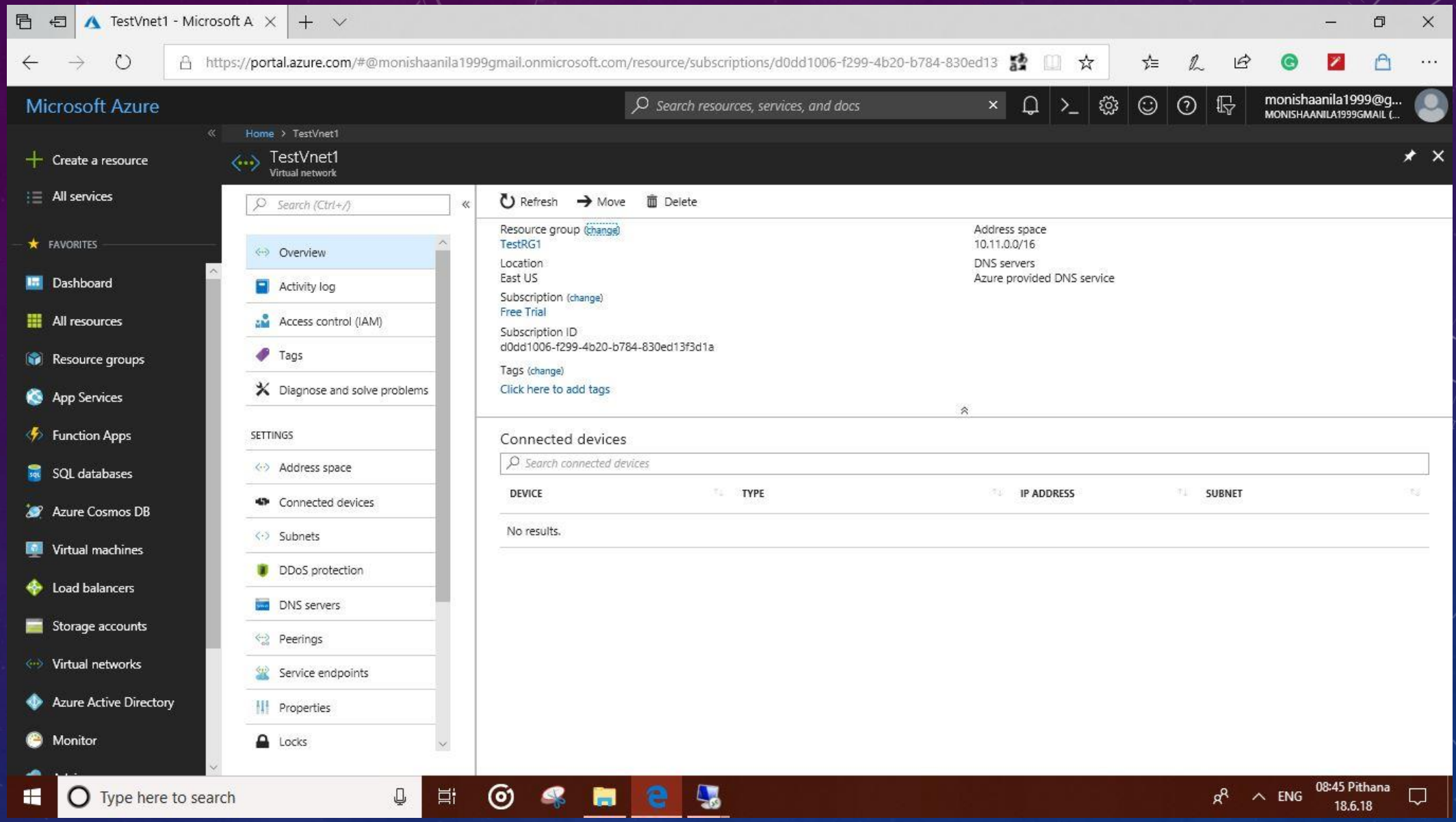
MINOR PROJECT-1
AZURE CLOUD COMPUTING

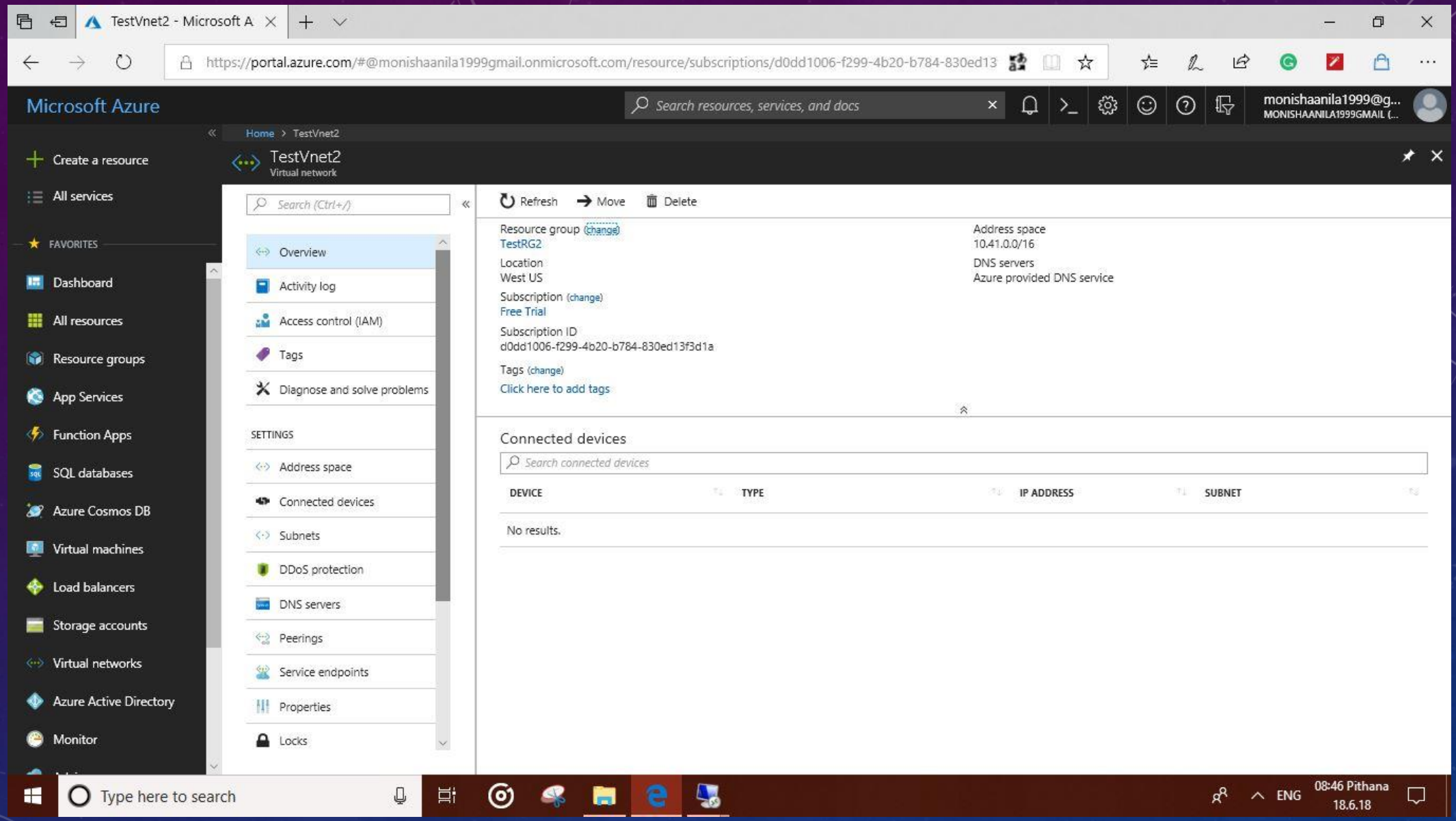
PITHANA MONISHA ANILA

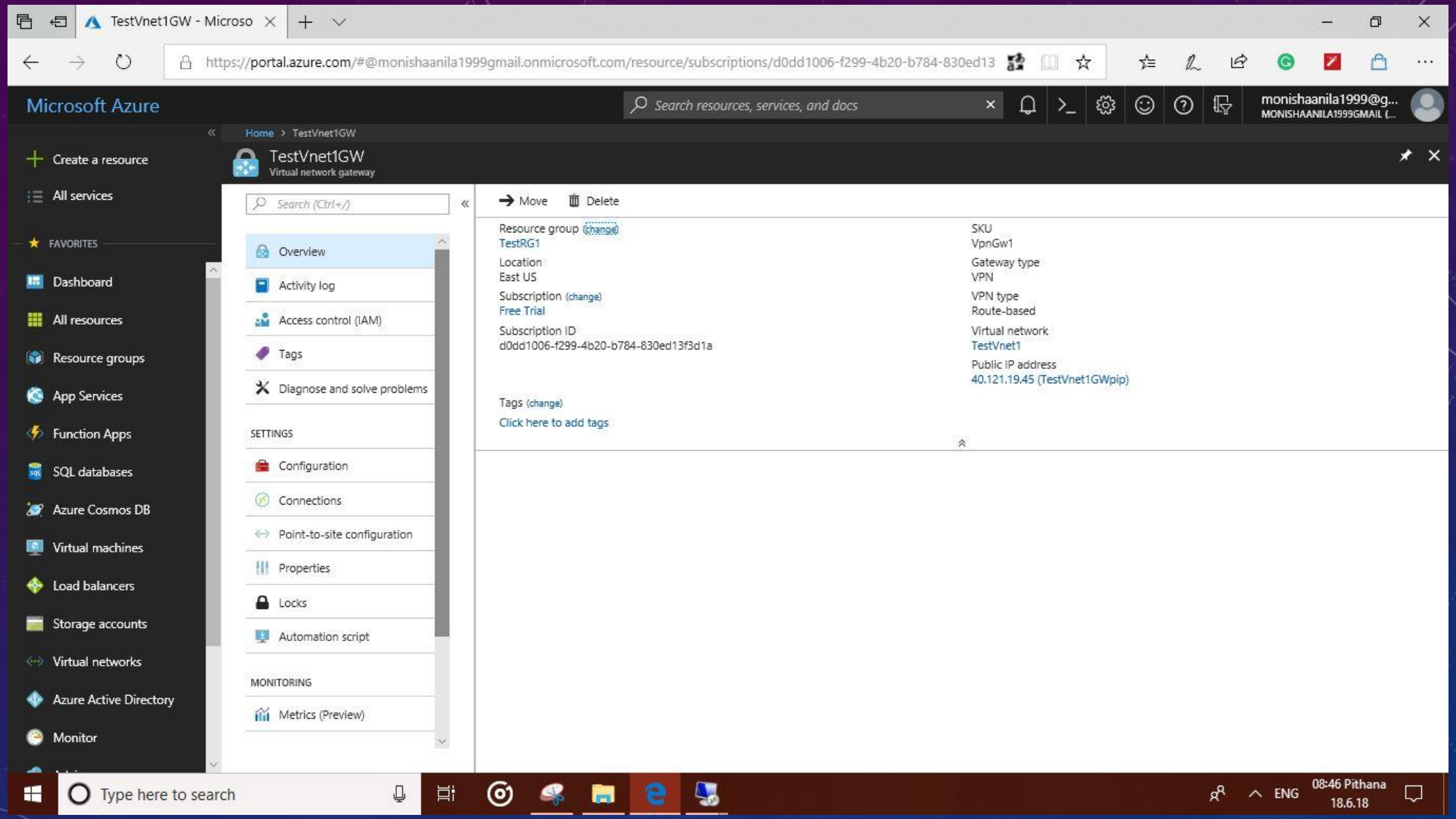
