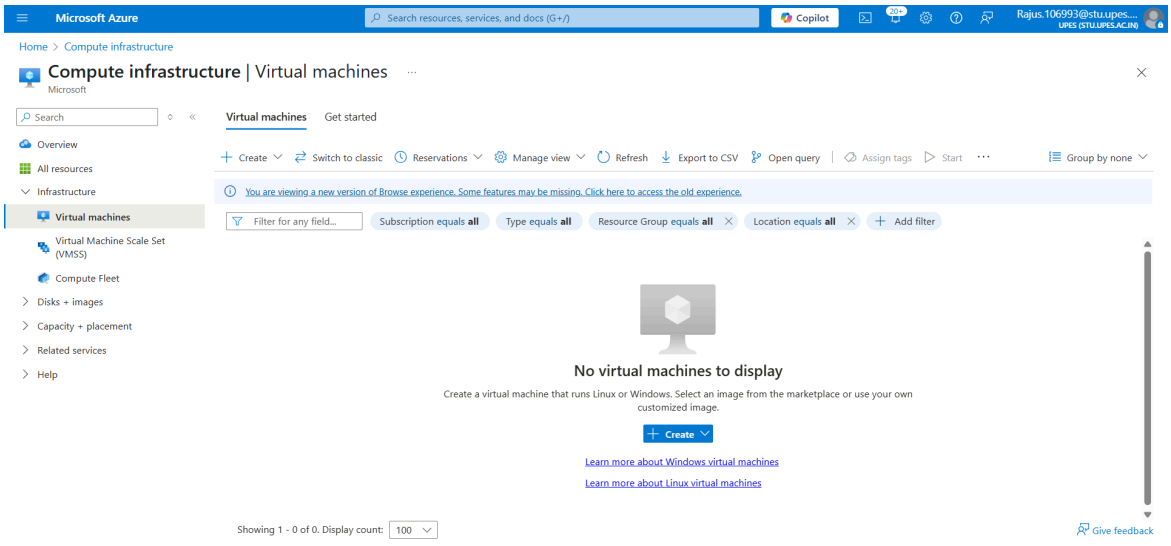
UPES (STU.UPES.AC.IN)
Home > Network foundation | Virtual networks > VNet-1
VNet-1 | Subnets
Virtual network
Search
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Resource visualizer
Settings
Address space
Connected devices
Subnets
Bastion
DDoS protection
Firewall
Microsoft Defender for Cloud
Network manager
DNS servers
Subnet
Refresh
Manage users
Delete
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.
Search subnets
Name
IPv4
IPv6
Available IPs
Delegated to
Security group
Route table
Subnet-Windows
10.0.1.0/24
-
251
-
-
-
Subnet-Linux
10.0.2.0/24
-
251
-
-
-
Showing 2 subnets
Give feedback

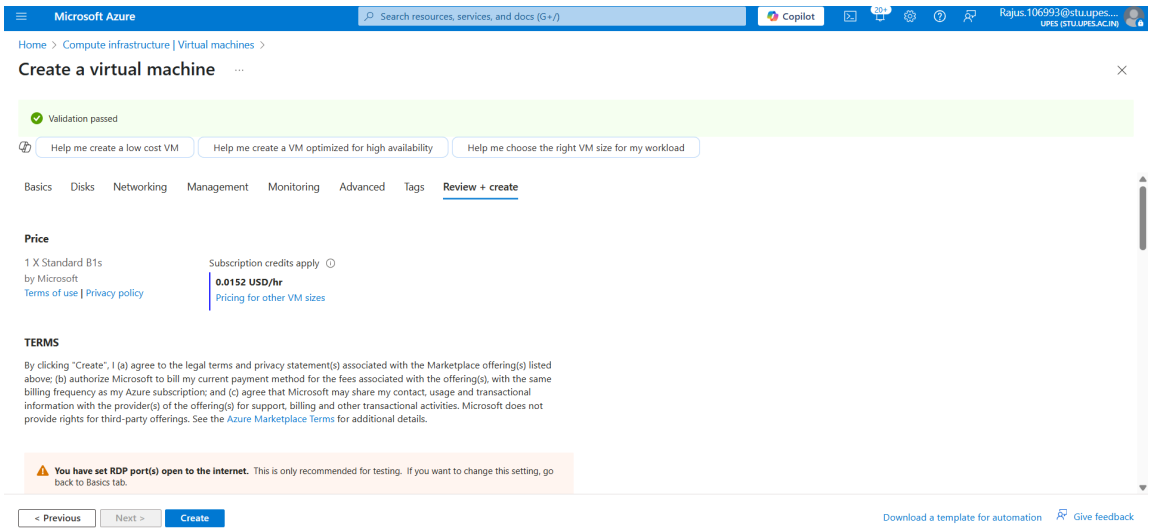
Step 3: Create VNet-2 with One Subnet (For VNet Peering Test VM)
Go to "Virtual Networks" → "+ Create"
Under Basics Tab:
Resource Group: VNetLab-RG
Name: VNet-2
Region: Same as VNet-1
Under IP Addresses Tab:
Address Space: 10.1.0.0/16
Add One Subnet:
Subnet-VNet2 10.1.1.0/24
Click Review + Create → Create



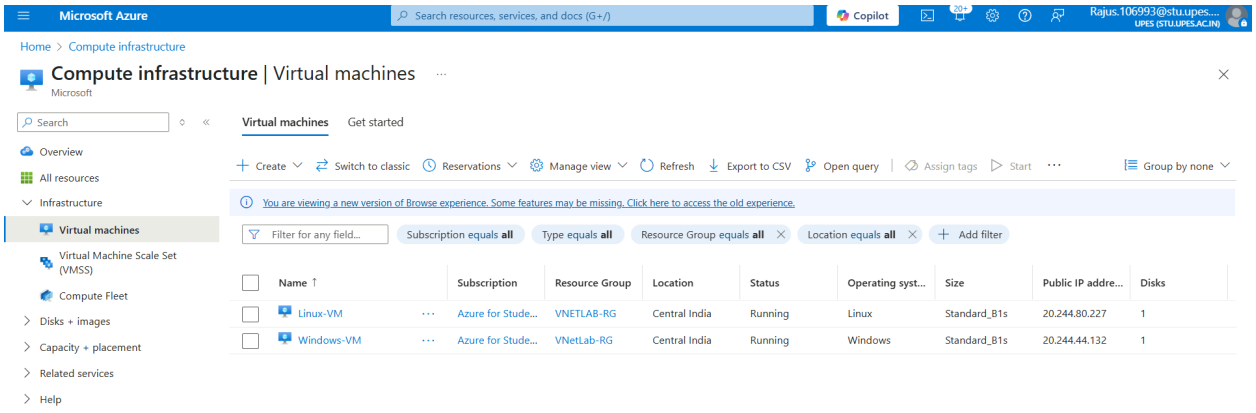


Step 4: Deploy Windows VM in Subnet-Windows (VNet-1)
Go to "Virtual Machines" → "+ Create"
Under Basics Tab:
Name: Windows-VM
Resource Group: VNetLab-RG
Region: Central India
Image: Windows Server 2019 Datacenter
Size: Standard B1s
Authentication: Username + Password
Inbound Ports: Allow RDP (3389)
Under Networking Tab:
Virtual Network: VNet-1
Subnet: Subnet-Windows
Click Review + Create → Create

