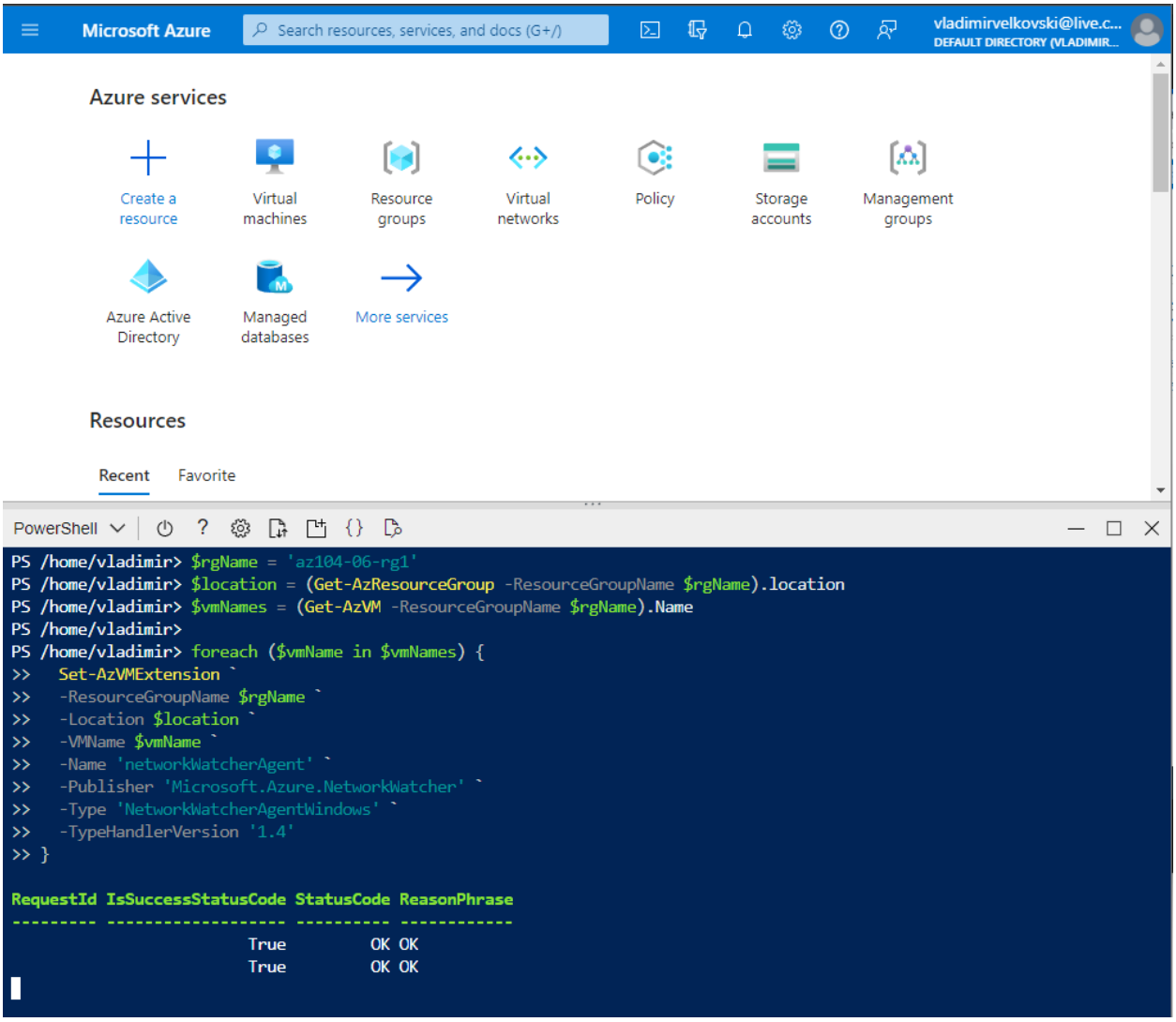
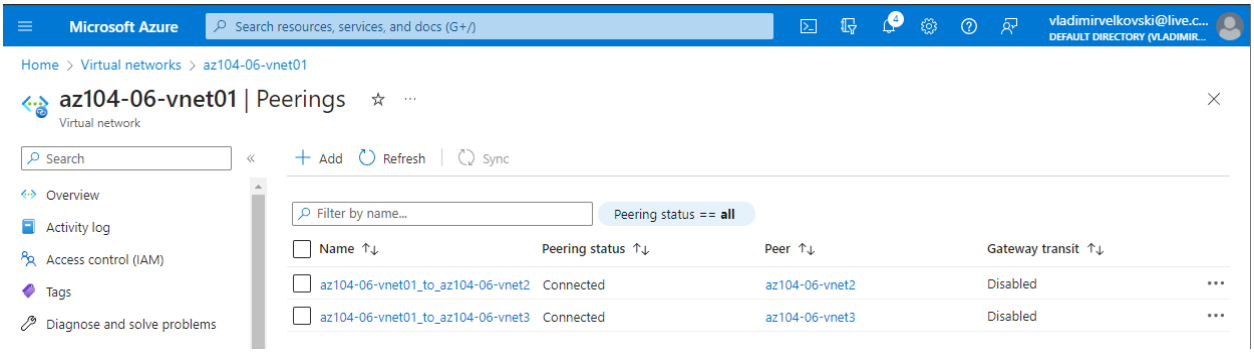
Lab 06 - Implement Traffic Management

