PROJECT – IMPLEMENT AZURE IAAS

WRITE-UP:

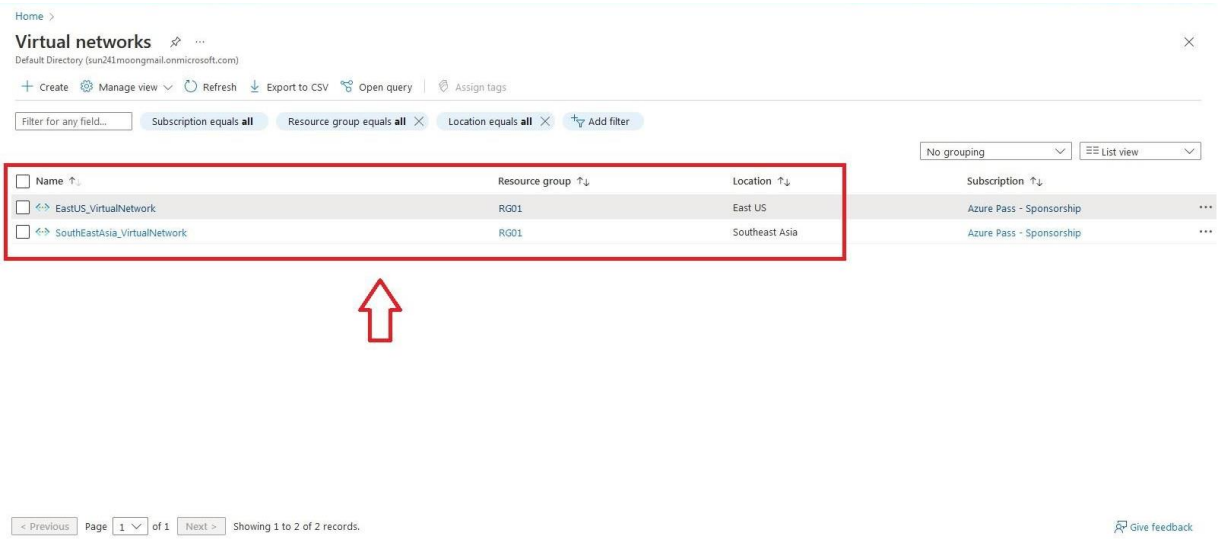
OSS Corporation, a globally distributed firm, has its headquarters in East US and a branch office in Southeast Asia. For an ongoing project, the application tier will reside in the Southeast Asia branch, while the data tier will remain in the East US headquarters for security reasons. The company is considering Microsoft Azure as its deployment platform and plans to use IaaS Standard DS1 v2 virtual machines for the project.

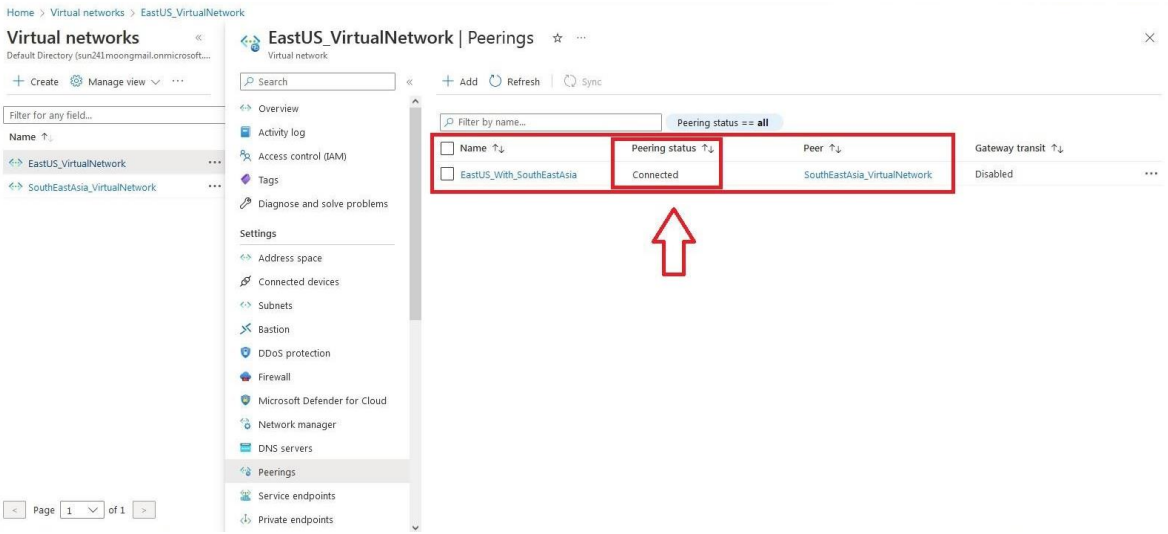
The work involves creating two separate IaaS v2 virtual networks—one in the East US region for the database tier and another in the Southeast Asia region for the application tier. Since communication between the application and database tiers must happen over a secure private channel, a virtual network gateway will be set up in the branch office region to connect to the headquarters' virtual network.

