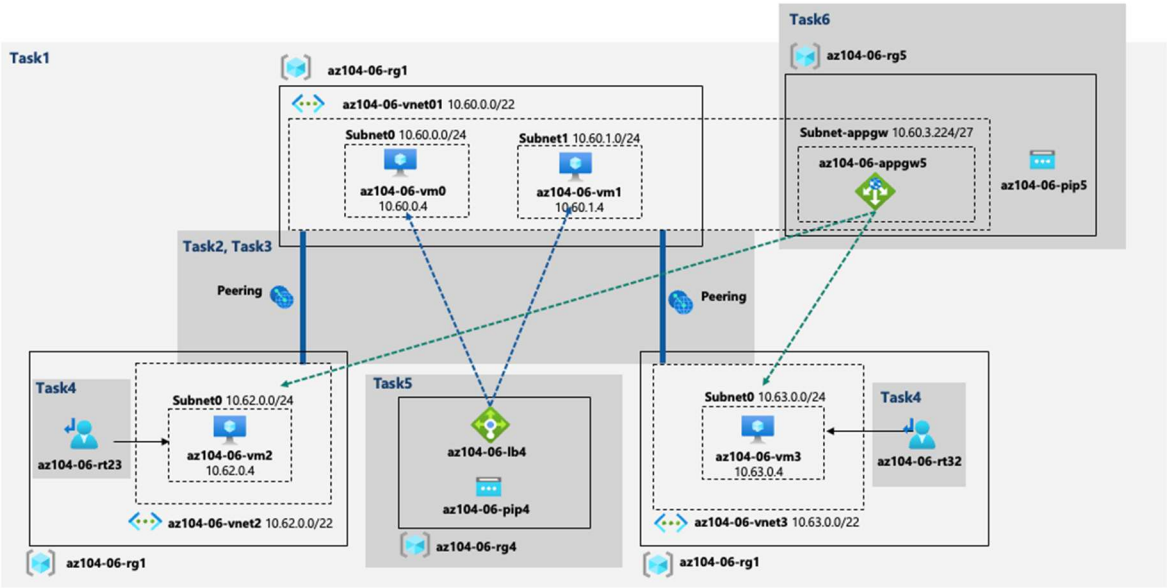
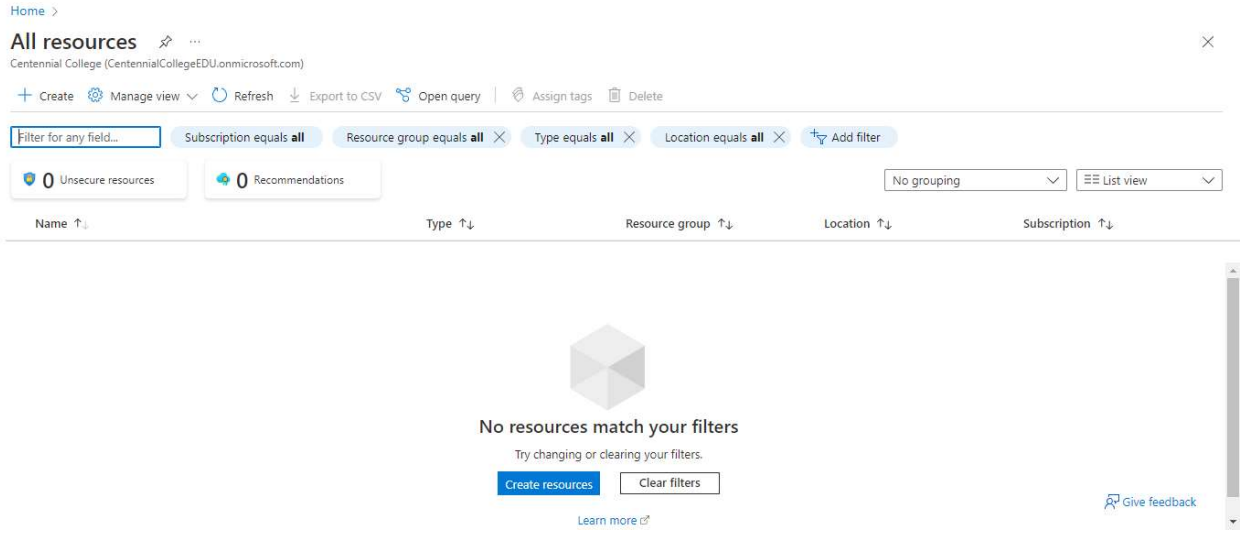
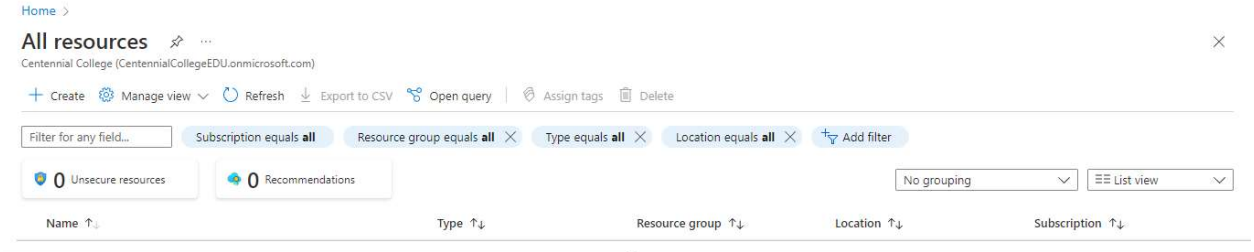
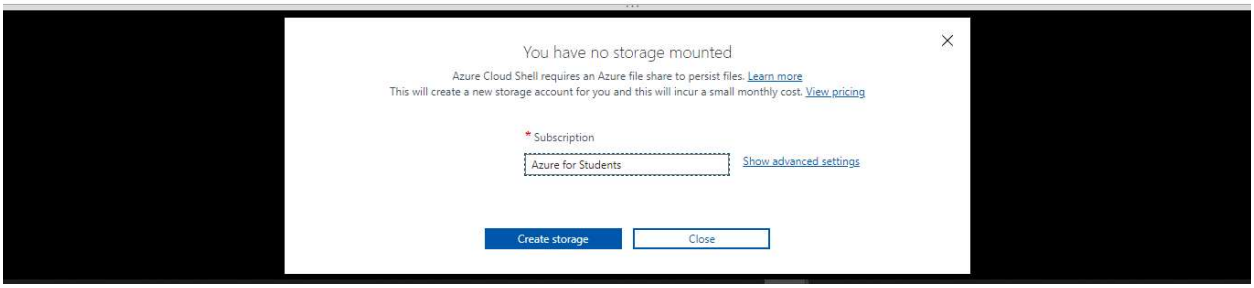
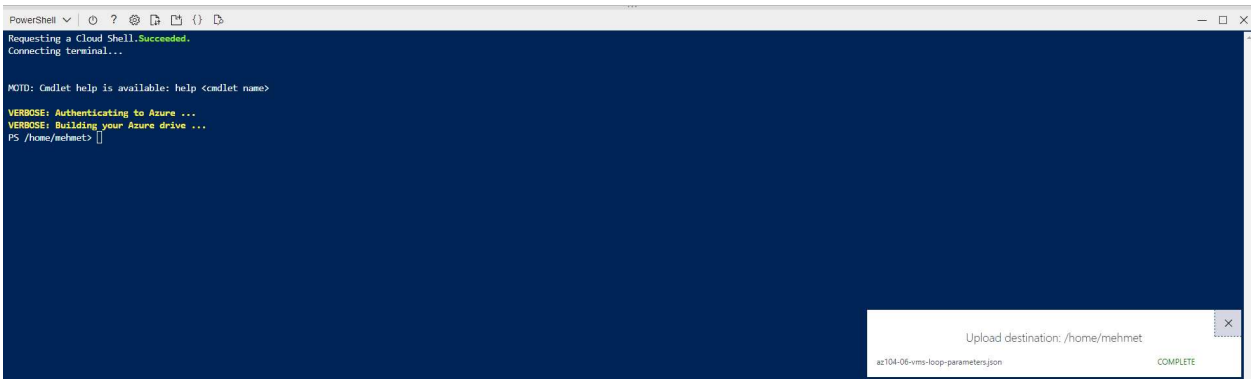