We were tasked with testing managing network traffic targeting Azure virtual machines in the hub and spoke network topology, which Contoso considers implementing in its Azure environment. This testing needs to include implementing connectivity between spokes by relying on user defined routes that force traffic to flow via the hub, as well as traffic distribution across virtual machines by using layer 4 and layer 7 load balancers. For this purpose, we intend to use Azure Load Balancer (layer 4) and Azure Application Gateway (layer 7).

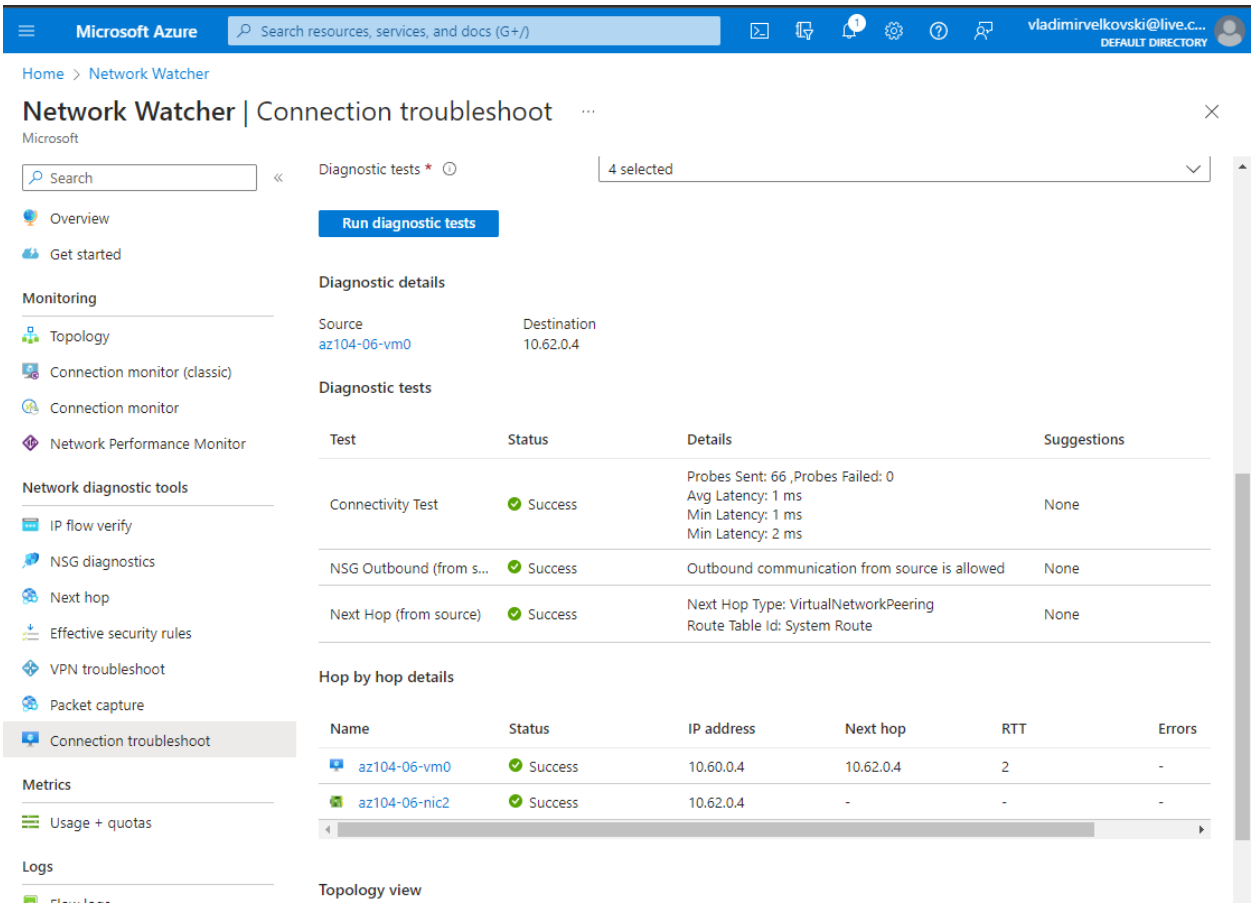
Task 1: Provision the lab environment.