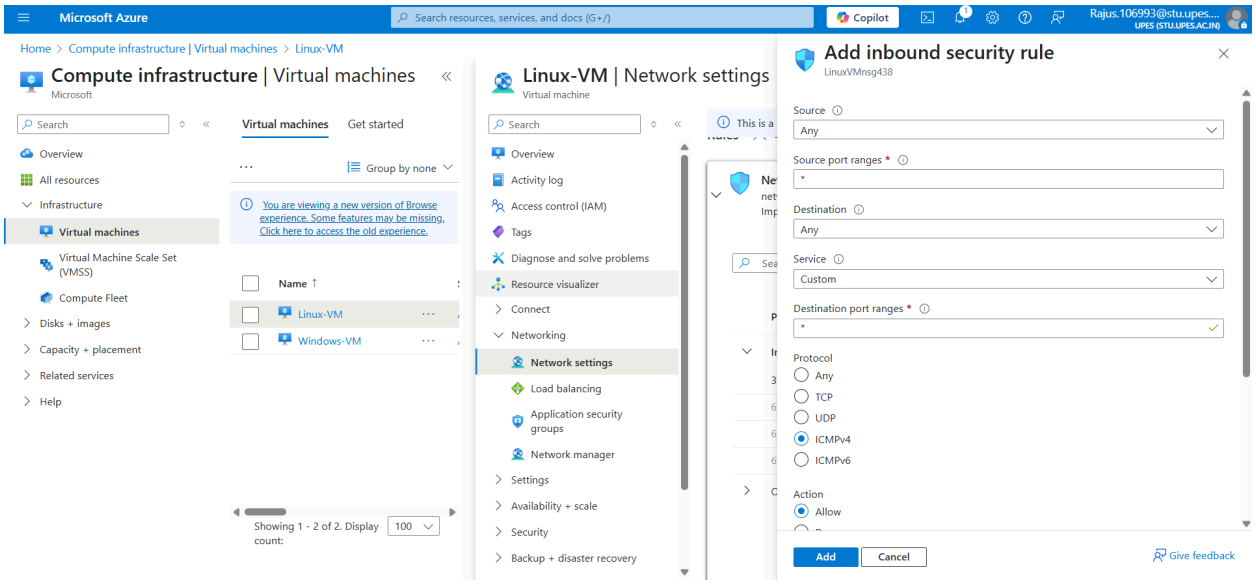


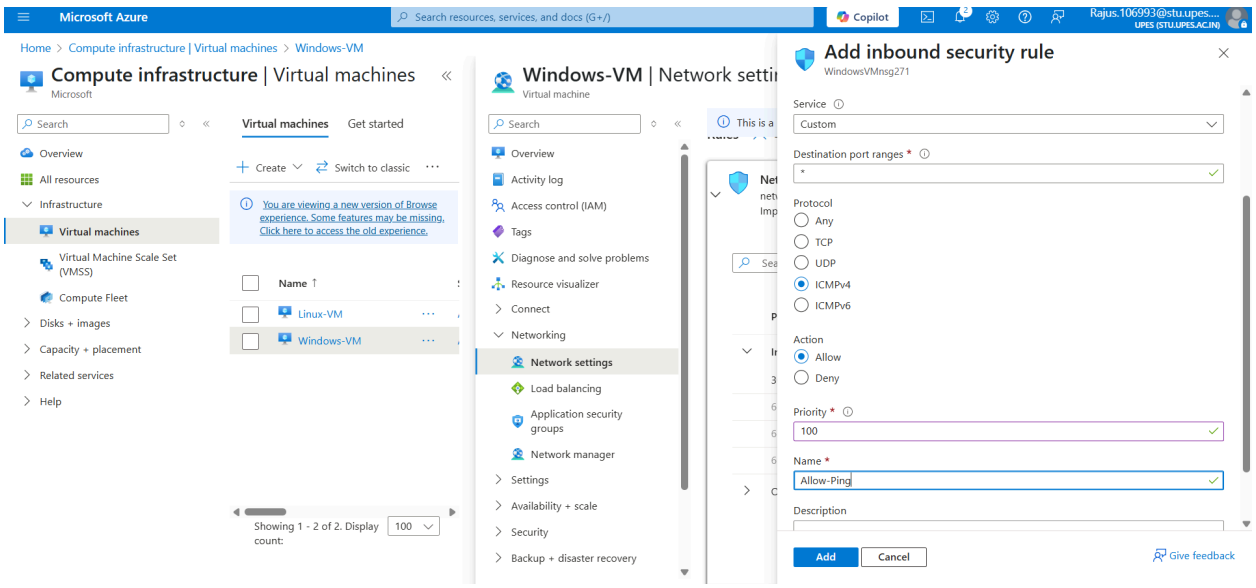


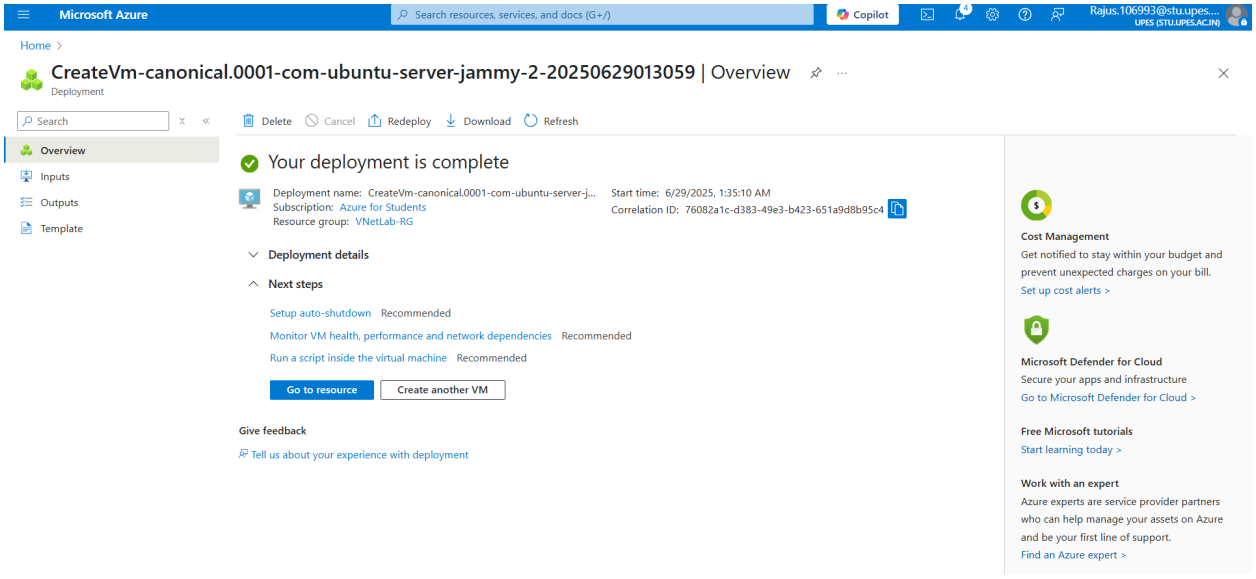
Step 5: Deploy Linux VM in Subnet-Linux (VNet-1)
Go to "Virtual Machines" → "+ Create"
Under Basics Tab:
Name: Linux-VM
Resource Group: VNetLab-RG
Region: Central India
Image: Ubuntu 20.04 LTS
Size: Standard B1s
Authentication: Username + Password (or SSH)
Inbound Ports: Allow SSH (22)
Under Networking Tab:
Virtual Network: VNet-1
Subnet: Subnet-Linux
Click Review + Create → Create



Step 6: Configure Network Security Group (NSG) Rules (Optional if auto-created)
Go to Azure Portal → Network Security Groups (or directly from each VM's Networking tab).
For both Windows-VM and Linux-VM NSGs:
Ensure inbound rules allow RDP (3389) for Windows-VM.
Ensure inbound rules allow SSH (22) for Linux-VM.
For Ping (ICMP), add a new inbound rule:
Protocol: ICMP
Source: Any
Destination: Any
Action: Allow
You can create this rule by going to each VM → Networking → Add inbound port rule.