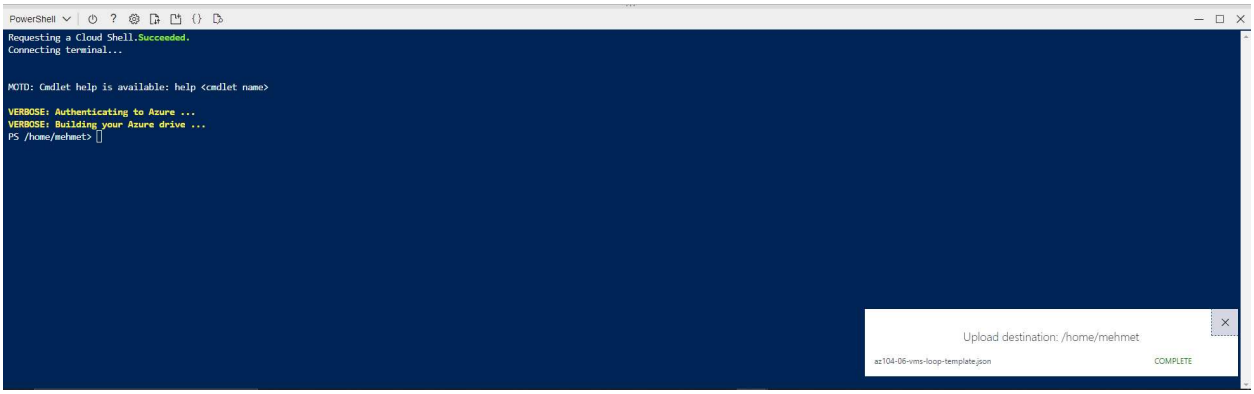
At the beginning



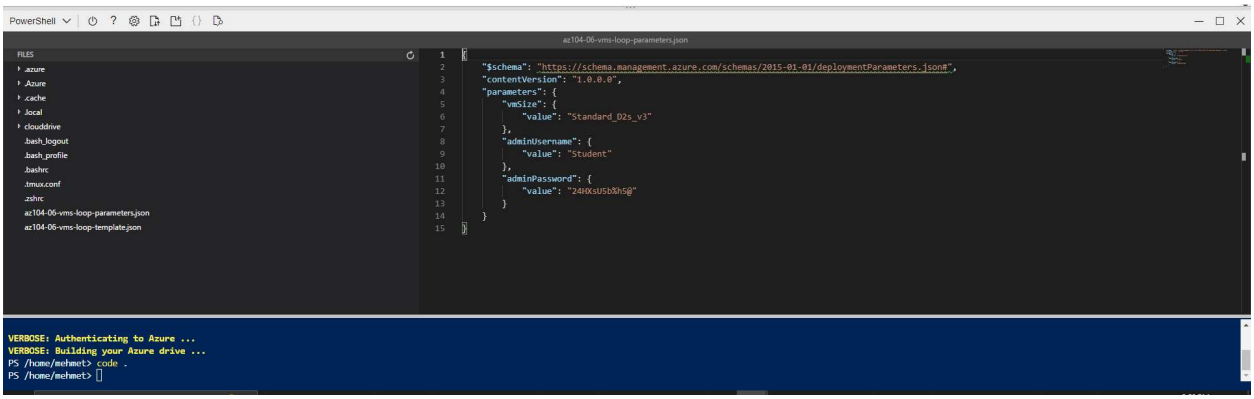

Home
All resources
Centennial College (CentennialCollegeEDU.onmicrosoft.com)
Create
Manage view
Refresh
Export to CSV
Open query
Assign tags
Delete
Filter for any field...
Subscription equals all
Resource group equals all
Type equals all
Location equals all
Add filter
0 Unsecure resources
0 Recommendations
No grouping
List view
Name
Type
Resource group
Location
Subscription


You have no storage mounted
Azure Cloud Shell requires an Azure file share to persist files. Learn more
This will create a new storage account for you and this will incur a small monthly cost. View pricing
* Subscription
Azure for Students
Show advanced settings
Create storage
Close


PowerShell
Requesting a Cloud Shell.Succeeded.
Connecting terminal...
MOTD: Cmdlet help is available: help <cmdlet name>
VERBOSE: Authenticating to Azure ...
VERBOSE: Building your Azure drive ...
PS /home/mehmet>
Upload destination: /home/mehmet
az104-06-vms-loop-parameters.json
COMPLETE

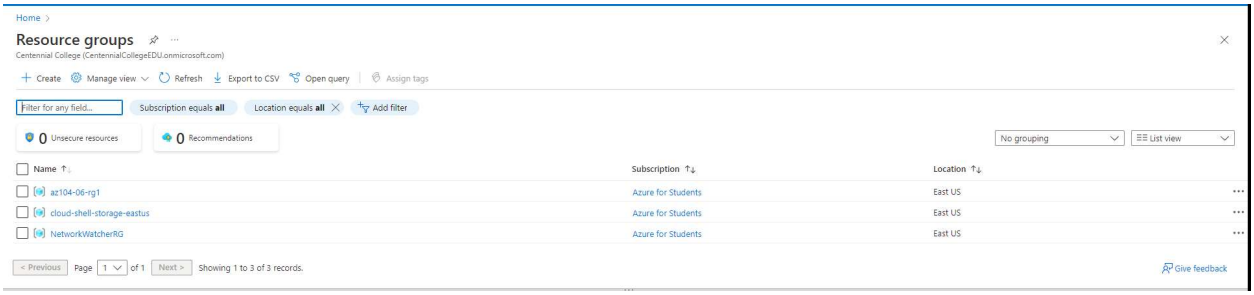

PowerShell
Requesting a Cloud Shell.Succeeded.
Connecting terminal...
MOTD: Cmdlet help is available: help <cmdlet name>
VERBOSE: Authenticating to Azure ...
VERBOSE: Building your Azure drive ...
PS /home/mehmet>
Upload destination: /home/mehmet
az104-06-vms-loop-template.json
COMPLETE

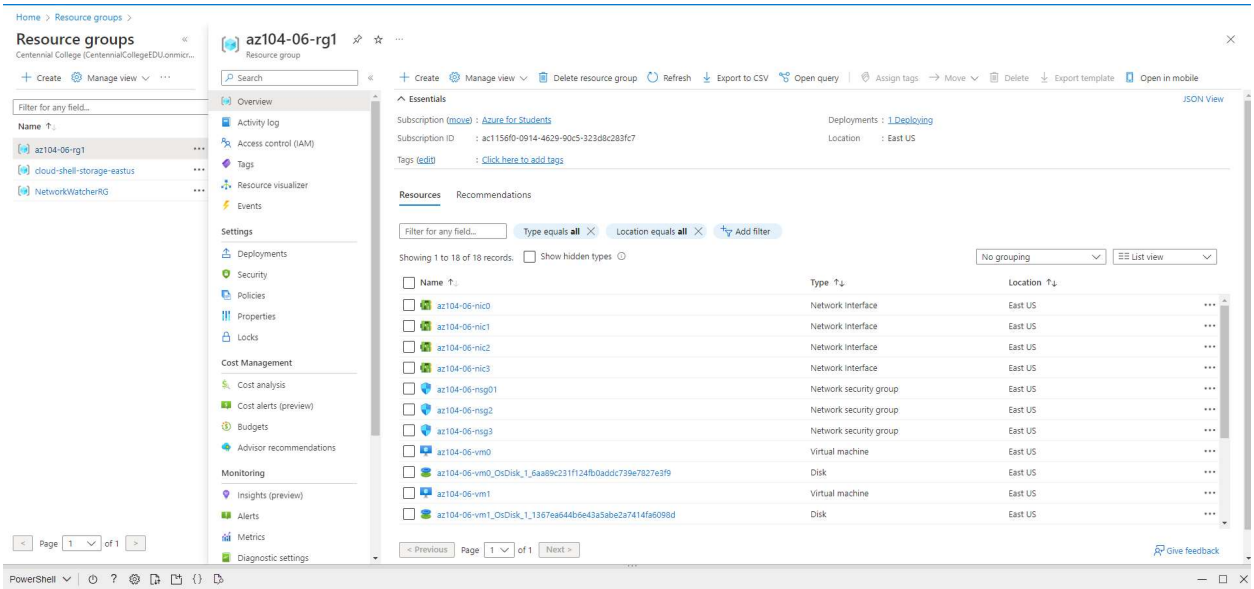
```
Requesting a Cloud Shell.Succeeded.
Connecting terminal...


MOTD: Cmdlet help is available: help <cmdlet name>

VERBOSE: Authenticating to Azure ...
VERBOSE: Building your Azure drive ...
PS /home/mehmet> code .
PS /home/mehmet>
```