Communication between two different Azure sites with Private IPs in same Azure Cloud- Vnet TO Vnet

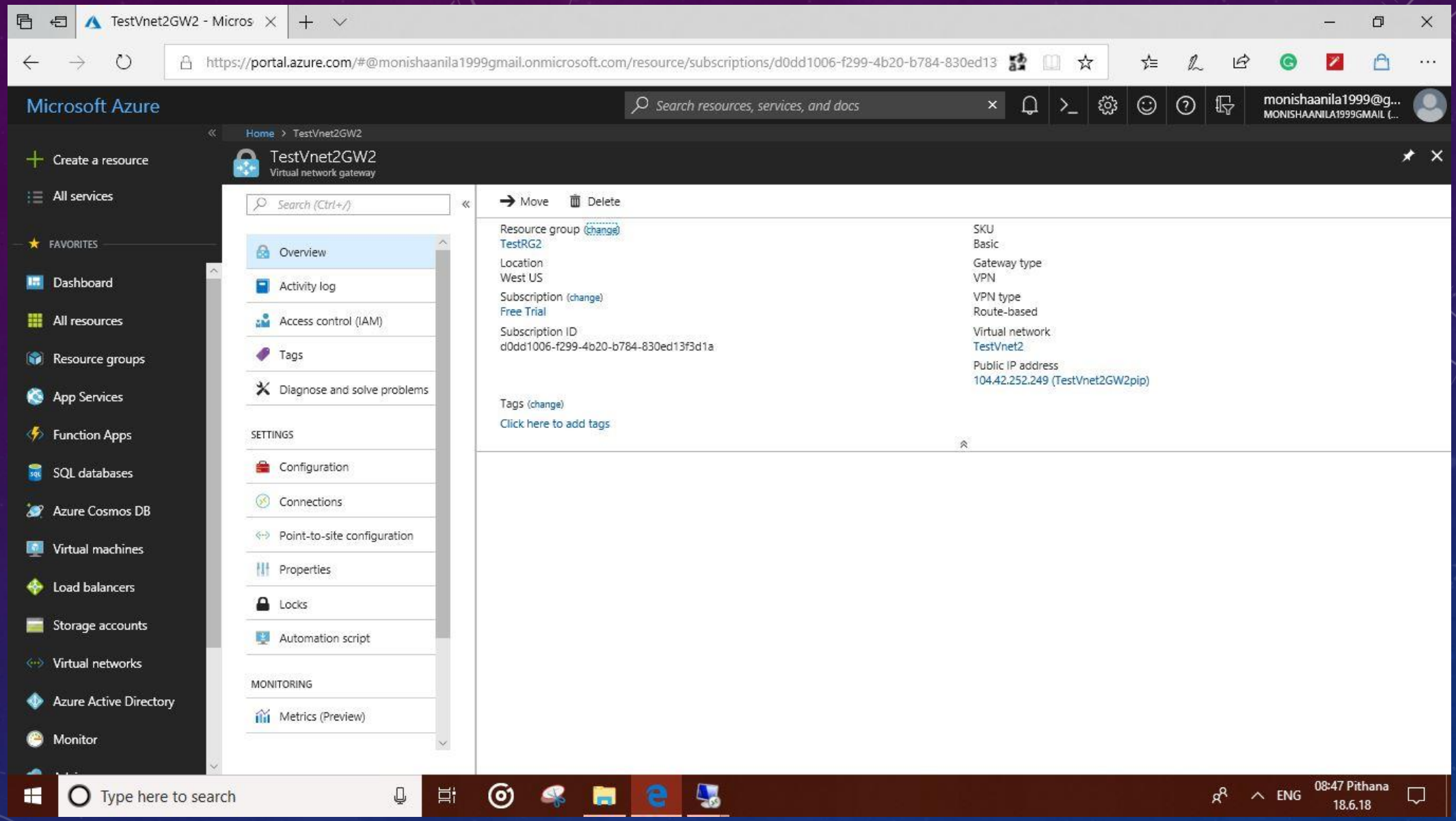
Steps:

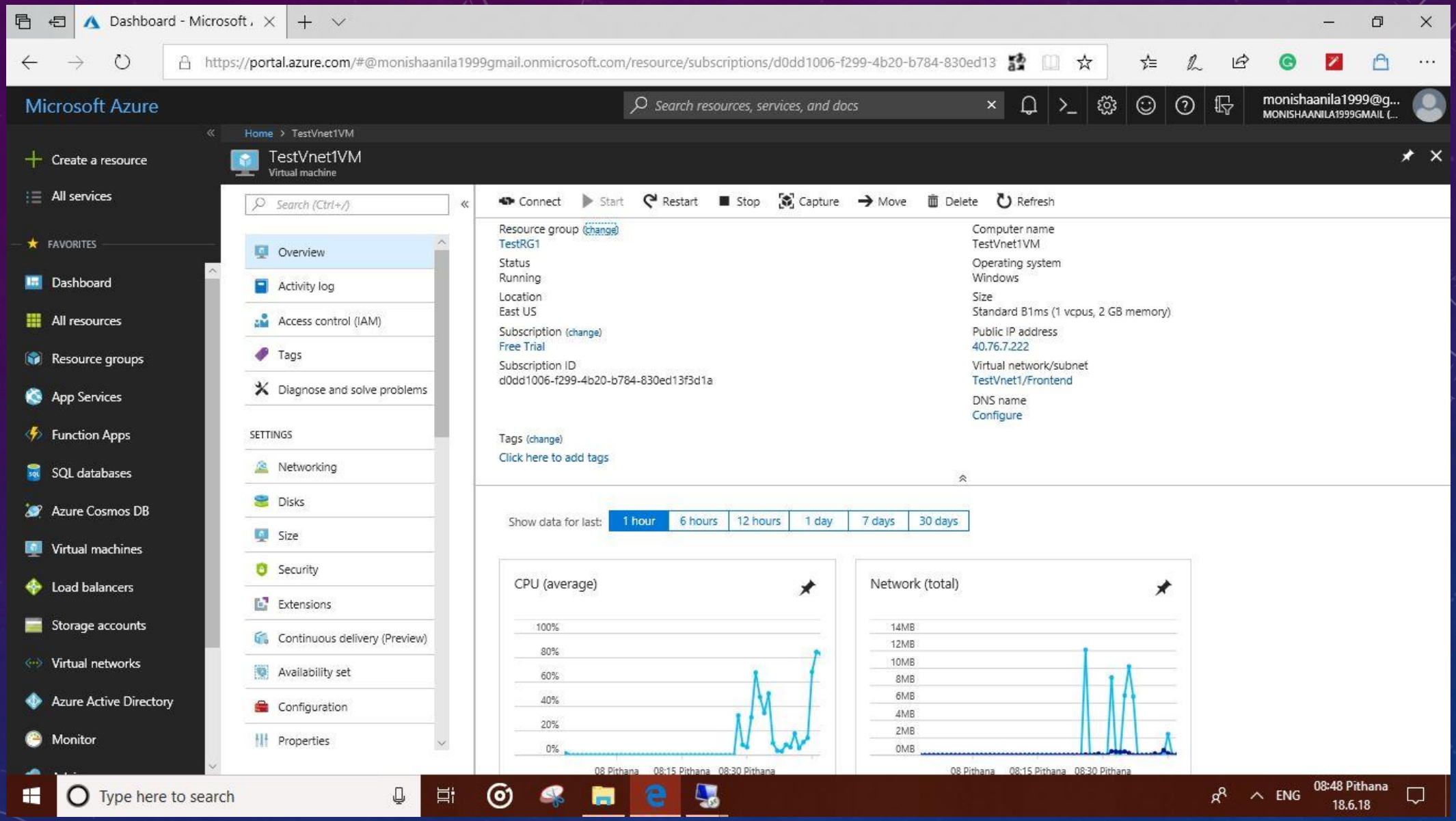
1. Create Virtual Network
2. Create Gateway Subnet
3. Create Virtual Network Gateway
4. Create Vnet-to-Vnet Peering