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UPES (STU.UPES.AC.IN)
Home
CreateVm-canonical.0001-com-ubuntu-server-jammy-2-20250629013059 | Overview
Deployment
Search
Overview
Inputs
Outputs
Template
Delete
Cancel
Redeploy
Download
Refresh
Your deployment is complete
Deployment name: CreateVm-canonical.0001-com-ubuntu-server-j...
Subscription: Azure for Students
Resource group: VNetLab-RG
Start time: 6/29/2025, 1:35:10 AM
Correlation ID: 76082a1c-d383-49e3-b423-651a9d8b95c4
Deployment details
Next steps
Setup auto-shutdown Recommended
Monitor VM health, performance and network dependencies Recommended
Run a script inside the virtual machine Recommended
Go to resource
Create another VM
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
Secure your apps and infrastructure
Go to Microsoft Defender for Cloud >
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Start learning today >
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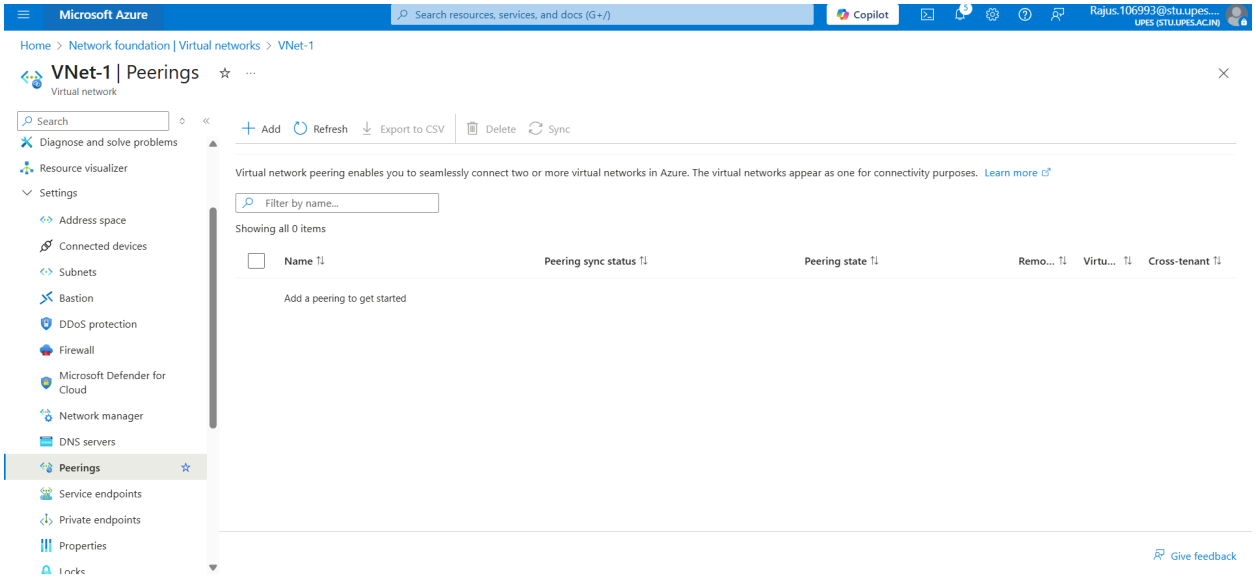
Home > Compute infrastructure | Virtual machines > VNet2-VM
Compute infrastructure | Virtual machines
Microsoft
Search
Overview
All resources
Infrastructure
Virtual machines
Virtual Machine Scale Set (VMSS)
Compute Fleet
Disks + images
Capacity + placement
Related services
Help
Virtual machines
Get started
Group by none
You are viewing a new version of Browse experience. Some features may be missing. Click here to access the old experience.
Name
Linux-VM
VNet2-VM
Windows-VM
Showing 1 - 3 of 3. Display count: 100
VNet2-VM | Network settings
Virtual machine
Search
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Resource visualizer
Connect
Networking
Network settings
Load balancing
Application security groups
Network manager