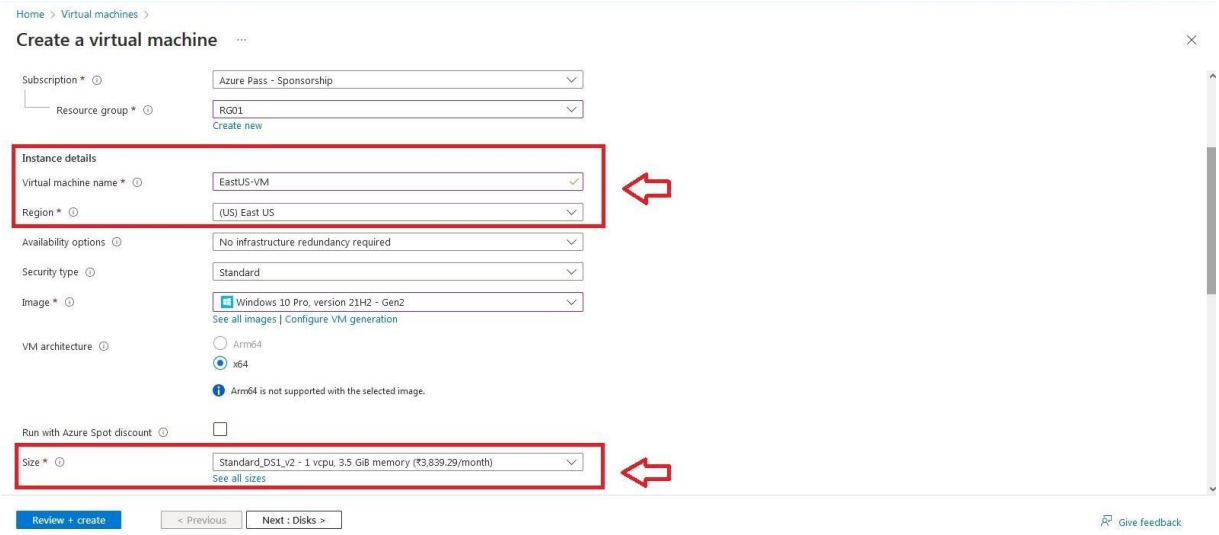
Additionally, test VMs will be deployed in both virtual networks to verify connectivity. Once the virtual network gateway and connection configurations are completed, the deployment team will ensure proper communication between the virtual networks using tools like Ping.

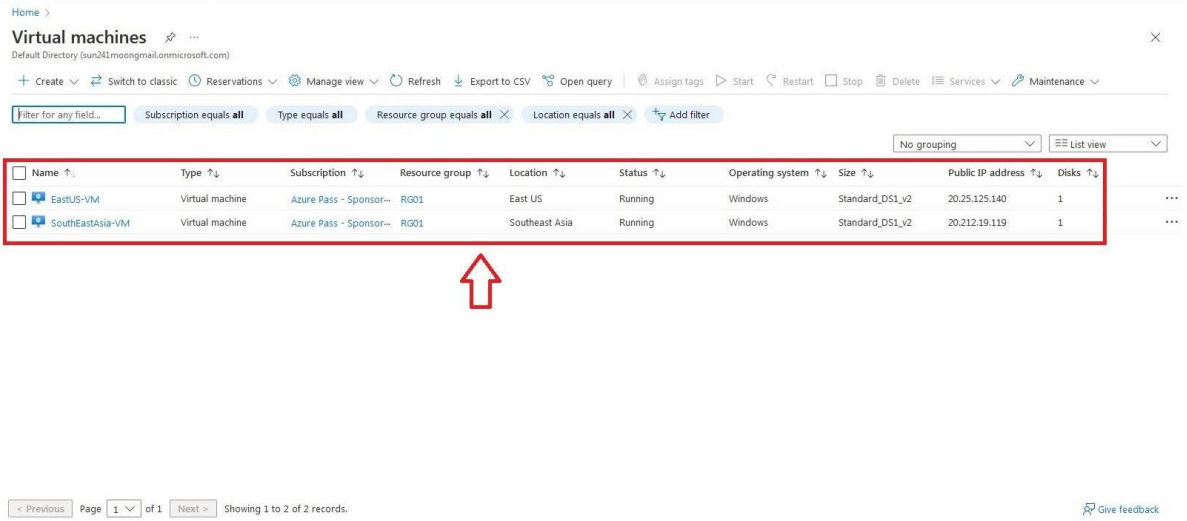
The tasks include creating the required virtual networks, setting up and configuring secure network connectivity via VNet peering or gateways, deploying test VMs in both regions, and validating connectivity. These steps will ensure a secure and functional deployment, aligning with OSS Corporation's security policies and project requirements. The successful implementation will provide a robust network architecture for the application to operate efficiently on Azure.