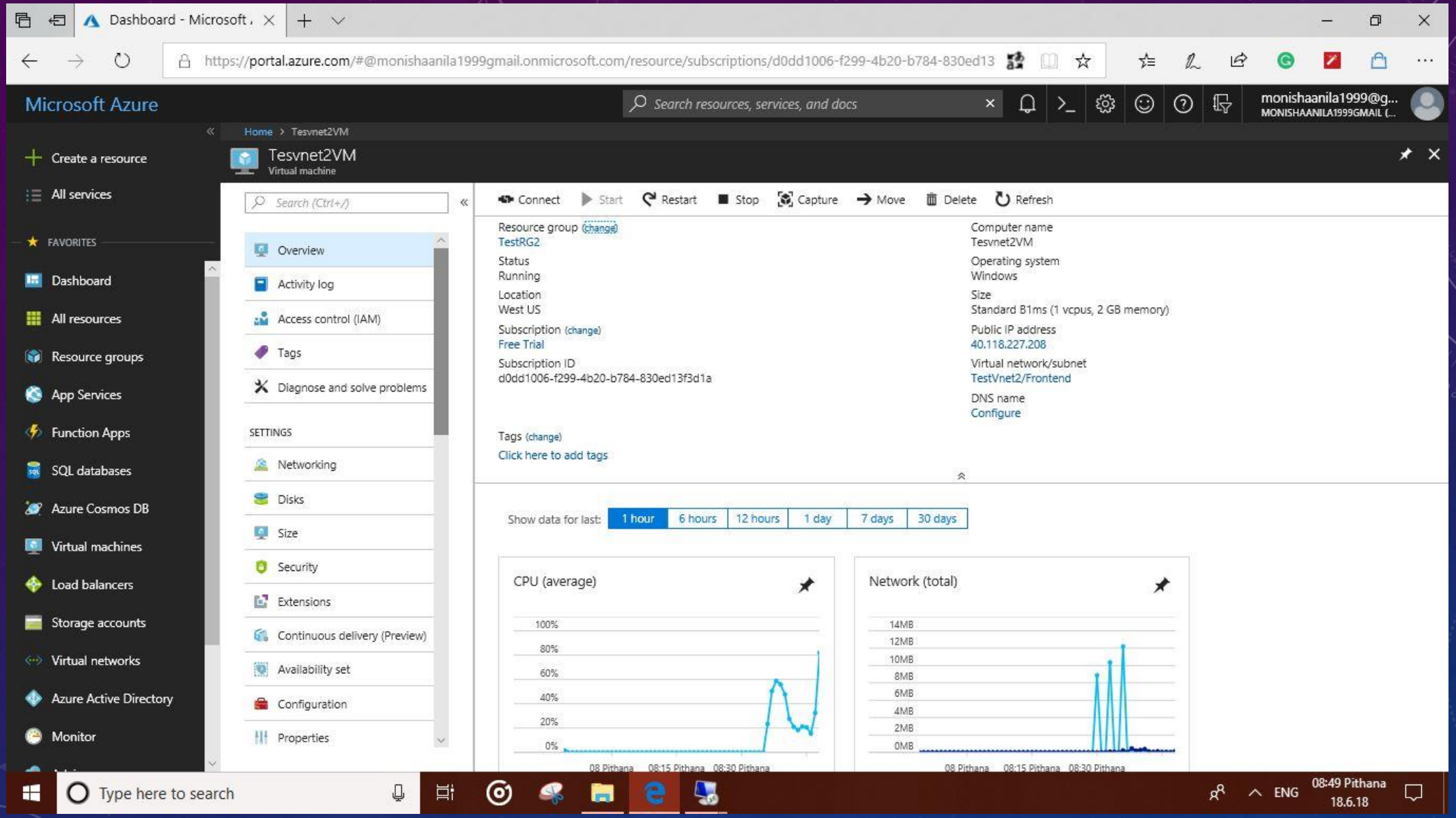

TestVnet1 - Microsoft A
https://portal.azure.com/#@monishaanila1999gmail.onmicrosoft.com/resource/subscriptions/d0dd1006-f299-4b20-b784-830ed13
Microsoft Azure
Search resources, services, and docs
monishaanila1999@g...
MONISHAANILA1999GMAIL (...
Home > TestVnet1
TestVnet1
Virtual network
Create a resource
All services
FAVORITES
Dashboard
All resources
Resource groups
App Services
Function Apps
SQL databases
Azure Cosmos DB
Virtual machines
Load balancers
Storage accounts
Virtual networks
Azure Active Directory
Monitor
Search (Ctrl+/)
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
SETTINGS
Address space
Connected devices
Subnets
DDoS protection
DNS servers
Peerings
Service endpoints
Properties
Locks
Refresh
Move
Delete
Resource group (change)
TestRG1
Location
East US
Subscription (change)
Free Trial
Subscription ID
d0dd1006-f299-4b20-b784-830ed13f3d1a
Tags (change)
Click here to add tags
Address space
10.11.0.0/16
DNS servers
Azure provided DNS service
Connected devices
Search connected devices
DEVICE
TYPE
IP ADDRESS
SUBNET
No results.
Type here to search
ENG
08:45 Pithana
18.6.18

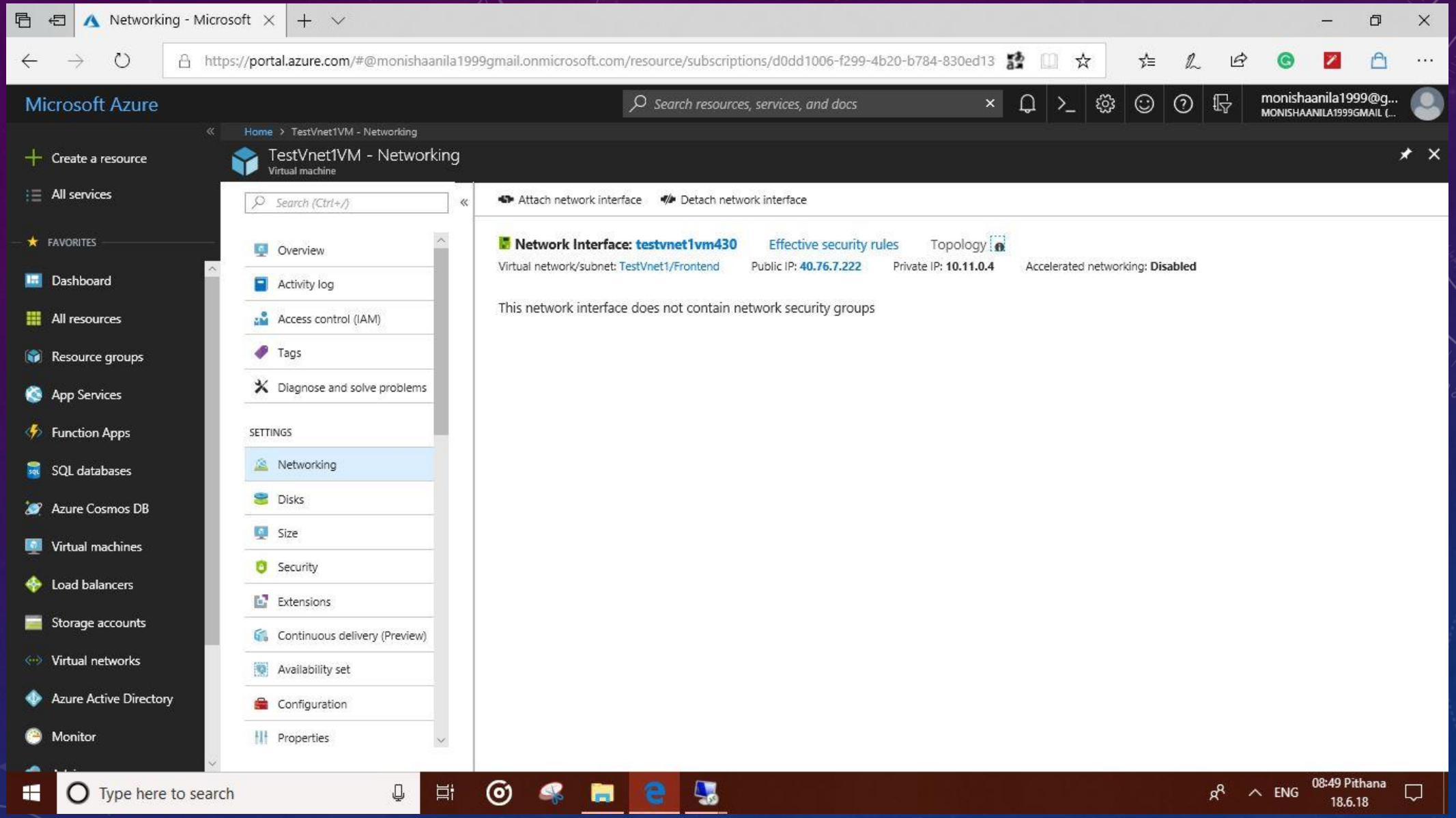

TestVnet2 - Microsoft A
https://portal.azure.com/#@monishaanila1999gmail.onmicrosoft.com/resource/subscriptions/d0dd1006-f299-4b20-b784-830ed13
Microsoft Azure
Search resources, services, and docs
monishaanila1999@g...
MONISHAANILA1999GMAIL (...
Home > TestVnet2
TestVnet2
Virtual network
Create a resource
All services
FAVORITES
Dashboard
All resources
Resource groups
App Services
Function Apps
SQL databases
Azure Cosmos DB
Virtual machines
Load balancers
Storage accounts
Virtual networks
Azure Active Directory
Monitor
Search (Ctrl+/)
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
SETTINGS
Address space
Connected devices
Subnets
DDoS protection
DNS servers
Peerings
Service endpoints
Properties
Locks
Refresh
Move
Delete
Resource group (change)
TestRG2
Location
West US
Subscription (change)
Free Trial
Subscription ID
d0dd1006-f299-4b20-b784-830ed13f3d1a
Tags (change)
Click here to add tags
Address space
10.41.0.0/16
DNS servers
Azure provided DNS service
Connected devices
Search connected devices
DEVICE
TYPE
IP ADDRESS
SUBNET
No results.
Type here to search
ENG
08:46 Pithana
18.6.18