Settings
Availability + scale
Security
Backup + disaster recovery
This is a
Rules
Add inbound security rule
VNet2-VM-nsg
Source
Any
Source port ranges *
*
Destination
Any
Service
Custom
Destination port ranges *
*
Protocol
Any
TCP
UDP
ICMPv4
ICMPv6
Action
Allow
Add
Cancel
Give feedback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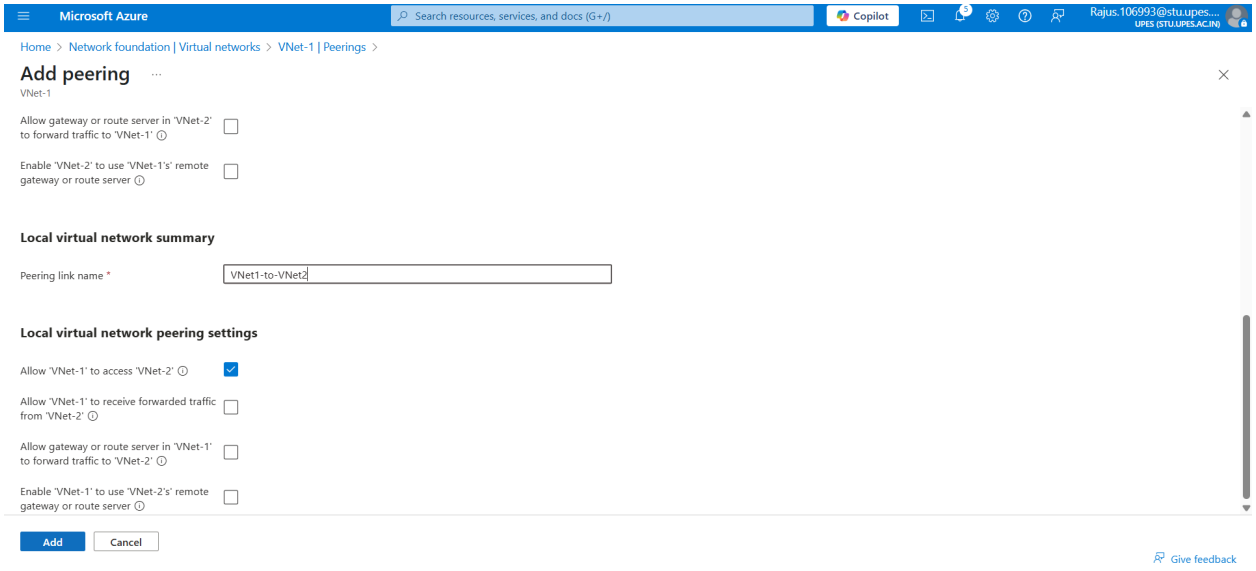
UPES (STU.UPES.AC.IN)
Home > Network foundation | Virtual networks > VNet-1
VNet-1 | Peerings
Virtual network
Search
Diagnose and solve problems
Resource visualizer
Settings
Address space
Connected devices
Subnets
Bastion
DDoS protection
Firewall
Microsoft Defender for Cloud
Network manager
DNS servers
Peerings
Service endpoints
Private endpoints
Properties
Locks
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 0 items
Name
Peering sync status
Peering state
Remo...
Virtu...
Cross-tenant
Add a peering to get started
Give feedback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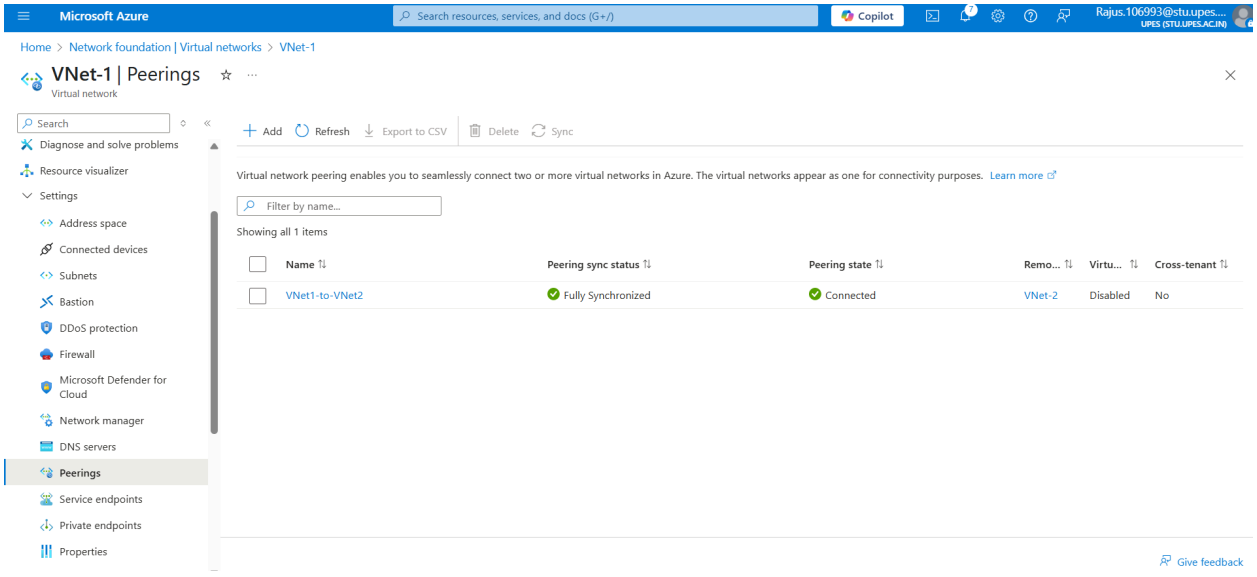
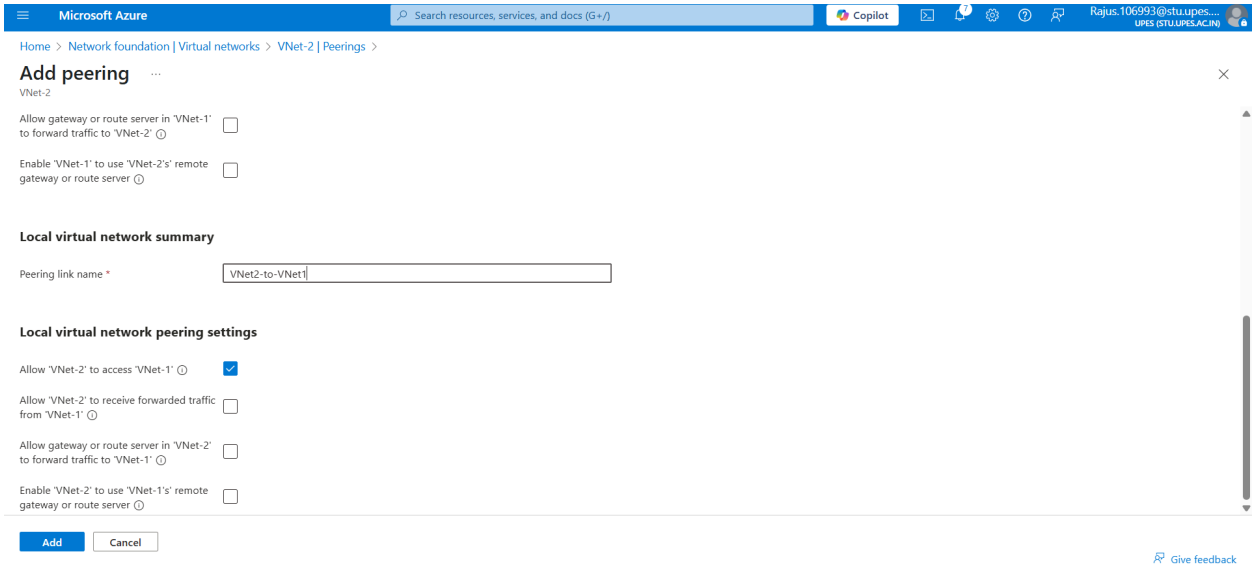
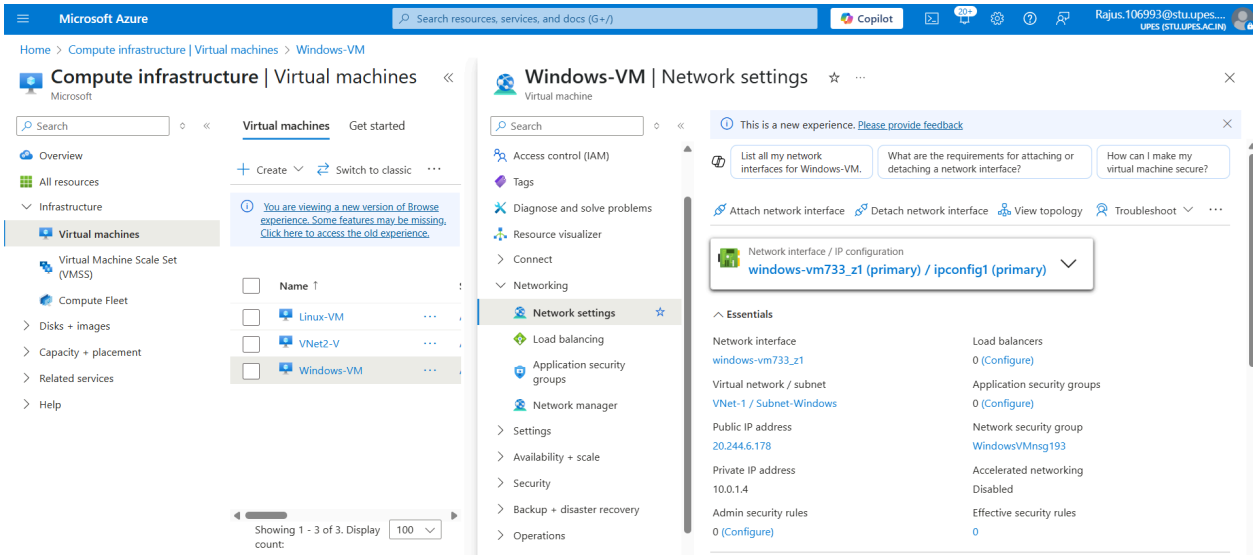
Rajus.106993@stu.upes....
UPES (STU.UPES.AC.IN)
Home > Network foundation | Virtual networks > VNet-1 | Peerings >
Add peering
VNet-1
Allow gateway or route server in 'VNet-2' to forward traffic to 'VNet-1'
Enable 'VNet-2' to use 'VNet-1's' remote gateway or route server
Local virtual network summary
Peering link name *
VNet1-to-VNet2
Local virtual network peering settings
Allow 'VNet-1' to access 'VNet-2'
Allow 'VNet-1' to receive forwarded traffic from 'VNet-2'
Allow gateway or route server in 'VNet-1' to forward traffic to 'VNet-2'
Enable 'VNet-1' to use 'VNet-2's' remote gateway or route server
Add
Cancel
Give feedback