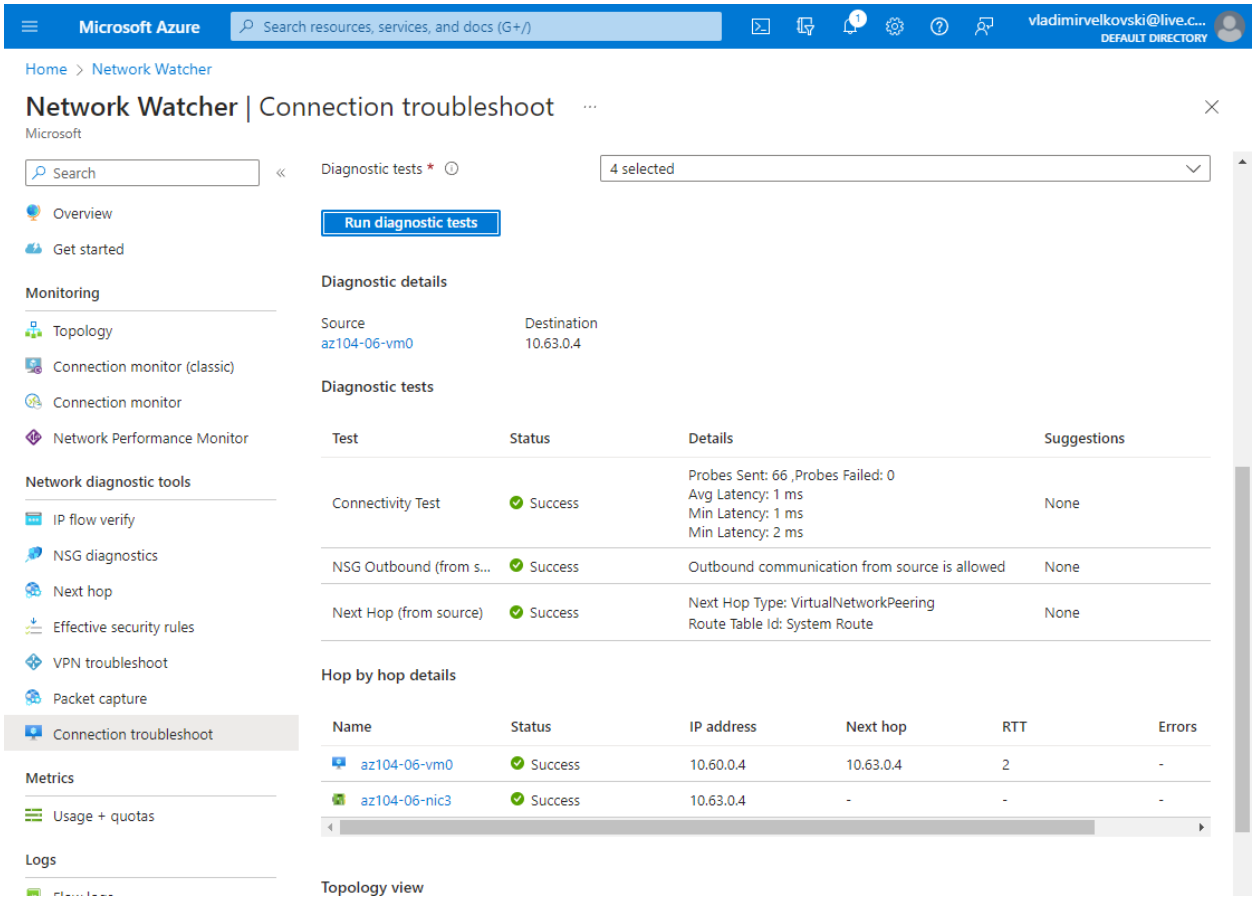


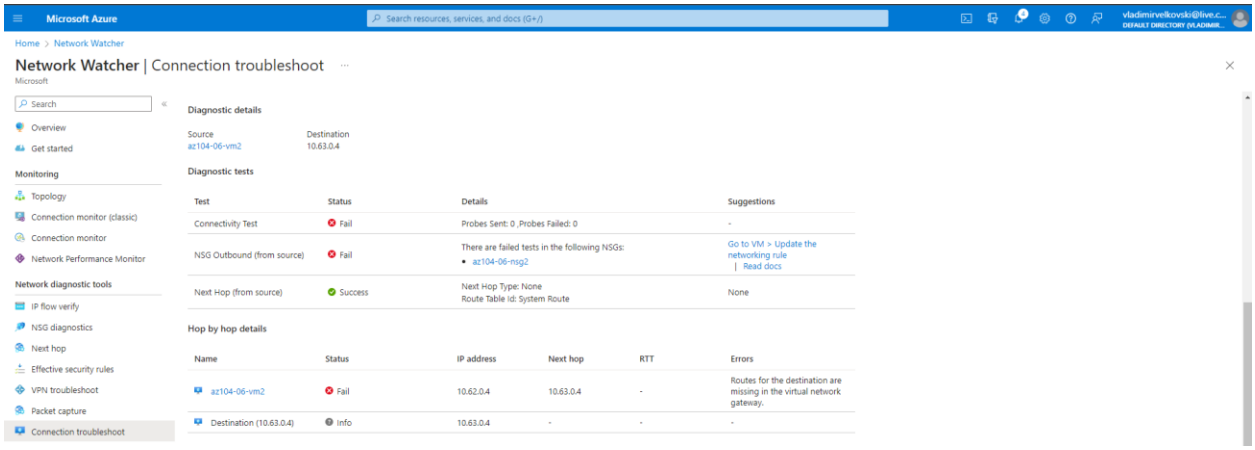
Task 2: Configure the hub and spoke network topology.