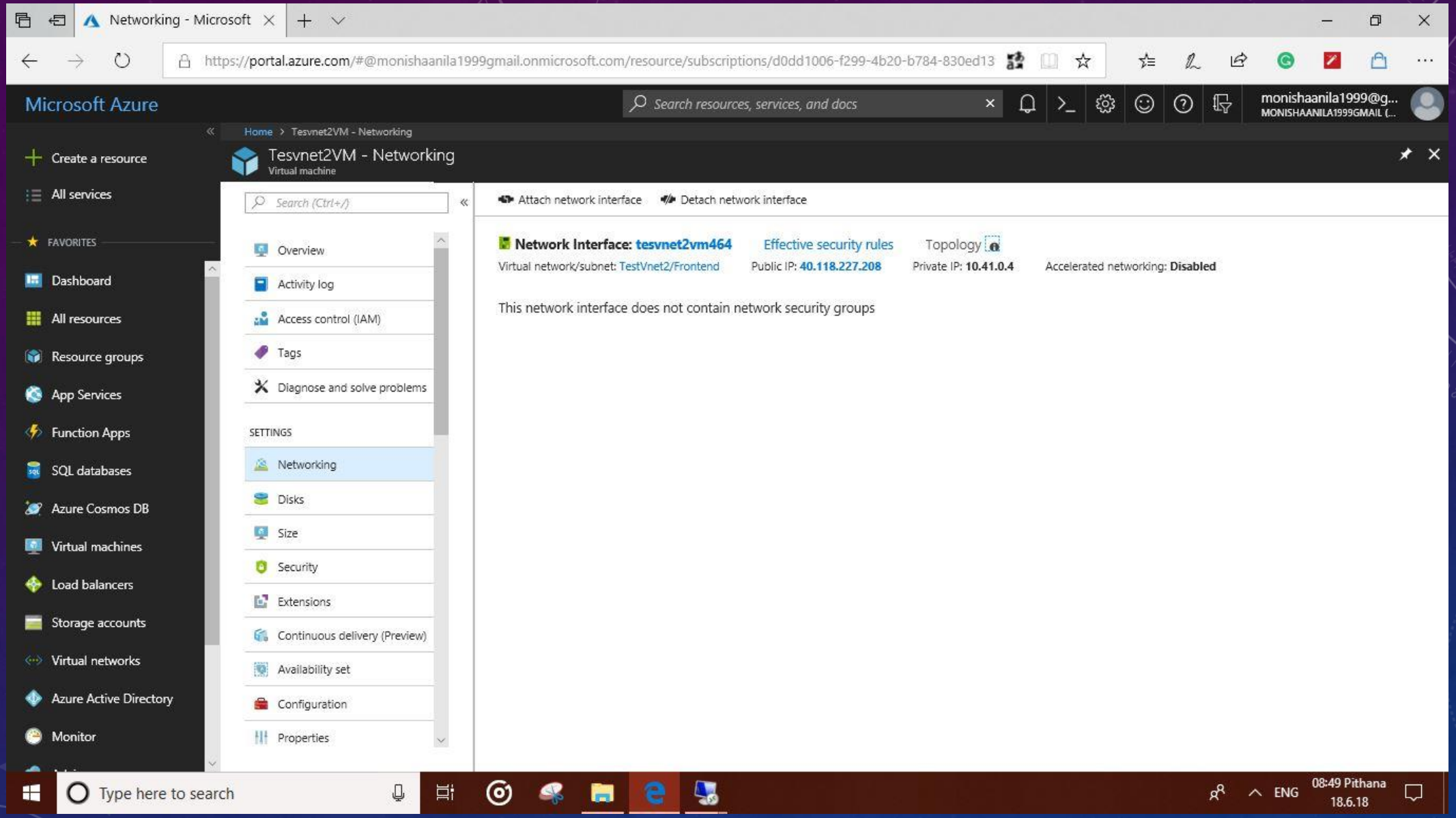

TestVnet1GW - Microso
https://portal.azure.com/#@monishaanila1999gmail.onmicrosoft.com/resource/subscriptions/d0dd1006-f299-4b20-b784-830ed13
Microsoft Azure
Search resources, services, and docs
monishaanila1999@g...
MONISHAANILA1999GMAIL (...
Home > TestVnet1GW
TestVnet1GW
Virtual network gateway
Create a resource
All services
FAVORITES
Dashboard
All resources
Resource groups
App Services
Function Apps
SQL databases
Azure Cosmos DB
Virtual machines
Load balancers
Storage accounts
Virtual networks
Azure Active Directory
Monitor
Search (Ctrl+/)
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
SETTINGS
Configuration
Connections
Point-to-site configuration
Properties
Locks
Automation script
MONITORING
Metrics (Preview)
Move
Delete
Resource group (change)
TestRG1
Location
East US
Subscription (change)
Free Trial
Subscription ID
d0dd1006-f299-4b20-b784-830ed13f3d1a
Tags (change)
Click here to add tags
SKU
VpnGw1
Gateway type
VPN
VPN type
Route-based
Virtual network
TestVnet1
Public IP address
40.121.19.45 (TestVnet1GWpip)
Type here to search
ENG
08:46 Pithana
18.6.18