Step 7: Create VNet Peering from VNet-1 to VNet-2
Go to Azure Portal → Virtual Networks → VNet-1 → Peerings → "+ Add".
For Peering link name: VNet1-to-VNet2
For remote virtual network: Select VNet-2
Check the option:
Allow VNet-2 to access VNet-1 (enable)
Leave others unchecked (for simple peering).
Click "Add".

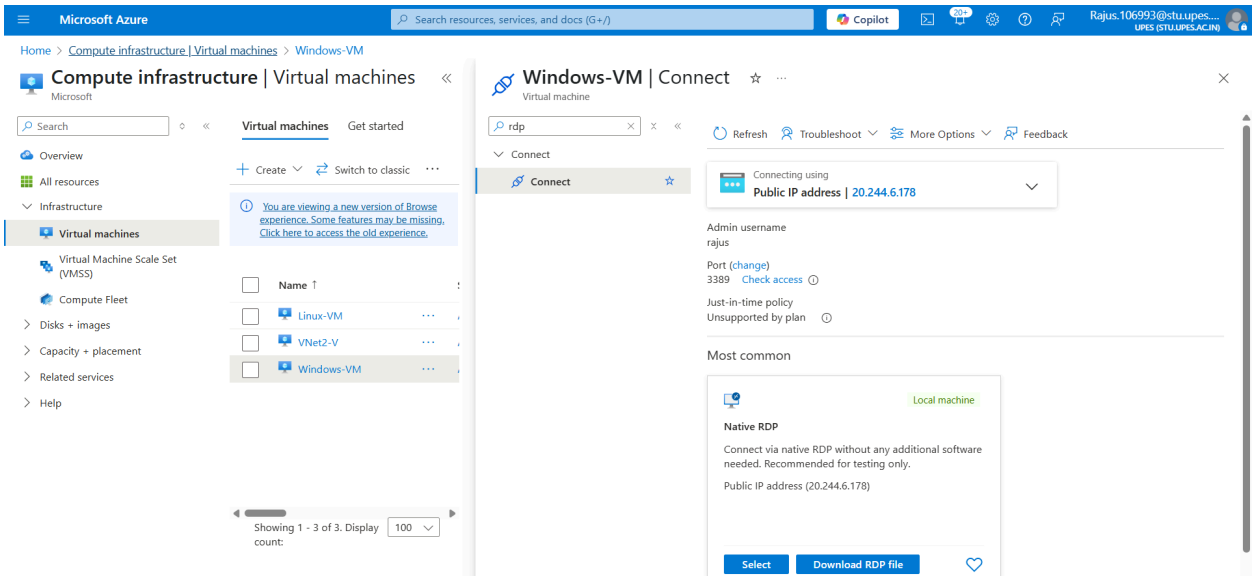


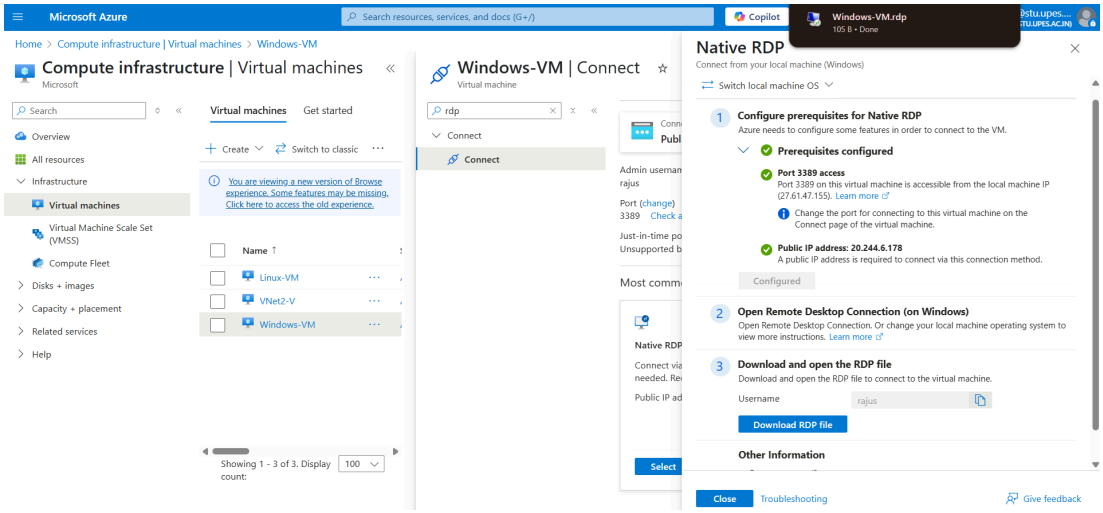


Step 8: Create VNet Peering from VNet-2 to VNet-1
Go to Virtual Networks → VNet-2 → Peerings → "+ Add".
Peering link name: VNet2-to-VNet1
Remote virtual network: Select VNet-1
Check:
Allow VNet-1 to access VNet-2 (enable)
Leave others unchecked.
Click "Add".



Click on Connect → Select RDP
Click Download RDP File
Open the downloaded .rdp file on your PC
Enter the Username and Password you set while creating the VM
Click Connect