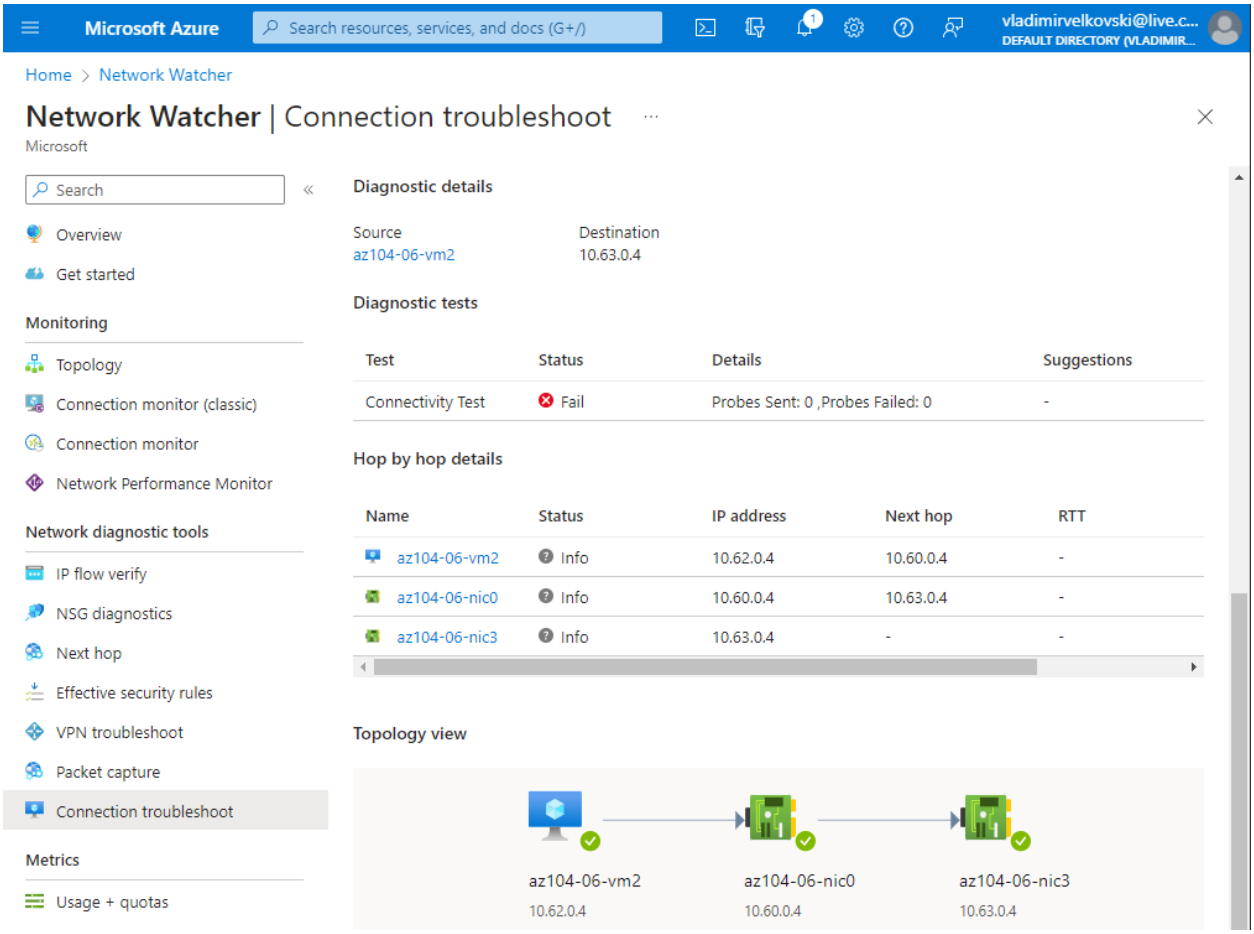
Task 3: Test transitivity of virtual network peering.