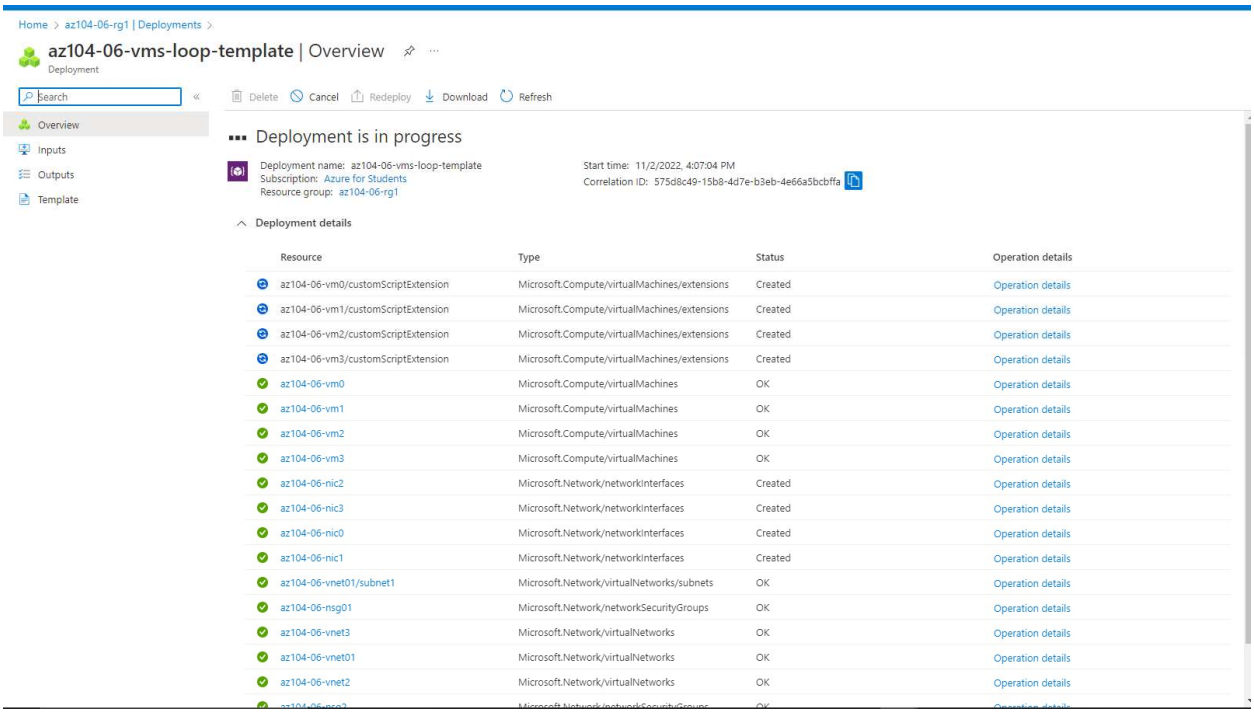


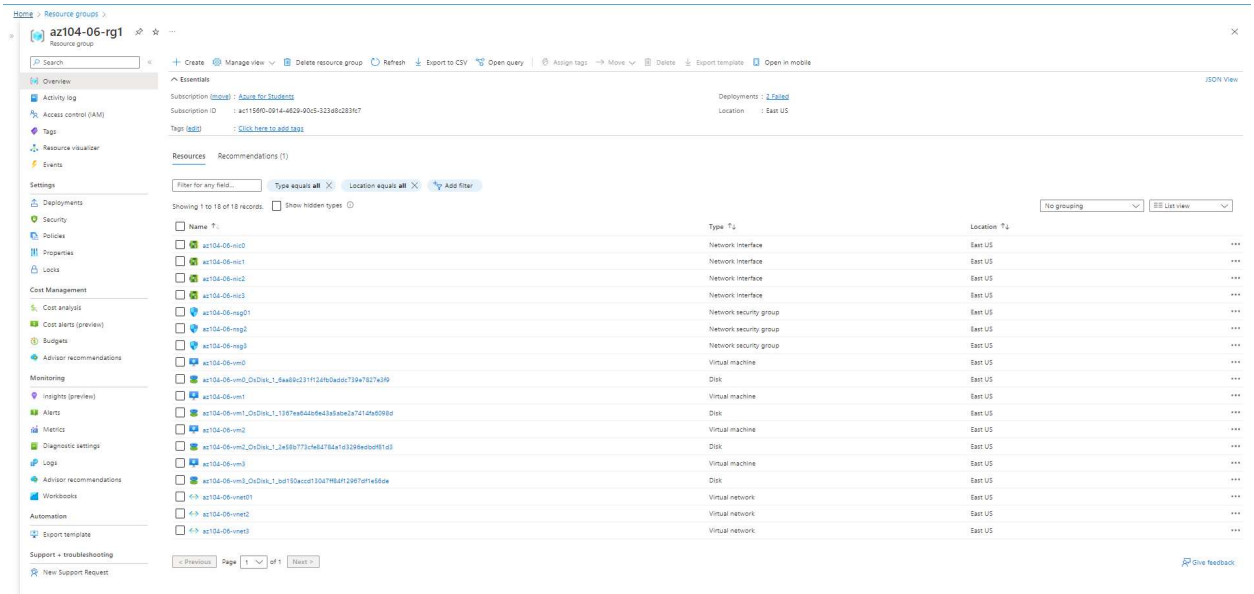

```
PowerShell
PS /home/mehmet> $location = 'eastus'
PS /home/mehmet> $rgName = 'az104-06-rg1'
PS /home/mehmet> New-AzResourceGroup -Name $rgName -Location $location

ResourceGroupName : az104-06-rg1
Location          : eastus
ProvisioningState : Succeeded
Tags              :
ResourceId        : /subscriptions/ac1156f0-0914-4629-90c5-323d8c283fc7/resourceGroups/az104-06-rg1


PS /home/mehmet> New-AzResourceGroupDeployment `
>>    -ResourceGroupName $rgName `
>>    -TemplateFile $HOME/az104-06-vms-loop-template.json `
>>    -TemplateParameterFile $HOME/az104-06-vms-loop-parameters.json
```

```
DeploymentName          : az104-06-vms-loop-template
ResourceGroupName       : az104-06-rg1
ProvisioningState       : Succeeded
Timestamp               : 11/4/2022 2:33:01 AM
Mode                    : Incremental
TemplateLink            :
Parameters              :

                          Name              Type                       Value
                          ================  =========================  ==========
                          vmSize            String                     "Standard_DS1_v2"
                          vmName            String                     "az104-06-vm"
                          vmCount           Int                        4
                          adminUsername     String                     "Student"
                          adminPassword     SecureString               null

Outputs                 :
DeploymentDebugLogLevel :
```

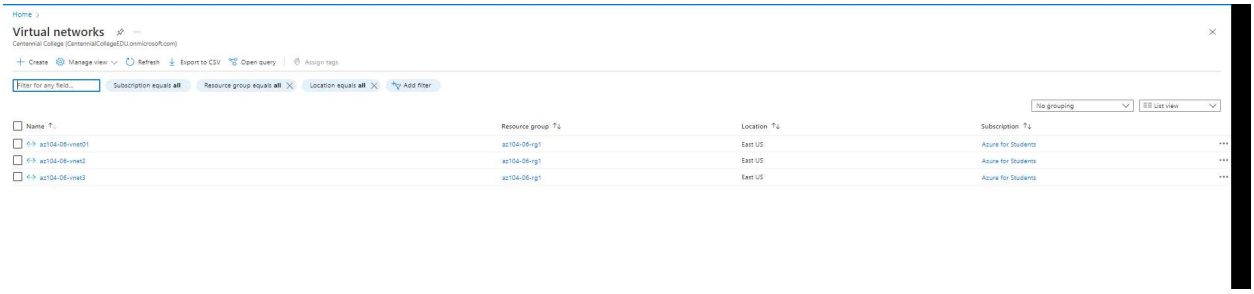





Home > az104-06-rg1 | Deployments >
az104-06-vms-loop-template | Overview
Deployment
Search
Overview
Inputs
Outputs
Template
Delete
Cancel
Redeploy
Download
Refresh
Deployment is in progress
Deployment name: az104-06-vms-loop-template
Subscription: Azure for Students
Resource group: az104-06-rg1
Start time: 11/2/2022, 4:07:04 PM
Correlation ID: 575d8c49-15b8-4d7e-b3eb-4e66a5bcbffa
Deployment details
Resource
Type
Status
Operation details
az104-06-vm0/customScriptExtension
Microsoft.Compute/virtualMachines/extensions
Created
Operation details
az104-06-vm1/customScriptExtension
Microsoft.Compute/virtualMachines/extensions
Created
Operation details
az104-06-vm2/customScriptExtension
Microsoft.Compute/virtualMachines/extensions
Created
Operation details
az104-06-vm3/customScriptExtension
Microsoft.Compute/virtualMachines/extensions
Created
Operation details
az104-06-vm0
Microsoft.Compute/virtualMachines
OK
Operation details
az104-06-vm1
Microsoft.Compute/virtualMachines
OK
Operation details
az104-06-vm2
Microsoft.Compute/virtualMachines
OK
Operation details
az104-06-vm3
Microsoft.Compute/virtualMachines
OK
Operation details
az104-06-nic2
Microsoft.Network/networkInterfaces
Created
Operation details
az104-06-nic3
Microsoft.Network/networkInterfaces
Created
Operation details
az104-06-nic0
Microsoft.Network/networkInterfaces
Created
Operation details
az104-06-nic1
Microsoft.Network/networkInterfaces
Created
Operation details
az104-06-vnet01/subnet1
Microsoft.Network/virtualNetworks/subnets
OK
Operation details
az104-06-nsg01
Microsoft.Network/networkSecurityGroups
OK
Operation details
az104-06-vnet3
Microsoft.Network/virtualNetworks
OK
Operation details
az104-06-vnet01
Microsoft.Network/virtualNetworks
OK
Operation details
az104-06-vnet2
Microsoft.Network/virtualNetworks
OK
Operation details