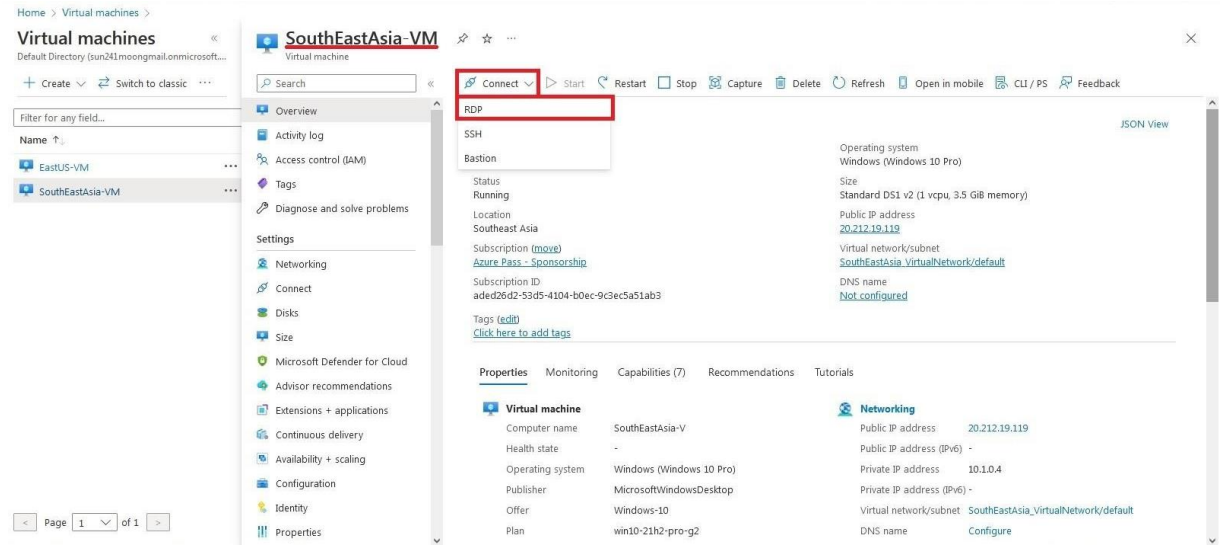
SCREENSHOTS:

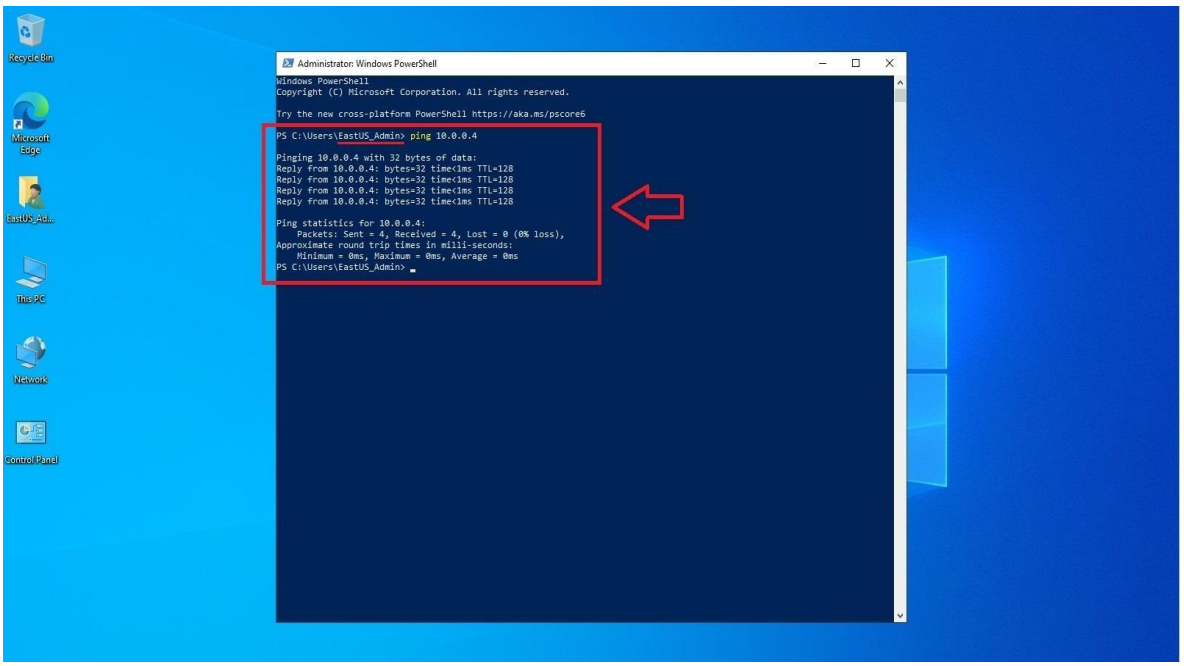


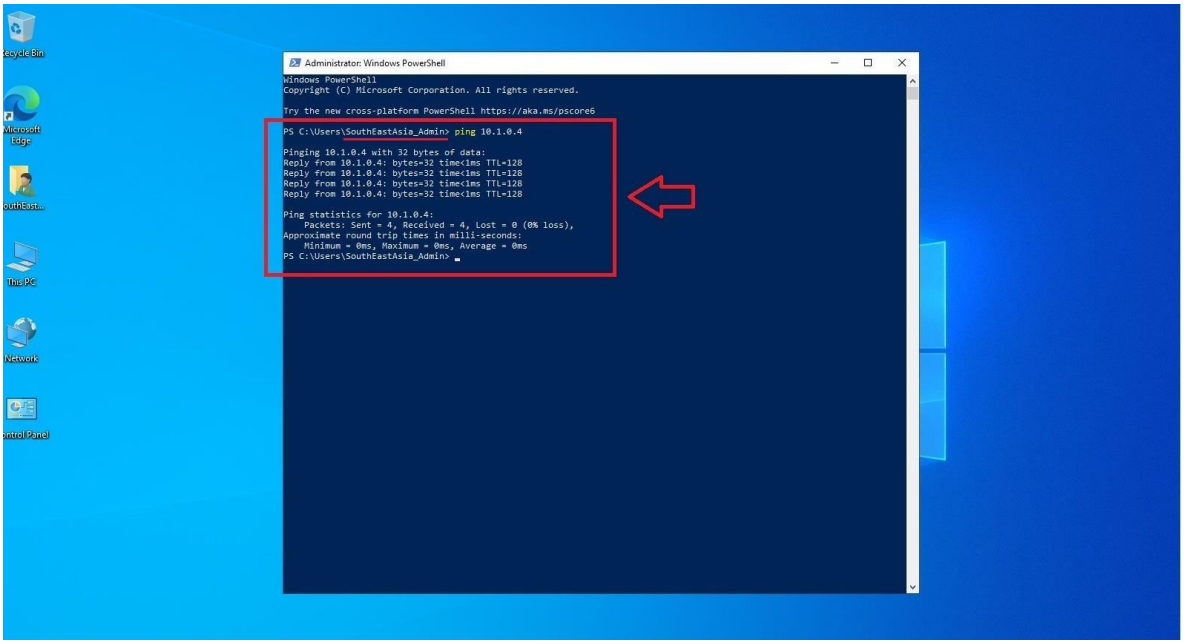



Home > Virtual machines >
Create a virtual machine
Subscription *
Azure Pass - Sponsorship
Resource group *
RG01
Create new
Instance details
Virtual machine name *
EastUS-VM
Region *
(US) East US
Availability options
No infrastructure redundancy required
Security type
Standard
Image *
Windows 10 Pro, version 21H2 - Gen2
See all images | Configure VM generation
VM architecture
Arm64
x64
Arm64 is not supported with the selected image.
Run with Azure Spot discount
Size *
Standard_DS1_v2 - 1 vcpu, 3.5 GiB memory (₹3,839.29/month)
See all sizes
Review + create
< Previous
Next : Disks >
Give feedback