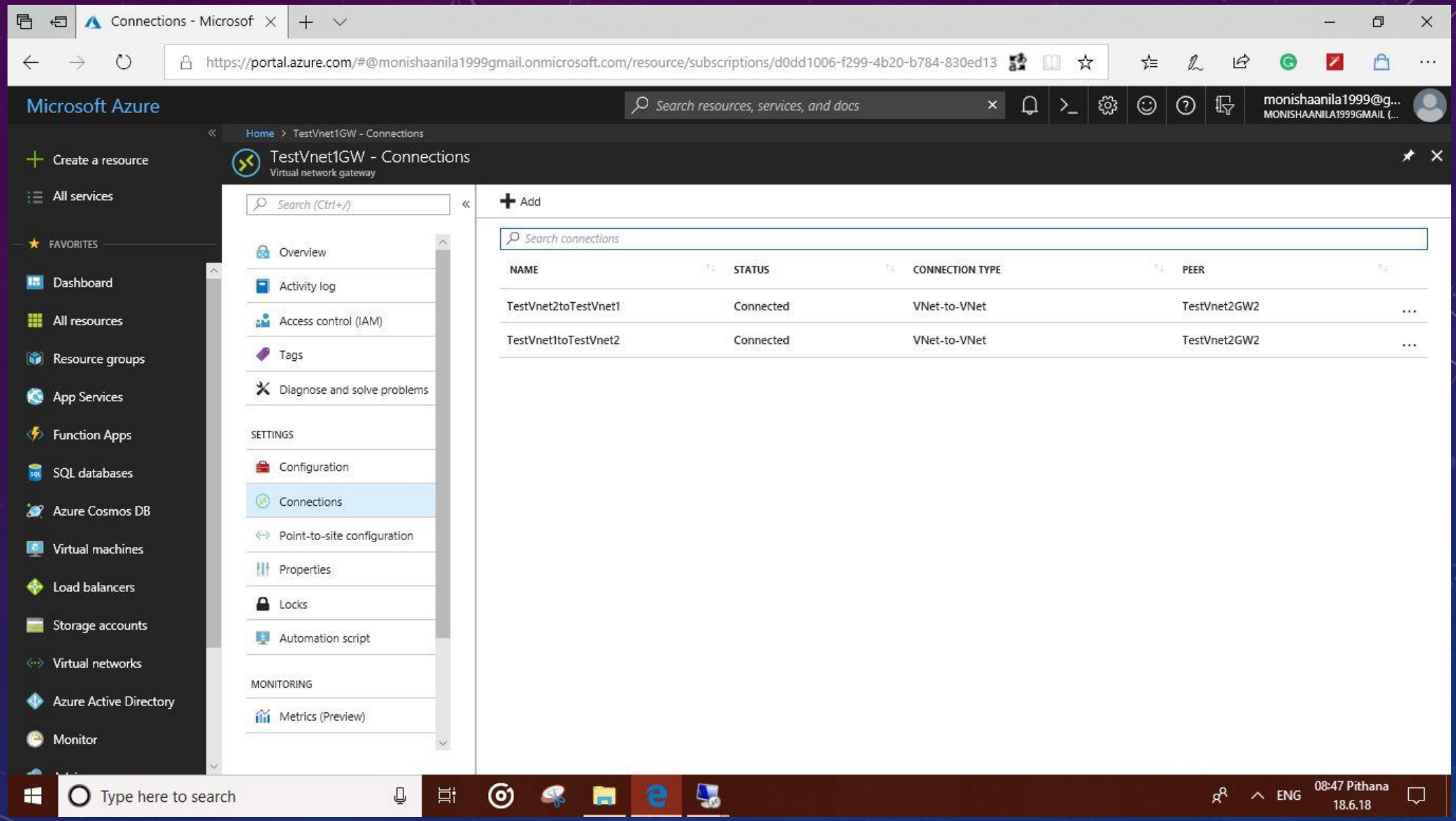

TestVnet2GW2 - Micros
https://portal.azure.com/#@monishaanila1999gmail.onmicrosoft.com/resource/subscriptions/d0dd1006-f299-4b20-b784-830ed13
Microsoft Azure
Search resources, services, and docs
monishaanila1999@g...
MONISHAANILA1999GMAIL (...
Home > TestVnet2GW2
TestVnet2GW2
Virtual network gateway
Create a resource
All services
FAVORITES
Dashboard
All resources
Resource groups
App Services
Function Apps
SQL databases
Azure Cosmos DB
Virtual machines
Load balancers
Storage accounts
Virtual networks
Azure Active Directory
Monitor
Search (Ctrl+/)
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
SETTINGS
Configuration
Connections
Point-to-site configuration
Properties
Locks
Automation script
MONITORING
Metrics (Preview)
Move
Delete
Resource group (change)
TestRG2
Location
West US
Subscription (change)
Free Trial
Subscription ID
d0dd1006-f299-4b20-b784-830ed13f3d1a
Tags (change)
Click here to add tags
SKU
Basic
Gateway type
VPN
VPN type
Route-based
Virtual network
TestVnet2
Public IP address
104.42.252.249 (TestVnet2GW2pip)
Type here to search
ENG
08:47 Pithana
18.6.18

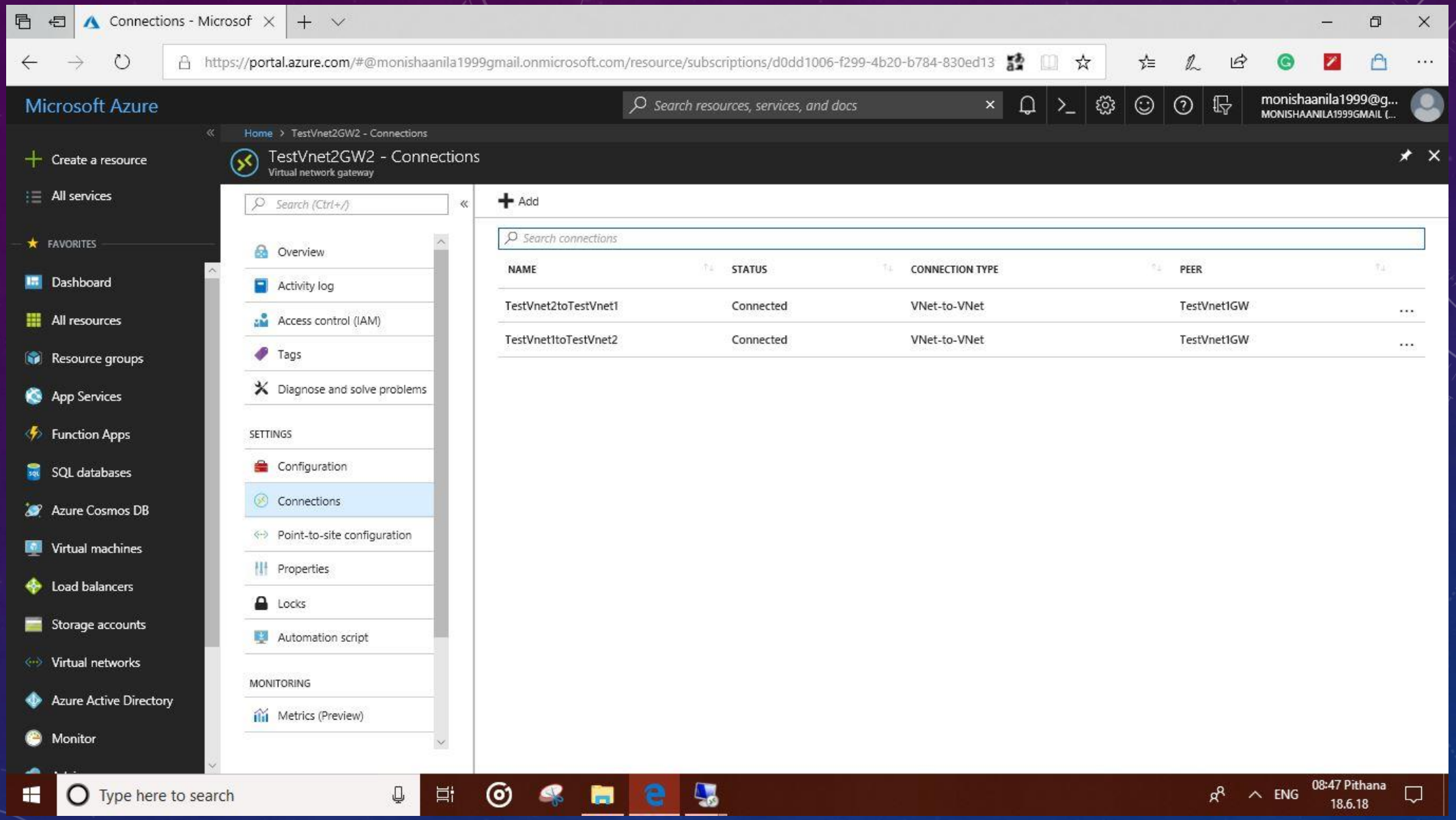

Dashboard - Microsoft
https://portal.azure.com/#@monishaanila1999gmail.onmicrosoft.com/resource/subscriptions/d0dd1006-f299-4b20-b784-830ed13
Microsoft Azure
Search resources, services, and docs
monishaanila1999@g...
MONISHAANILA1999GMAIL (...
Home > TestVnet1VM
TestVnet1VM
Virtual machine
Create a resource
All services
FAVORITES
Dashboard
All resources
Resource groups
App Services
Function Apps
SQL databases
Azure Cosmos DB
Virtual machines
Load balancers
Storage accounts
Virtual networks
Azure Active Directory
Monitor
Search (Ctrl+/)
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
SETTINGS
Networking
Disks
Size
Security
Extensions
Continuous delivery (Preview)
Availability set
Configuration
Properties
Connect
Start
Restart
Stop
Capture
Move
Delete
Refresh
Resource group (change)
TestRG1
Status
Running
Location
East US
Subscription (change)
Free Trial
Subscription ID
d0dd1006-f299-4b20-b784-830ed13f3d1a
Computer name
TestVnet1VM
Operating system
Windows
Size
Standard B1ms (1 vcpus, 2 GB memory)
Public IP address
40.76.7.222
Virtual network/subnet
TestVnet1/Frontend
DNS name
Configure
Tags (change)
Click here to add tags
Show data for last:
1 hour
6 hours
12 hours
1 day
7 days
30 days
CPU (average)
100%
80%
60%
40%
20%
0%
08 Pithana
08:15 Pithana
08:30 Pithana
Network (total)
14MB
12MB
10MB
8MB
6MB
4MB
2MB
0MB
08 Pithana
08:15 Pithana
08:30 Pithana
Type here to search
ENG
08:48 Pithana
18.6.18