Home > Resource groups >
az104-06-rg1
Resource group
Create
Manage view
Delete resource group
Refresh
Export to CSV
Open query
Assign tags
Move
Delete
Export template
Open in mobile
Essentials
JSON View
Subscription (move) : Azure for Students
Subscription ID : ac1156f0-0914-4629-90c5-323d8c283fc7
Tags (edit) : Click here to add tags
Deployments : 2 Failed
Location : East US
Resources
Recommendations (1)
Filter for any field...
Type equals all
Location equals all
Add filter
Showing 1 to 18 of 18 records.
Show hidden types
No grouping
List view
Name
Type
Location
az104-06-nic0
Network Interface
East US
az104-06-nic1
Network Interface
East US
az104-06-nic2
Network Interface
East US
az104-06-nic3
Network Interface
East US
az104-06-nsg01
Network security group
East US
az104-06-nsg2
Network security group
East US
az104-06-nsg3
Network security group
East US
az104-06-vm0
Virtual machine
East US
az104-06-vm0_OsDisk_1_6aa89c231f124fb0addc739e7827e3f9
Disk
East US
az104-06-vm1
Virtual machine
East US
az104-06-vm1_OsDisk_1_1367ea644b6e43a5abe2a7414fa6098d
Disk
East US
az104-06-vm2
Virtual machine
East US
az104-06-vm2_OsDisk_1_2e58b773cfe84784a1d3296edbdf81d3
Disk
East US
az104-06-vm3
Virtual machine
East US
az104-06-vm3_OsDisk_1_bd150accd130d7ff84f12967df1e56de
Disk
East US
az104-06-vnet01
Virtual network
East US
az104-06-vnet2
Virtual network
East US
az104-06-vnet3
Virtual network
East US
Previous
Page 1 of 1
Next
Give feedback

```
PS /home/mehmet> $rgName = 'az104-06-rg1'
PS /home/mehmet> $location = (Get-AzResourceGroup -ResourceGroupName $rgName).loc
PS /home/mehmet> $vmNames = (Get-AzVM -ResourceGroupName $rgName).Name
PS /home/mehmet> foreach ($vmName in $vmNames) {
>>   Set-AzVMExtension `
>>   -ResourceGroupName $rgName `
>>   -Location $location `
>>   -VMName $vmName `
>>   -Name 'networkWatcherAgent' `
>>   -Publisher 'Microsoft.Azure.NetworkWatcher' `
>>   -Type 'NetworkWatcherAgentWindows' `
>>   -TypeHandlerVersion '1.4'
>> }

RequestId IsSuccessStatusCode StatusCode ReasonPhrase
--------- ------------------- ---------- ------------
                         True         OK OK
                         True         OK OK
                         True         OK OK
                         True         OK OK

PS /home/mehmet>
```



Home > Virtual networks > az104-06-vnet01 | Peerings >

Add peering

az104-06-vnet01

For peering to work, two peering links must be created. By selecting remote virtual network, Azure will create both peering links.

This virtual network

Peering link name *

az104-06-vnet01_to_az104-06-vnet2

Traffic to remote virtual network

- (•) Allow (default)
- ( ) Block all traffic to the remote virtual network

Traffic forwarded from remote virtual network

- ( ) Allow (default)
- (•) Block traffic that originates from outside this virtual network

Virtual network gateway or Route Server

- ( ) Use this virtual network's gateway or Route Server
- ( ) Use the remote virtual network's gateway or Route Server
- (•) None (default)

Remote virtual network

Peering link name *

az104-06-vnet2_to_az104-06-vnet01

Virtual network deployment model

- (•) Resource manager
- ( ) Classic

[ ] I know my resource ID

Subscription *

Azure for Students

Virtual network *

az104-06-vnet2

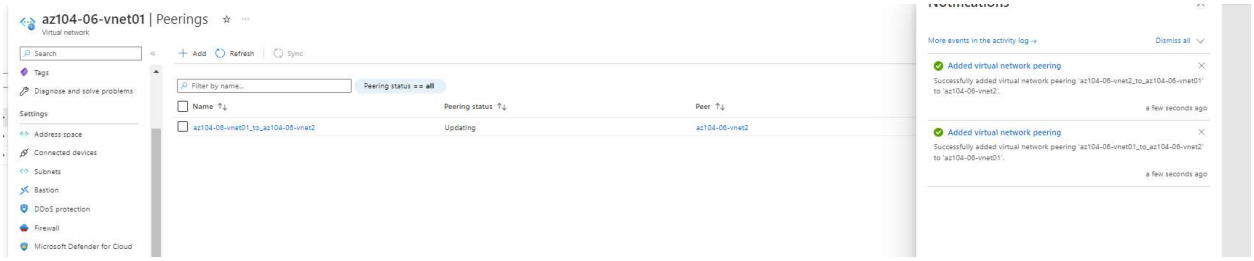
Traffic to remote virtual network

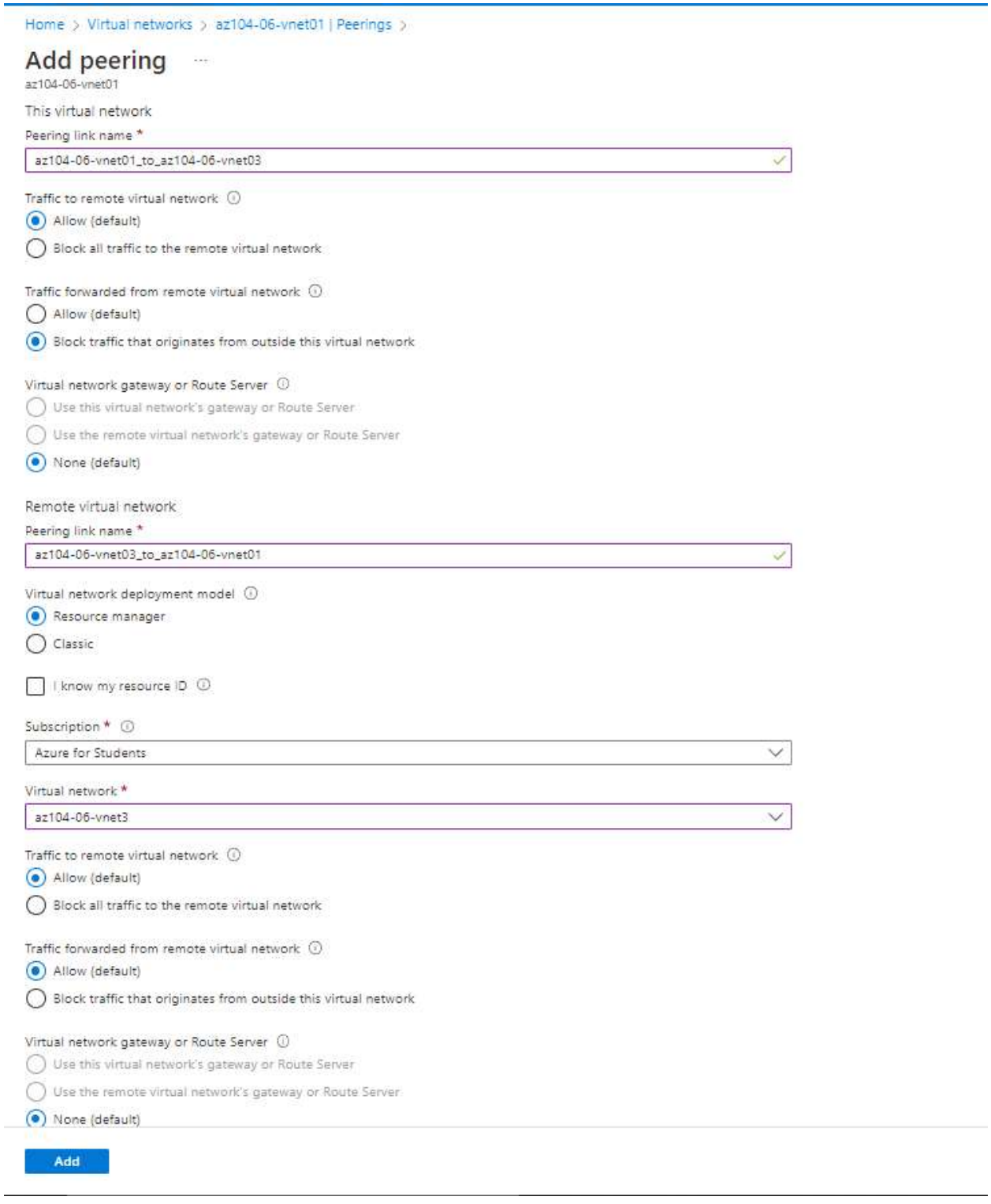
- (•) Allow (default)
- ( ) Block all traffic to the remote virtual network