Home >
Virtual machines
Default Directory (sun241moongmail.onmicrosoft.com)
Create
Switch to classic
Reservations
Manage view
Refresh
Export to CSV
Open query
Assign tags
Start
Restart
Stop
Delete
Services
Maintenance
Filter for any field...
Subscription equals all
Type equals all
Resource group equals all
Location equals all
Add filter
No grouping
List view
Name
Type
Subscription
Resource group
Location
Status
Operating system
Size
Public IP address
Disks
EastUS-VM
Virtual machine
Azure Pass - Sponsor...
RG01
East US
Running
Windows
Standard_DS1_v2
20.25.125.140
1
SouthEastAsia-VM
Virtual machine
Azure Pass - Sponsor...
RG01
Southeast Asia
Running
Windows
Standard_DS1_v2
20.212.19.119
1
< Previous
Page 1 of 1
Next >
Showing 1 to 2 of 2 records.
Give feedback


Home > Virtual machines >
Virtual machines
Default Directory (sun241moongmail.onmicrosoft....
Create
Switch to classic
Filter for any field...
Name
EastUS-VM
SouthEastAsia-VM
Page 1 of 1
SouthEastAsia-VM
Virtual machine
Search
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Settings
Networking
Connect
Disks
Size
Microsoft Defender for Cloud
Advisor recommendations
Extensions + applications
Continuous delivery
Availability + scaling
Configuration
Identity
Properties
Connect
Start
Restart
Stop
Capture
Delete
Refresh
Open in mobile
CLI / PS
Feedback
RDP
SSH
Bastion
JSON View
Status
Running
Location
Southeast Asia
Subscription (move)
Azure Pass - Sponsorship
Subscription ID
aded26d2-53d5-4104-b0ec-9c3ec5a51ab3
Tags (edit)
Click here to add tags
Operating system
Windows (Windows 10 Pro)
Size
Standard DS1 v2 (1 vcpu, 3.5 GiB memory)
Public IP address
20.212.19.119
Virtual network/subnet
SouthEastAsia_VirtualNetwork/default
DNS name
Not configured
Properties
Monitoring
Capabilities (7)
Recommendations
Tutorials
Virtual machine
Computer name SouthEastAsia-V
Health state -
Operating system Windows (Windows 10 Pro)
Publisher MicrosoftWindowsDesktop
Offer Windows-10
Plan win10-21h2-pro-g2
Networking
Public IP address 20.212.19.119
Public IP address (IPv6) -
Private IP address 10.1.0.4
Private IP address (IPv6) -
Virtual network/subnet SouthEastAsia_VirtualNetwork/default
DNS name Configure


Recycle Bin
Microsoft Edge
EastUS_Ad...
This PC
Network
Control Panel
Administrator: Windows PowerShell
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.
Try the new cross-platform PowerShell https://aka.ms/pscore6
PS C:\Users\EastUS_Admin> ping 10.0.0.4
Pinging 10.0.0.4 with 32 bytes of data:
Reply from 10.0.0.4: bytes=32 time<1ms TTL=128
Reply from 10.0.0.4: bytes=32 time<1ms TTL=128
Reply from 10.0.0.4: bytes=32 time<1ms TTL=128
Reply from 10.0.0.4: bytes=32 time<1ms TTL=128
Ping statistics for 10.0.0.4:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 0ms, Average = 0ms
PS C:\Users\EastUS_Admin>


Administrator: Windows PowerShell
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.
Try the new cross-platform PowerShell https://aka.ms/pscore6
PS C:\Users\SouthEastAsia_Admin> ping 10.1.0.4
Pinging 10.1.0.4 with 32 bytes of data:
Reply from 10.1.0.4: bytes=32 time<1ms TTL=128
Reply from 10.1.0.4: bytes=32 time<1ms TTL=128
Reply from 10.1.0.4: bytes=32 time<1ms TTL=128
Reply from 10.1.0.4: bytes=32 time<1ms TTL=128
Ping statistics for 10.1.0.4:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 0ms, Average = 0ms
PS C:\Users\SouthEastAsia_Admin>
Microsoft Edge
This PC
Network