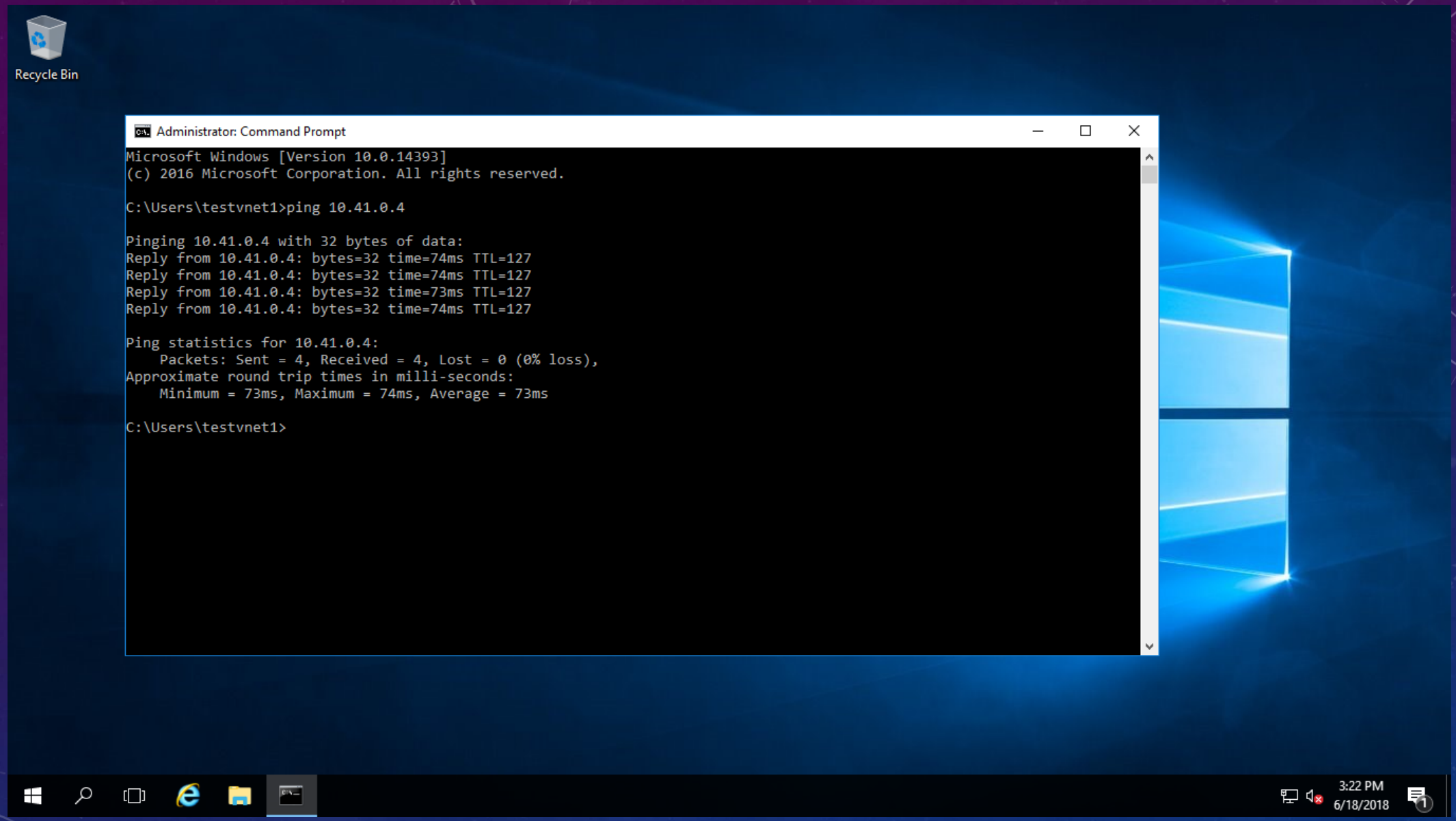

Dashboard - Microsoft
https://portal.azure.com/#@monishaanila1999gmail.onmicrosoft.com/resource/subscriptions/d0dd1006-f299-4b20-b784-830ed13
Microsoft Azure
Search resources, services, and docs
monishaanila1999@g...
MONISHAANILA1999GMAIL (...
Home > Tesvnet2VM
Create a resource
All services
FAVORITES
Dashboard
All resources
Resource groups
App Services
Function Apps
SQL databases
Azure Cosmos DB
Virtual machines
Load balancers
Storage accounts
Virtual networks
Azure Active Directory
Monitor
Tesvnet2VM
Virtual machine
Search (Ctrl+/)
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
SETTINGS
Networking
Disks
Size
Security
Extensions
Continuous delivery (Preview)
Availability set
Configuration
Properties
Connect
Start
Restart
Stop
Capture
Move
Delete
Refresh
Resource group (change)
TestRG2
Status
Running
Location
West US
Subscription (change)
Free Trial
Subscription ID
d0dd1006-f299-4b20-b784-830ed13f3d1a
Tags (change)
Click here to add tags
Computer name
Tesvnet2VM
Operating system
Windows
Size
Standard B1ms (1 vcpus, 2 GB memory)
Public IP address
40.118.227.208
Virtual network/subnet
TestVnet2/Frontend
DNS name
Configure
Show data for last:
1 hour
6 hours
12 hours
1 day
7 days
30 days
CPU (average)
100%
80%
60%
40%
20%
0%
08 Pithana
08:15 Pithana
08:30 Pithana
Network (total)
14MB
12MB
10MB
8MB
6MB
4MB
2MB
0MB
08 Pithana
08:15 Pithana
08:30 Pithana
Type here to search
ENG
08:49 Pithana
18.6.18