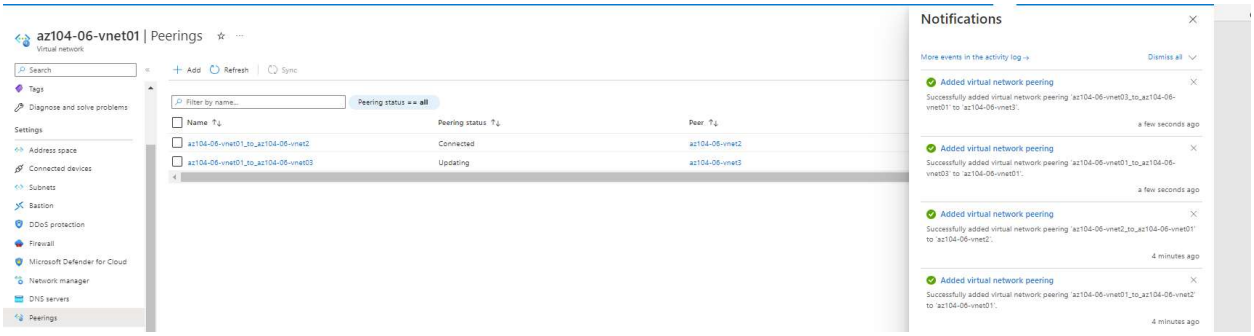
Traffic forwarded from remote virtual network

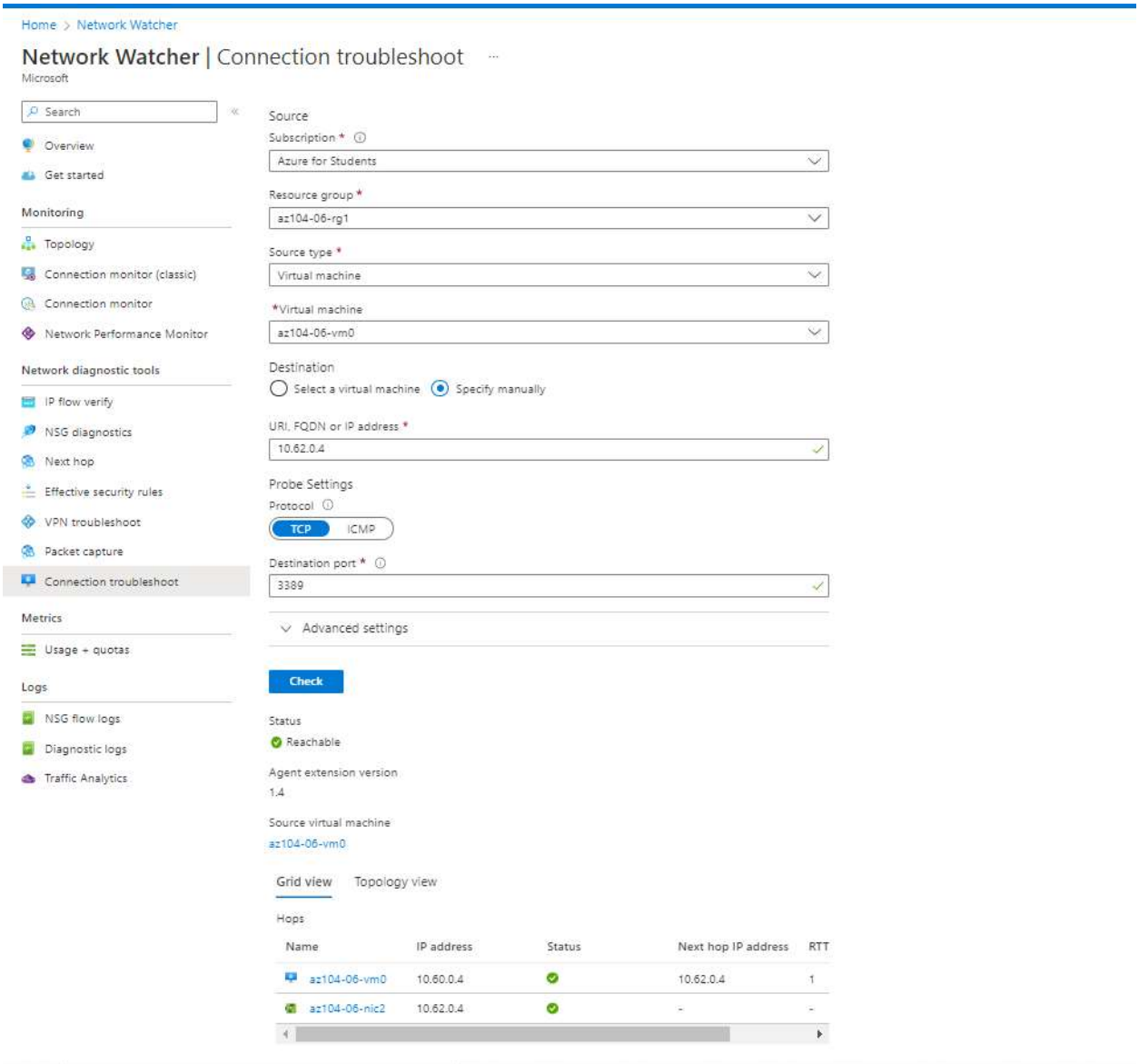
- (•) Allow (default)