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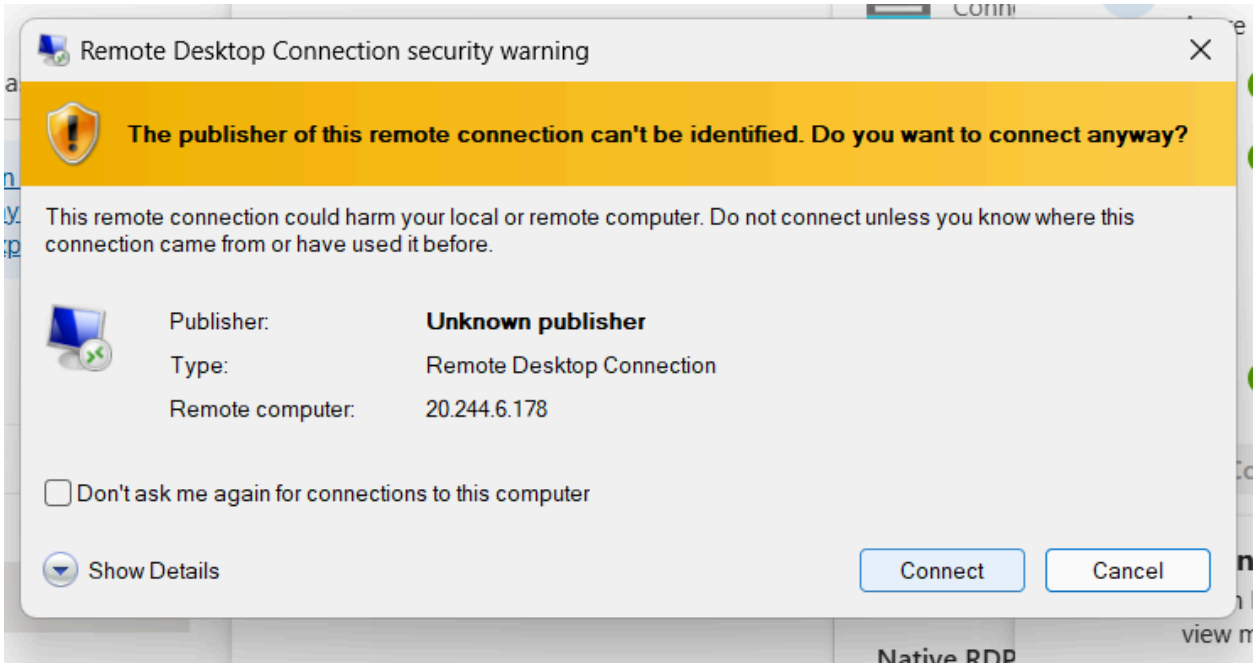
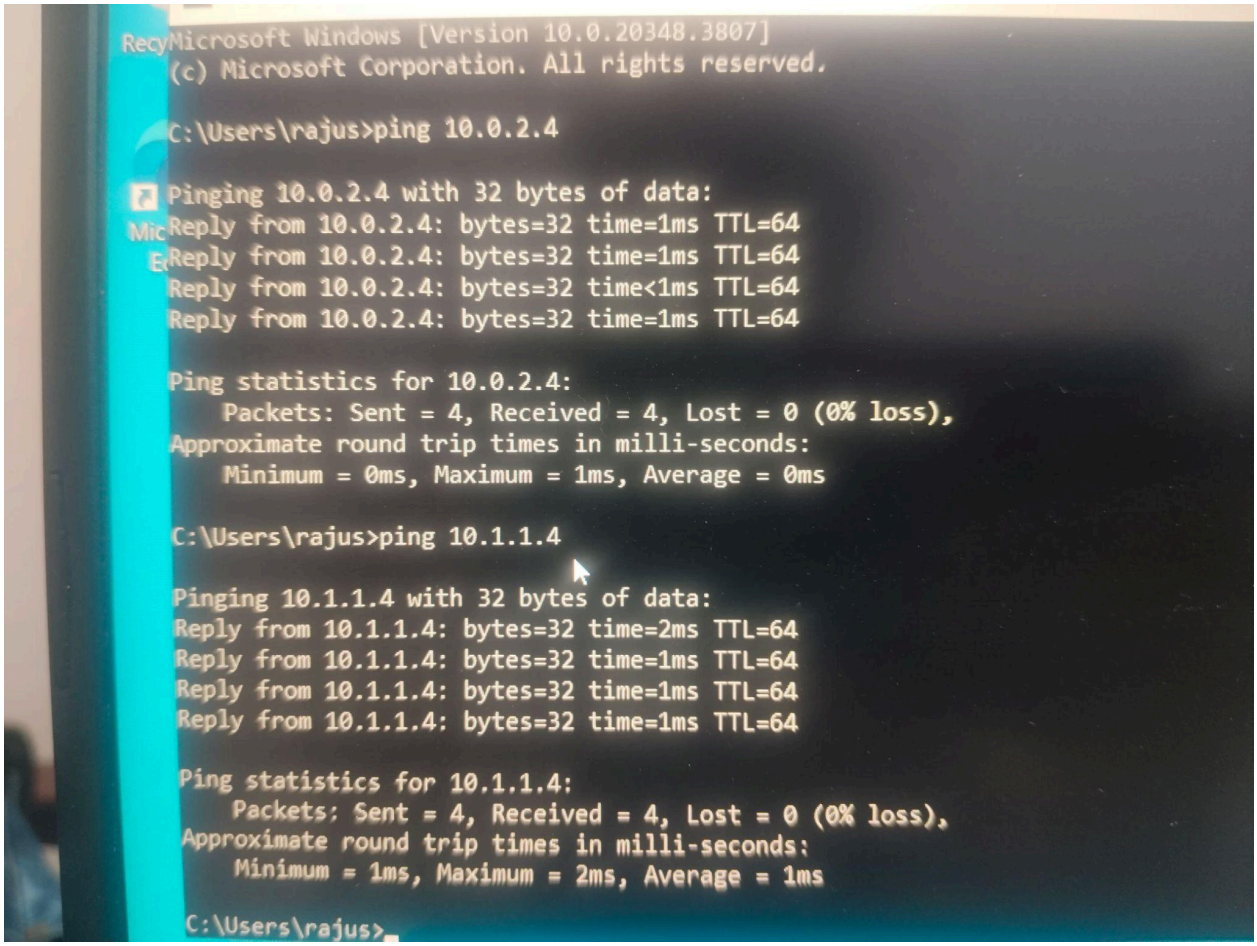
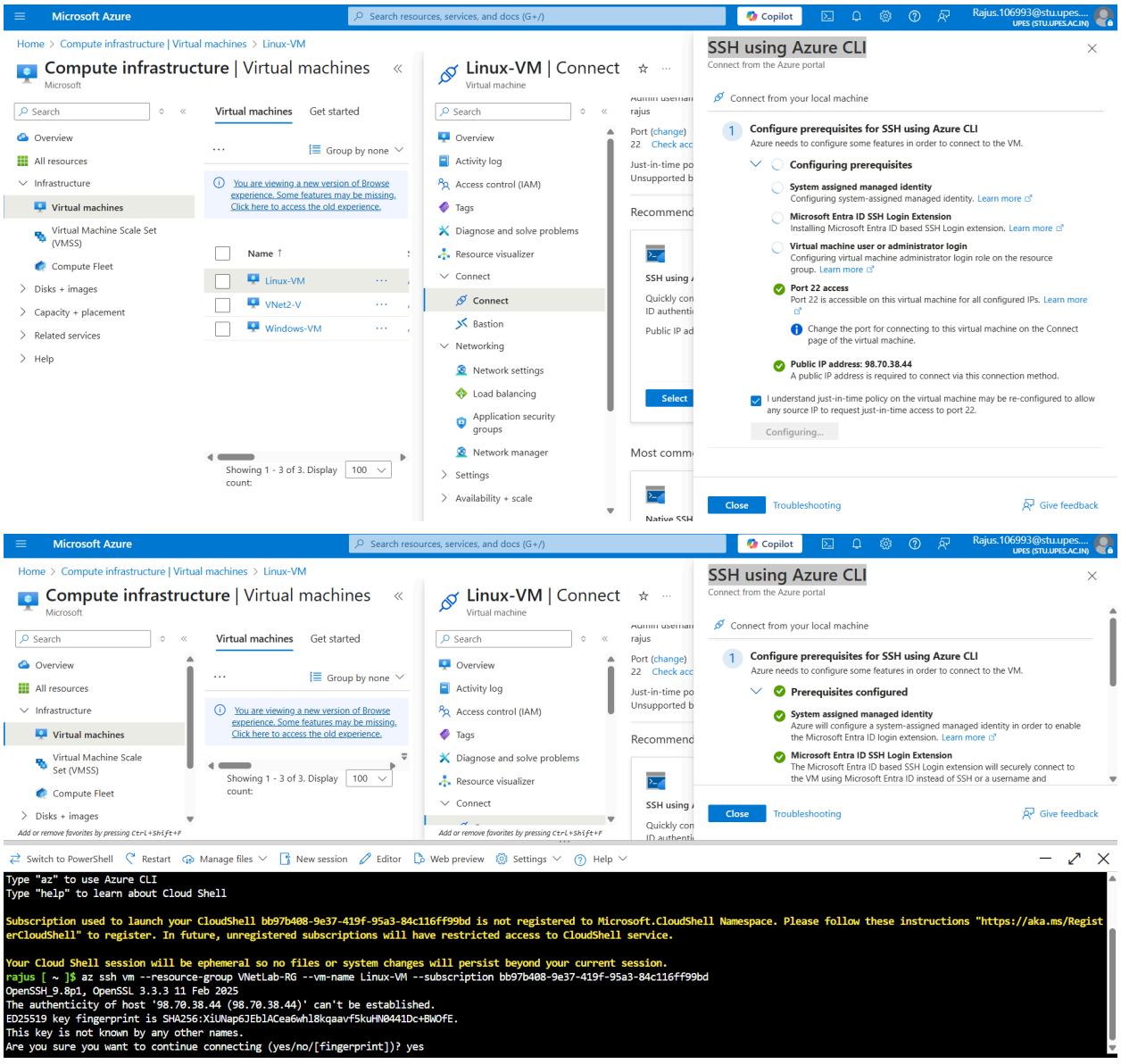
Copilot
Windows-VM.rdp
105 B • Done
Home > Compute infrastructure | Virtual machines > Windows-VM
Compute infrastructure | Virtual machines
Microsoft
Search
Overview
All resources
Infrastructure
Virtual machines
Virtual Machine Scale Set (VMSS)
Compute Fleet
Disks + images
Capacity + placement
Related services
Help
Virtual machines
Get started
Create
Switch to classic
You are viewing a new version of Browse experience. Some features may be missing. Click here to access the old experience.
Name
Linux-VM
VNet2-V
Windows-VM
Showing 1 - 3 of 3. Display count:
100
Windows-VM | Connect
Virtual machine
rdp
Connect
Connect
Native RDP
Connect from your local machine (Windows)
Switch local machine OS
1 Configure prerequisites for Native RDP
Azure needs to configure some features in order to connect to the VM.
Prerequisites configured
Port 3389 access
Port 3389 on this virtual machine is accessible from the local machine IP (27.61.47.155). Learn more
Change the port for connecting to this virtual machine on the Connect page of the virtual machine.
Public IP address: 20.244.6.178
A public IP address is required to connect via this connection method.
Configured
2 Open Remote Desktop Connection (on Windows)
Open Remote Desktop Connection. Or change your local machine operating system to view more instructions. Learn more
3 Download and open the RDP file
Download and open the RDP file to connect to the virtual machine.
Username
rajus
Download RDP file
Other Information
Close
Troubleshooting
Give feedback