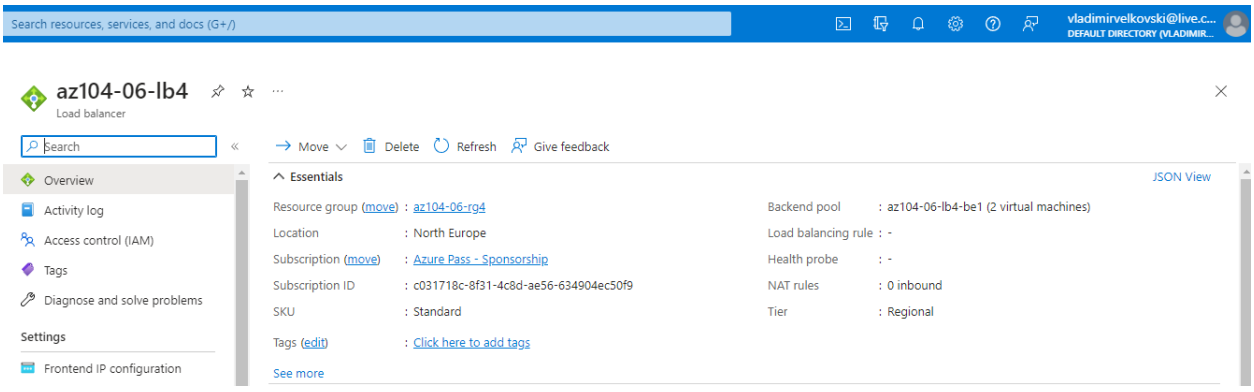

Microsoft Azure
Search resources, services, and docs (G+/)
vladimirvelkovski@live.c...
DEFAULT DIRECTORY
Home > Network Watcher
Network Watcher | Connection troubleshoot
Microsoft
Search
Overview
Get started
Monitoring
Topology
Connection monitor (classic)
Connection monitor
Network Performance Monitor
Network diagnostic tools
IP flow verify
NSG diagnostics
Next hop
Effective security rules
VPN troubleshoot
Packet capture
Connection troubleshoot
Metrics
Usage + quotas
Logs
Diagnostic tests *
4 selected
Run diagnostic tests
Diagnostic details
Source
az104-06-vm0
Destination
10.63.0.4
Diagnostic tests
Test
Status
Details
Suggestions
Connectivity Test
Success
Probes Sent: 66 ,Probes Failed: 0
Avg Latency: 1 ms
Min Latency: 1 ms
Min Latency: 2 ms
None
NSG Outbound (from s...
Success
Outbound communication from source is allowed
None
Next Hop (from source)
Success
Next Hop Type: VirtualNetworkPeering
Route Table Id: System Route
None
Hop by hop details
Name
Status
IP address
Next hop
RTT
Errors
az104-06-vm0
Success
10.60.0.4
10.63.0.4
2
-
az104-06-nic3
Success
10.63.0.4
-
-
-
Topology view


Microsoft Azure
Home > Network Watcher
Network Watcher | Connection troubleshoot
Diagnostic details
Source
az104-06-vm2
Destination
10.63.0.4
Diagnostic tests
Test
Status
Details
Suggestions
Connectivity Test
Fail
Probes Sent: 0 ,Probes Failed: 0
-
NSG Outbound (from source)
Fail
There are failed tests in the following NSGs:
az104-06-nsg2
Go to VM > Update the networking rule
Read docs
Next Hop (from source)
Success
Next Hop Type: None
Route Table Id: System Route
None
Hop by hop details
Name
Status
IP address
Next hop
RTT
Errors
az104-06-vm2
Fail
10.62.0.4
10.63.0.4
-
Routes for the destination are missing in the virtual network gateway.
Destination (10.63.0.4)
Info
10.63.0.4
-
-
-

Task 4: Configure routing in the hub and spoke topology. ***The connectivity test fails despite everything being configured properly. I tried to start and stop az104-06-vm0 as it says in the manual and tried with two different regions, but again it fails.***



Task 5: Implement Azure Load Balancer – ***Connection with the public IP cannot be established despite everything being configured properly.***



Task 6: Implement Azure Application Gateway - *Connection with the public IP cannot be established despite everything being configured properly.*