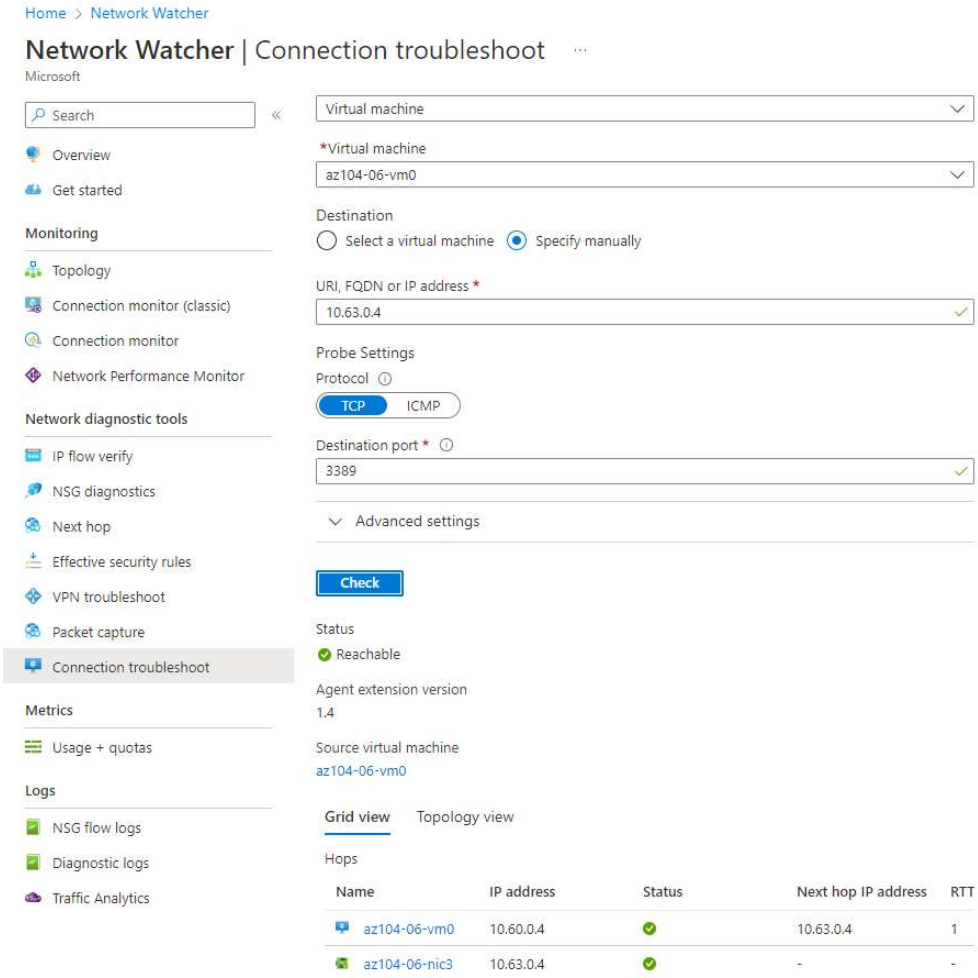
Add

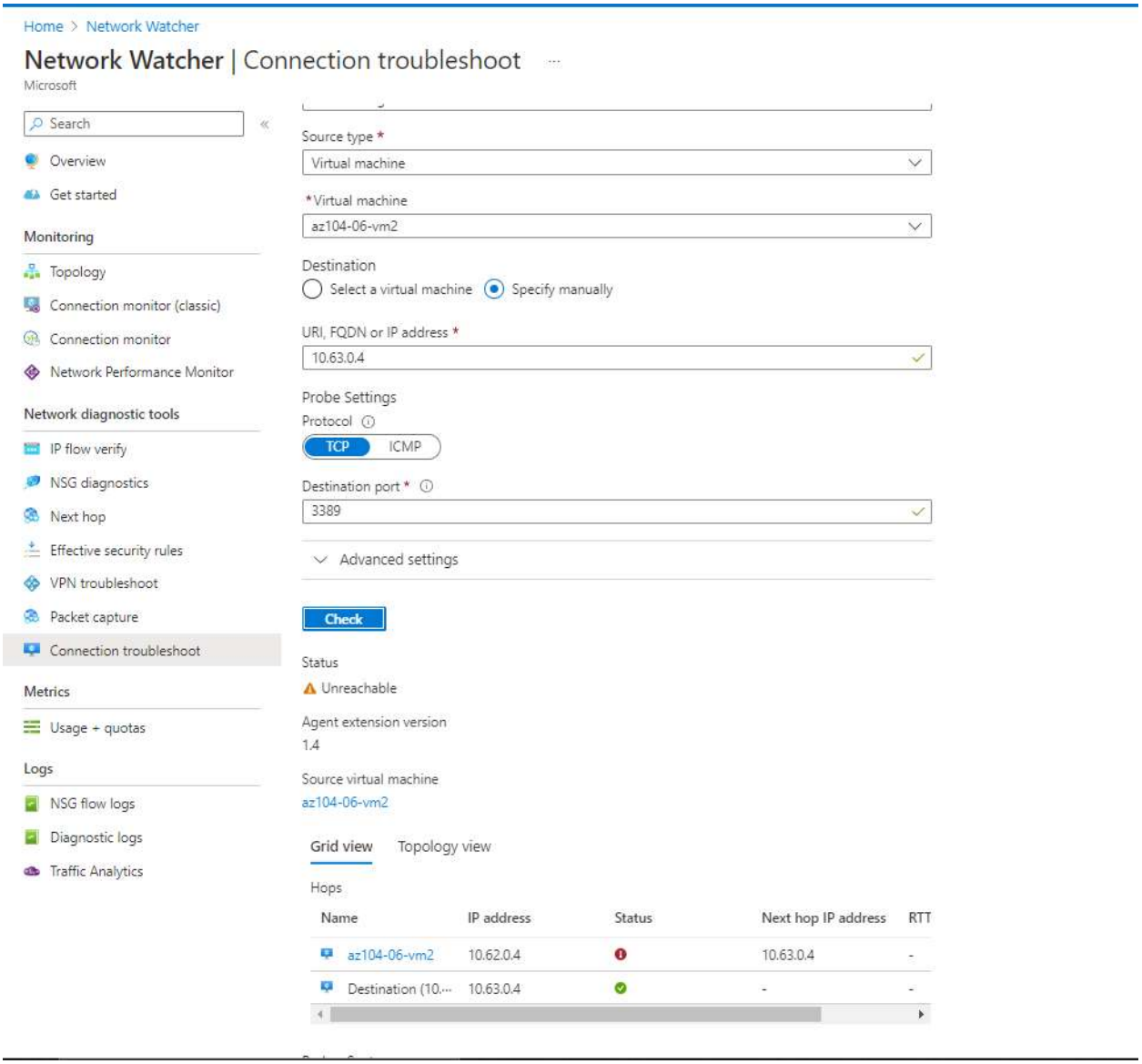

az104-06-vnet01 | Peerings
Virtual network
Search
Tags
Diagnose and solve problems
Settings
Address space
Connected devices
Subnets
Bastion
DDoS protection
Firewall
Microsoft Defender for Cloud
Add
Refresh
Sync
Filter by name...
Peering status == all
Name
Peering status
Peer
az104-06-vnet01_to_az104-06-vnet2
Updating
az104-06-vnet2
More events in the activity log →
Dismiss all
Added virtual network peering
Successfully added virtual network peering 'az104-06-vnet2_to_az104-06-vnet01' to 'az104-06-vnet2'.
a few seconds ago
Added virtual network peering
Successfully added virtual network peering 'az104-06-vnet01_to_az104-06-vnet2' to 'az104-06-vnet01'.
a few seconds ago

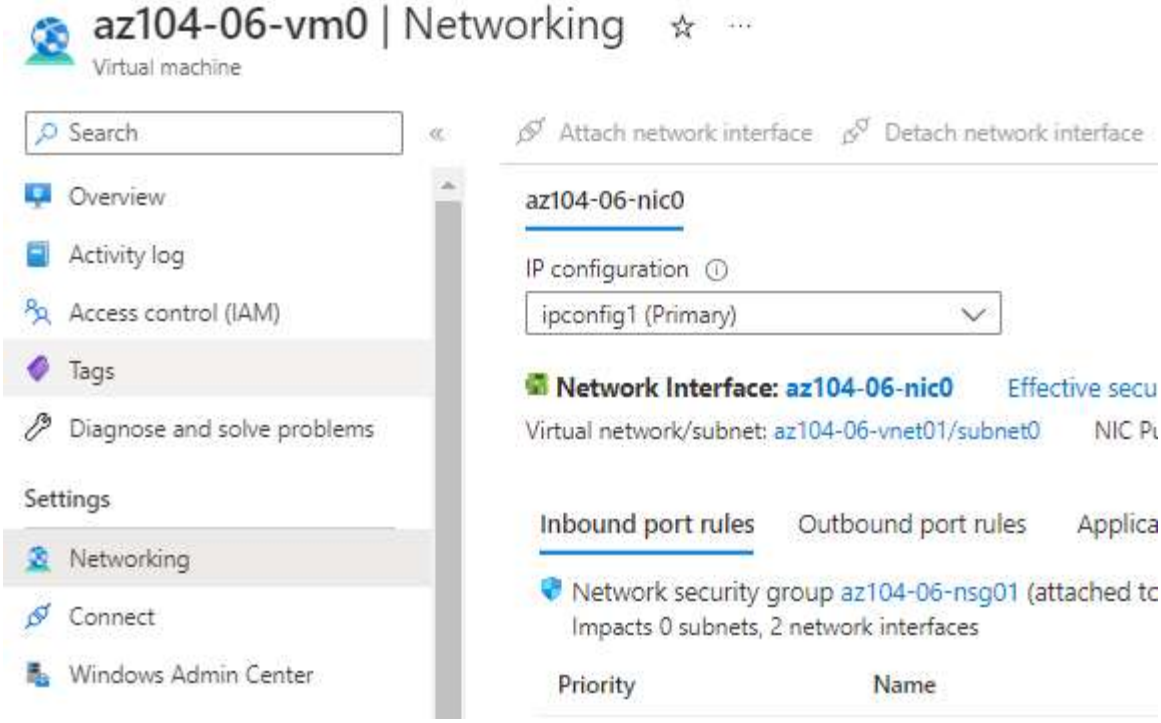

Home > Virtual networks > az104-06-vnet01 | Peerings >
Add peering
az104-06-vnet01
This virtual network
Peering link name *
az104-06-vnet01_to_az104-06-vnet03
Traffic to remote virtual network
Allow (default)
Block all traffic to the remote virtual network
Traffic forwarded from remote virtual network
Allow (default)
Block traffic that originates from outside this virtual network
Virtual network gateway or Route Server
Use this virtual network's gateway or Route Server
Use the remote virtual network's gateway or Route Server
None (default)
Remote virtual network
Peering link name *
az104-06-vnet03_to_az104-06-vnet01
Virtual network deployment model
Resource manager
Classic
I know my resource ID
Subscription *
Azure for Students
Virtual network *
az104-06-vnet3
Traffic to remote virtual network
Allow (default)
Block all traffic to the remote virtual network
Traffic forwarded from remote virtual network
Allow (default)
Block traffic that originates from outside this virtual network
Virtual network gateway or Route Server
Use this virtual network's gateway or Route Server
Use the remote virtual network's gateway or Route Server
None (default)
Add