Remote Desktop Connection security warning
The publisher of this remote connection can't be identified. Do you want to connect anyway?
This remote connection could harm your local or remote computer. Do not connect unless you know where this connection came from or have used it before.
Publisher:
Unknown publisher
Type:
Remote Desktop Connection
Remote computer:
20.244.6.178
Don't ask me again for connections to this computer
Show Details
Connect
Cancel


Microsoft Windows [Version 10.0.20348.3807]
(c) Microsoft Corporation. All rights reserved.
C:\Users\rajus>ping 10.0.2.4
Pinging 10.0.2.4 with 32 bytes of data:
Reply from 10.0.2.4: bytes=32 time=1ms TTL=64
Reply from 10.0.2.4: bytes=32 time=1ms TTL=64
Reply from 10.0.2.4: bytes=32 time<1ms TTL=64
Reply from 10.0.2.4: bytes=32 time=1ms TTL=64
Ping statistics for 10.0.2.4:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 1ms, Average = 0ms
C:\Users\rajus>ping 10.1.1.4
Pinging 10.1.1.4 with 32 bytes of data:
Reply from 10.1.1.4: bytes=32 time=2ms TTL=64
Reply from 10.1.1.4: bytes=32 time=1ms TTL=64
Reply from 10.1.1.4: bytes=32 time=1ms TTL=64
Reply from 10.1.1.4: bytes=32 time=1ms TTL=64
Ping statistics for 10.1.1.4:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 1ms, Maximum = 2ms, Average = 1ms
C:\Users\rajus>

From Linux-VM, run:
ping 10.0.2.4
ping 10.1.1.4



From VNet2-VM
ping 10.0.2.4
ping 10.1.1.4

```
New release '24.04.2 LTS' available.
Run 'do-release-upgrade' to upgrade to it.


Last login: Sun Jun 29 06:26:05 2025 from 4.224.111.199
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

rajus.106993@stu.upes.ac.in@Linux-VM:~$ ping 10.0.1.4
PING 10.0.1.4 (10.0.1.4) 56(84) bytes of data.
```

```
rajus.106993@stu.upes.ac.in@VNet2-V:~$ ping 10.0.2.4
PING 10.0.2.4 (10.0.2.4) 56(84) bytes of data.
64 bytes from 10.0.2.4: icmp_seq=1 ttl=64 time=2.18 ms
64 bytes from 10.0.2.4: icmp_seq=2 ttl=64 time=1.81 ms
64 bytes from 10.0.2.4: icmp_seq=3 ttl=64 time=0.959 ms
64 bytes from 10.0.2.4: icmp_seq=4 ttl=64 time=1.66 ms
64 bytes from 10.0.2.4: icmp_seq=5 ttl=64 time=2.53 ms
64 bytes from 10.0.2.4: icmp_seq=6 ttl=64 time=1.39 ms
64 bytes from 10.0.2.4: icmp_seq=7 ttl=64 time=0.830 ms
64 bytes from 10.0.2.4: icmp_seq=8 ttl=64 time=1.08 ms
64 bytes from 10.0.2.4: icmp_seq=9 ttl=64 time=1.33 ms
64 bytes from 10.0.2.4: icmp_seq=10 ttl=64 time=1.16 ms
64 bytes from 10.0.2.4: icmp_seq=11 ttl=64 time=1.62 ms
64 bytes from 10.0.2.4: icmp_seq=12 ttl=64 time=1.80 ms
64 bytes from 10.0.2.4: icmp_seq=13 ttl=64 time=1.65 ms
64 bytes from 10.0.2.4: icmp_seq=14 ttl=64 time=3.87 ms
64 bytes from 10.0.2.4: icmp_seq=15 ttl=64 time=1.20 ms
64 bytes from 10.0.2.4: icmp_seq=16 ttl=64 time=1.67 ms
64 bytes from 10.0.2.4: icmp_seq=17 ttl=64 time=0.906 ms
64 bytes from 10.0.2.4: icmp_seq=18 ttl=64 time=1.69 ms
64 bytes from 10.0.2.4: icmp_seq=19 ttl=64 time=2.21 ms
64 bytes from 10.0.2.4: icmp_seq=20 ttl=64 time=1.25 ms
64 bytes from 10.0.2.4: icmp_seq=21 ttl=64 time=1.67 ms
64 bytes from 10.0.2.4: icmp_seq=22 ttl=64 time=1.88 ms
64 bytes from 10.0.2.4: icmp_seq=23 ttl=64 time=1.33 ms
64 bytes from 10.0.2.4: icmp_seq=24 ttl=64 time=1.10 ms
64 bytes from 10.0.2.4: icmp_seq=25 ttl=64 time=1.69 ms
64 bytes from 10.0.2.4: icmp_seq=26 ttl=64 time=1.40 ms
64 bytes from 10.0.2.4: icmp_seq=27 ttl=64 time=2.75 ms
64 bytes from 10.0.2.4: icmp_seq=28 ttl=64 time=1.47 ms
64 bytes from 10.0.2.4: icmp_seq=29 ttl=64 time=2.50 ms
```