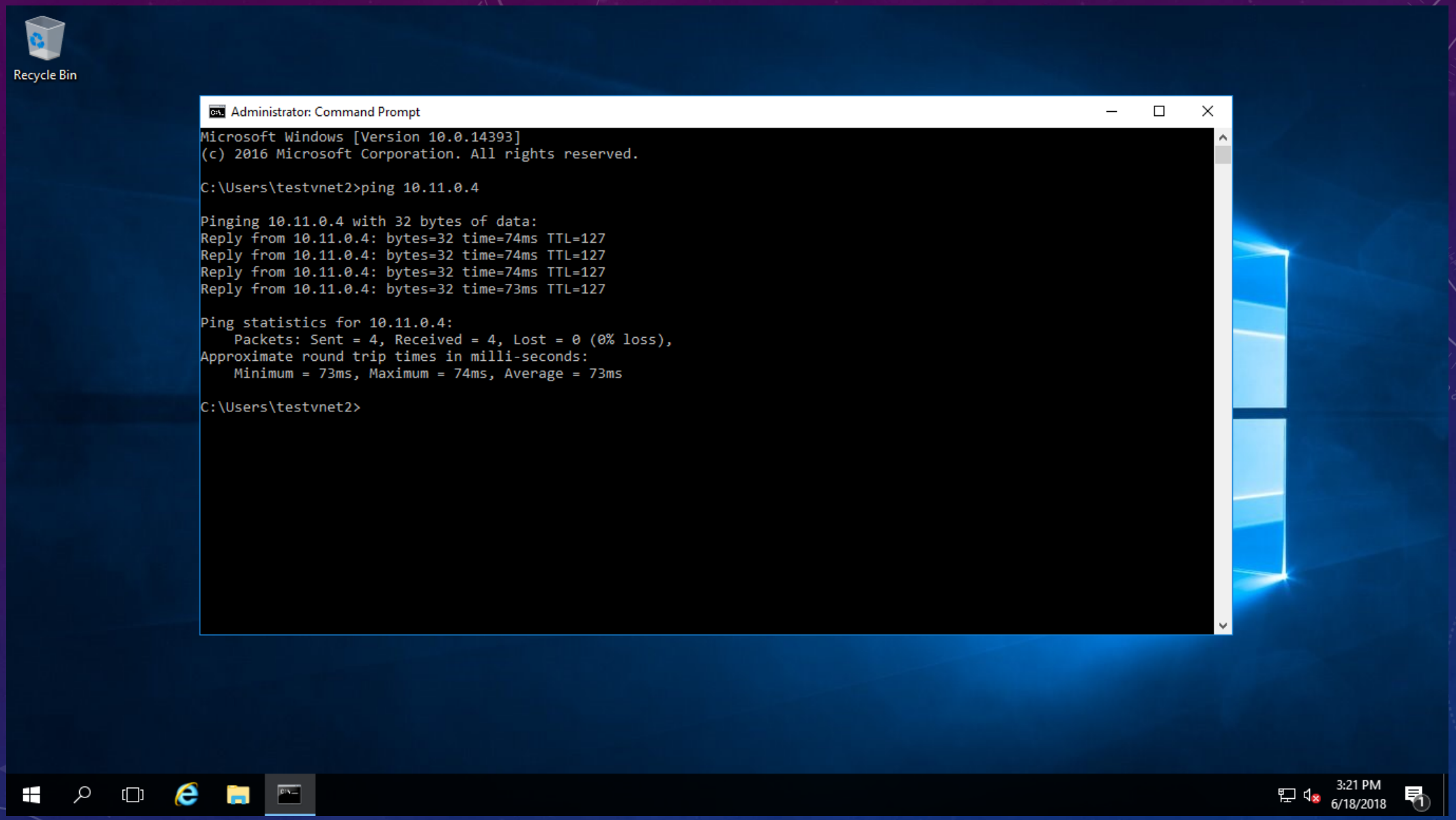

Networking - Microsoft
https://portal.azure.com/#@monishaanila1999gmail.onmicrosoft.com/resource/subscriptions/d0dd1006-f299-4b20-b784-830ed13
Microsoft Azure
Search resources, services, and docs
monishaanila1999@g...
MONISHAANILA1999GMAIL (...
Home > TestVnet1VM - Networking
Create a resource
All services
FAVORITES
Dashboard
All resources
Resource groups
App Services
Function Apps
SQL databases
Azure Cosmos DB
Virtual machines
Load balancers
Storage accounts
Virtual networks
Azure Active Directory
Monitor
TestVnet1VM - Networking
Virtual machine
Search (Ctrl+/)
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
SETTINGS
Networking
Disks
Size
Security
Extensions
Continuous delivery (Preview)
Availability set
Configuration
Properties
Attach network interface
Detach network interface
Network Interface: testvnet1vm430
Effective security rules
Topology
Virtual network/subnet: TestVnet1/Frontend
Public IP: 40.76.7.222
Private IP: 10.11.0.4
Accelerated networking: Disabled
This network interface does not contain network security groups
Type here to search
ENG
08:49 Pithana
18.6.18


Networking - Microsoft
https://portal.azure.com/#@monishaanila1999gmail.onmicrosoft.com/resource/subscriptions/d0dd1006-f299-4b20-b784-830ed13
Microsoft Azure
Search resources, services, and docs
monishaanila1999@g...
MONISHAANILA1999GMAIL (...
Home > Tesvnet2VM - Networking
Create a resource
All services
FAVORITES
Dashboard
All resources
Resource groups
App Services
Function Apps
SQL databases
Azure Cosmos DB
Virtual machines
Load balancers
Storage accounts
Virtual networks
Azure Active Directory
Monitor
Tesvnet2VM - Networking
Virtual machine
Search (Ctrl+/)
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
SETTINGS
Networking
Disks
Size
Security
Extensions
Continuous delivery (Preview)
Availability set
Configuration
Properties
Attach network interface
Detach network interface
Network Interface: tesvnet2vm464
Effective security rules
Topology
Virtual network/subnet: TestVnet2/Frontend
Public IP: 40.118.227.208
Private IP: 10.41.0.4
Accelerated networking: Disabled
This network interface does not contain network security groups
Type here to search
ENG
08:49 Pithana
18.6.18


Connections - Microsof
https://portal.azure.com/#@monishaanila1999gmail.onmicrosoft.com/resource/subscriptions/d0dd1006-f299-4b20-b784-830ed13
Microsoft Azure
Search resources, services, and docs
monishaanila1999@g...
MONISHAANILA1999GMAIL (...
Home > TestVnet1GW - Connections
Create a resource
All services
FAVORITES
Dashboard
All resources
Resource groups
App Services
Function Apps
SQL databases
Azure Cosmos DB
Virtual machines
Load balancers
Storage accounts
Virtual networks
Azure Active Directory
Monitor
TestVnet1GW - Connections
Virtual network gateway
Search (Ctrl+/)
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
SETTINGS
Configuration
Connections
Point-to-site configuration
Properties
Locks
Automation script
MONITORING
Metrics (Preview)
Add
Search connections
NAME
STATUS
CONNECTION TYPE
PEER
TestVnet2toTestVnet1
Connected
VNet-to-VNet
TestVnet2GW2
TestVnet1toTestVnet2
Connected
VNet-to-VNet
TestVnet2GW2
Type here to search
ENG
08:47 Pithana
18.6.18


Connections - Microsof
https://portal.azure.com/#@monishaanila1999gmail.onmicrosoft.com/resource/subscriptions/d0dd1006-f299-4b20-b784-830ed13
Microsoft Azure
Search resources, services, and docs
monishaanila1999@g...
MONISHAANILA1999GMAIL (...
Home > TestVnet2GW2 - Connections
Create a resource
All services
FAVORITES
Dashboard
All resources
Resource groups
App Services
Function Apps
SQL databases
Azure Cosmos DB
Virtual machines
Load balancers
Storage accounts
Virtual networks
Azure Active Directory
Monitor
TestVnet2GW2 - Connections
Virtual network gateway
Search (Ctrl+/)
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
SETTINGS
Configuration
Connections
Point-to-site configuration
Properties
Locks
Automation script
MONITORING
Metrics (Preview)
Add
Search connections
NAME
STATUS
CONNECTION TYPE
PEER
TestVnet2toTestVnet1
Connected
VNet-to-VNet
TestVnet1GW
TestVnet1toTestVnet2
Connected
VNet-to-VNet
TestVnet1GW
Type here to search
ENG
08:47 Pithana
18.6.18


Recycle Bin
Administrator: Command Prompt
Microsoft Windows [Version 10.0.14393]
(c) 2016 Microsoft Corporation. All rights reserved.
C:\Users\testvnet1>ping 10.41.0.4
Pinging 10.41.0.4 with 32 bytes of data:
Reply from 10.41.0.4: bytes=32 time=74ms TTL=127
Reply from 10.41.0.4: bytes=32 time=74ms TTL=127
Reply from 10.41.0.4: bytes=32 time=73ms TTL=127
Reply from 10.41.0.4: bytes=32 time=74ms TTL=127
Ping statistics for 10.41.0.4:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 73ms, Maximum = 74ms, Average = 73ms
C:\Users\testvnet1>
3:22 PM
6/18/2018


Recycle Bin
Administrator: Command Prompt
Microsoft Windows [Version 10.0.14393]
(c) 2016 Microsoft Corporation. All rights reserved.
C:\Users\testvnet2>ping 10.11.0.4
Pinging 10.11.0.4 with 32 bytes of data:
Reply from 10.11.0.4: bytes=32 time=74ms TTL=127
Reply from 10.11.0.4: bytes=32 time=74ms TTL=127
Reply from 10.11.0.4: bytes=32 time=74ms TTL=127
Reply from 10.11.0.4: bytes=32 time=73ms TTL=127
Ping statistics for 10.11.0.4:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 73ms, Maximum = 74ms, Average = 73ms
C:\Users\testvnet2>
3:21 PM
6/18/2018