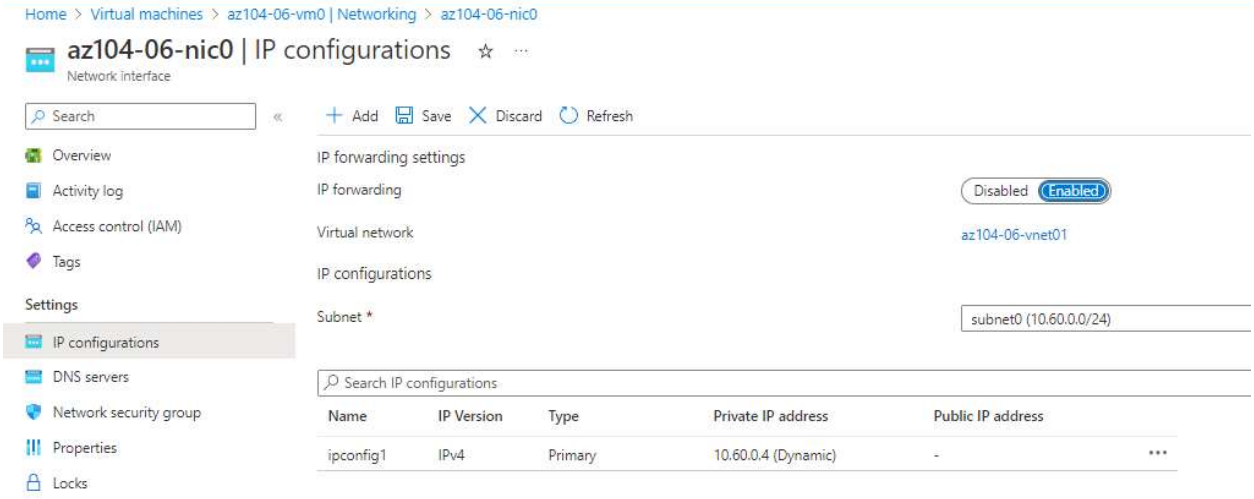

az104-06-vnet01 | Peerings
Virtual network
Search
Tags
Diagnose and solve problems
Settings
Address space
Connected devices
Subnets
Bastion
DDoS protection
Firewall
Microsoft Defender for Cloud
Network manager
DNS servers
Peerings
Add
Refresh
Sync
Filter by name...
Peering status == all
Name
Peering status
Peer
az104-06-vnet01_to_az104-06-vnet2
Connected
az104-06-vnet2
az104-06-vnet01_to_az104-06-vnet03
Updating
az104-06-vnet3
Notifications
More events in the activity log →
Dismiss all
Added virtual network peering
Successfully added virtual network peering 'az104-06-vnet03_to_az104-06-vnet01' to 'az104-06-vnet3'.
a few seconds ago
Added virtual network peering
Successfully added virtual network peering 'az104-06-vnet01_to_az104-06-vnet03' to 'az104-06-vnet01'.
a few seconds ago
Added virtual network peering
Successfully added virtual network peering 'az104-06-vnet2_to_az104-06-vnet01' to 'az104-06-vnet2'.
4 minutes ago
Added virtual network peering
Successfully added virtual network peering 'az104-06-vnet01_to_az104-06-vnet2' to 'az104-06-vnet01'.
4 minutes ago

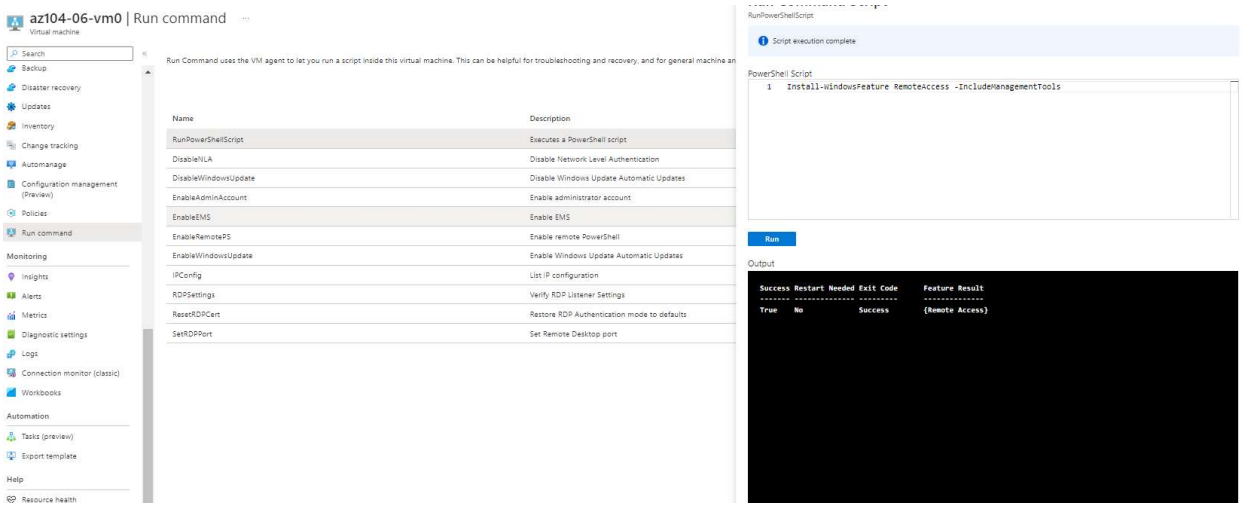

Home > Network Watcher
Network Watcher | Connection troubleshoot
Microsoft
Search
Overview
Get started
Monitoring
Topology
Connection monitor (classic)
Connection monitor
Network Performance Monitor
Network diagnostic tools
IP flow verify
NSG diagnostics
Next hop
Effective security rules
VPN troubleshoot
Packet capture
Connection troubleshoot
Metrics
Usage + quotas
Logs
NSG flow logs
Diagnostic logs
Traffic Analytics
Source
Subscription *
Azure for Students
Resource group *
az104-06-rg1
Source type *
Virtual machine
*Virtual machine
az104-06-vm0
Destination
Select a virtual machine
Specify manually
URI, FQDN or IP address *
10.62.0.4
Probe Settings
Protocol
TCP
ICMP
Destination port *
3389
Advanced settings
Check
Status
Reachable
Agent extension version
1.4
Source virtual machine
az104-06-vm0
Grid view
Topology view
Hops
Name
IP address
Status
Next hop IP address
RTT
az104-06-vm0
10.60.0.4
10.62.0.4
1
az104-06-nic2
10.62.0.4
-
-

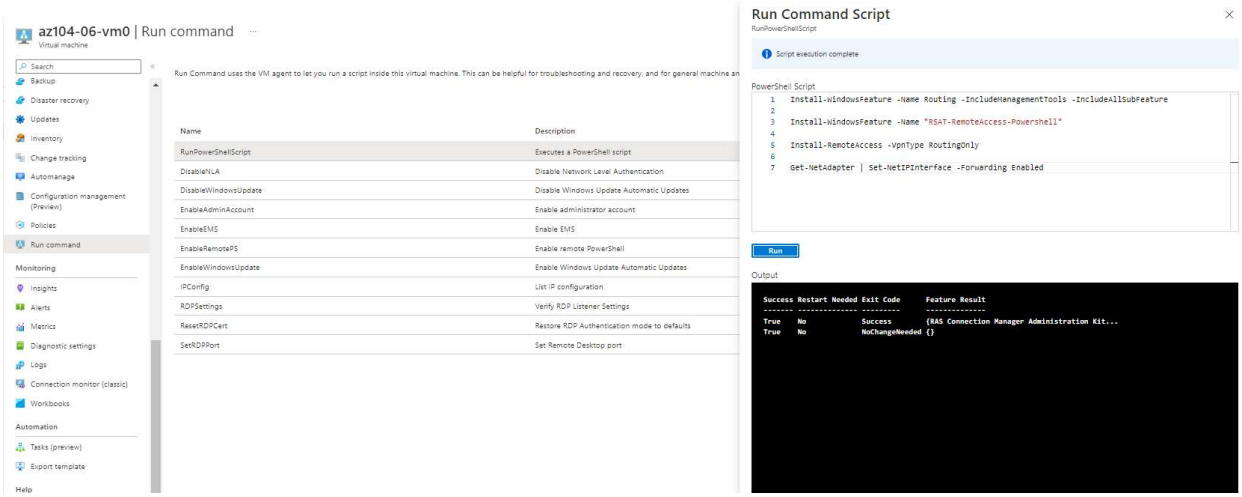

Home > Network Watcher
Network Watcher | Connection troubleshoot
Microsoft
Search
Overview
Get started
Monitoring
Topology
Connection monitor (classic)
Connection monitor
Network Performance Monitor
Network diagnostic tools
IP flow verify
NSG diagnostics
Next hop
Effective security rules
VPN troubleshoot
Packet capture
Connection troubleshoot
Metrics
Usage + quotas
Logs
NSG flow logs
Diagnostic logs
Traffic Analytics
Virtual machine
*Virtual machine
az104-06-vm0
Destination
Select a virtual machine
Specify manually
URI, FQDN or IP address *
10.63.0.4
Probe Settings
Protocol
TCP
ICMP
Destination port *
3389
Advanced settings
Check
Status
Reachable
Agent extension version
1.4
Source virtual machine
az104-06-vm0
Grid view
Topology view
Hops
Name
IP address
Status
Next hop IP address
RTT
az104-06-vm0
10.60.0.4
10.63.0.4
1
az104-06-nic3
10.63.0.4
-
-


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
NSG flow logs
Diagnostic logs
Traffic Analytics
Source type *
Virtual machine
*Virtual machine
az104-06-vm2
Destination
Select a virtual machine
Specify manually
URI, FQDN or IP address *
10.63.0.4
Probe Settings
Protocol
TCP
ICMP
Destination port *
3389
Advanced settings
Check
Status
Unreachable
Agent extension version
1.4
Source virtual machine
az104-06-vm2
Grid view
Topology view
Hops
Name
IP address
Status
Next hop IP address
RTT
az104-06-vm2
10.62.0.4
10.63.0.4
-
Destination (10.···
10.63.0.4
-
-


az104-06-vm0 | Networking
Virtual machine
Search
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Settings
Networking
Connect
Windows Admin Center
Attach network interface
Detach network interface
az104-06-nic0
IP configuration
ipconfig1 (Primary)
Network Interface: az104-06-nic0
Effective secu
Virtual network/subnet: az104-06-vnet01/subnet0
NIC Pu
Inbound port rules
Outbound port rules
Applica
Network security group az104-06-nsg01 (attached to
Impacts 0 subnets, 2 network interfaces
Priority
Name


Home > Virtual machines > az104-06-vm0 | Networking > az104-06-nic0
az104-06-nic0 | IP configurations
Network interface
Search
Overview
Activity log
Access control (IAM)
Tags
Settings
IP configurations
DNS servers
Network security group
Properties
Locks
Add
Save
Discard
Refresh
IP forwarding settings
IP forwarding
Disabled
Enabled
Virtual network
az104-06-vnet01
IP configurations
Subnet *
subnet0 (10.60.0.0/24)
Search IP configurations
Name
IP Version
Type
Private IP address
Public IP address
ipconfig1
IPv4
Primary
10.60.0.4 (Dynamic)
-


az104-06-vm0 | Run command
Virtual machine
Search
Backup
Disaster recovery
Updates
Inventory
Change tracking
Automanage
Configuration management (Preview)
Policies
Run command
Monitoring
Insights
Alerts
Metrics
Diagnostic settings
Logs
Connection monitor (classic)
Workbooks
Automation
Tasks (preview)
Export template
Help
Resource health
Run Command uses the VM agent to let you run a script inside this virtual machine. This can be helpful for troubleshooting and recovery, and for general machine an
Name
Description
RunPowerShellScript
Executes a PowerShell script
DisableNLA
Disable Network Level Authentication
DisableWindowsUpdate
Disable Windows Update Automatic Updates
EnableAdminAccount
Enable administrator account
EnableEMS
Enable EMS
EnableRemotePS
Enable remote PowerShell
EnableWindowsUpdate
Enable Windows Update Automatic Updates
IPConfig
List IP configuration
RDPSettings
Verify RDP Listener Settings
ResetRDPCert
Restore RDP Authentication mode to defaults
SetRDPPort
Set Remote Desktop port
RunPowerShellScript
Script execution complete
PowerShell Script
1 Install-WindowsFeature RemoteAccess -IncludeManagementTools
Run
Output
Success Restart Needed Exit Code Feature Result
------- -------------- --------- --------------
True No Success {Remote Access}


az104-06-vm0 | Run command
Virtual machine
Search
Backup
Disaster recovery
Updates
Inventory
Change tracking
Automanage
Configuration management (Preview)
Policies
Run command
Monitoring
Insights
Alerts
Metrics
Diagnostic settings
Logs
Connection monitor (classic)
Workbooks
Automation
Tasks (preview)
Export template
Help
Run Command uses the VM agent to let you run a script inside this virtual machine. This can be helpful for troubleshooting and recovery, and for general machine an
Name
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RunPowerShellScript
Executes a PowerShell script
DisableNLA
Disable Network Level Authentication
DisableWindowsUpdate
Disable Windows Update Automatic Updates
EnableAdminAccount
Enable administrator account
EnableEMS
Enable EMS
EnableRemotePS
Enable remote PowerShell
EnableWindowsUpdate
Enable Windows Update Automatic Updates
IPConfig
List IP configuration
RDPSettings
Verify RDP Listener Settings
ResetRDPCert
Restore RDP Authentication mode to defaults
SetRDPPort
Set Remote Desktop port
Run Command Script
RunPowerShellScript
Script execution complete
PowerShell Script
1 Install-WindowsFeature -Name Routing -IncludeManagementTools -IncludeAllSubFeature
2
3 Install-WindowsFeature -Name "RSAT-RemoteAccess-Powershell"
4
5 Install-RemoteAccess -VpnType RoutingOnly
6
7 Get-NetAdapter | Set-NetIPInterface -Forwarding Enabled
Run
Output
Success Restart Needed Exit Code Feature Result
------- -------------- --------- --------------
True No Success {RAS Connection Manager Administration Kit...
True No NoChangeNeeded {}

Home > Route tables >

Create Route table ...

Validation Passed

Basics Tags Review + create

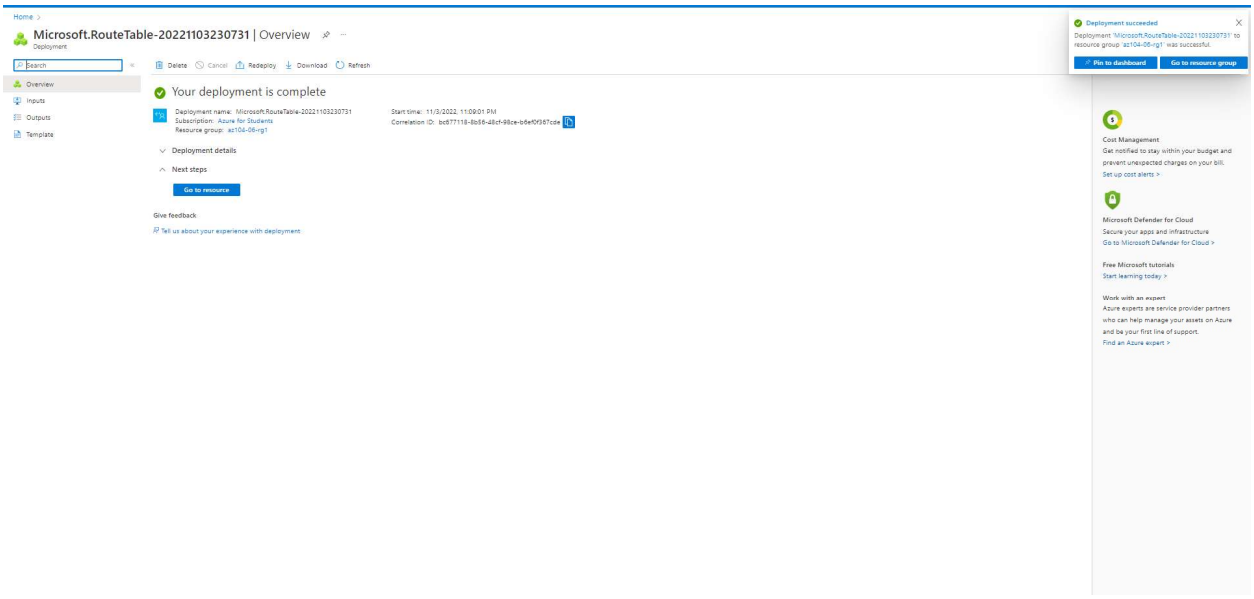
TERMS

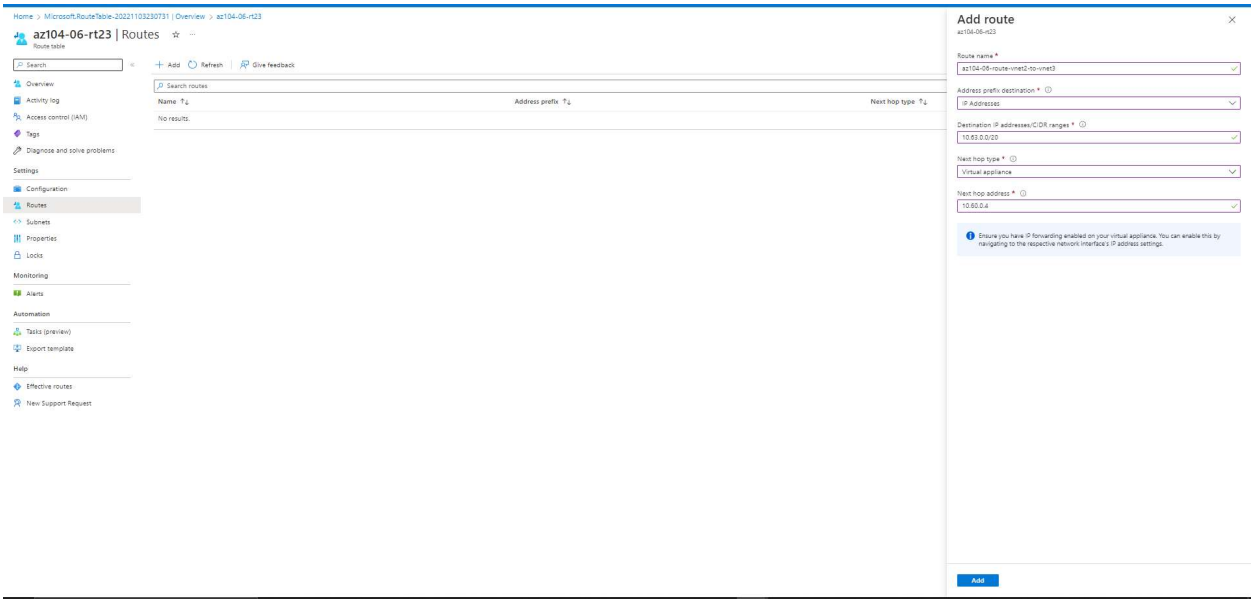
By clicking "Create", I (a) agree to the legal terms and privacy statement(s) associated with the Marketplace offering(s) listed above; (b) authorize Microsoft to bill my current payment method for the fees associated with the offering(s), with the same billing frequency as my Azure subscription; and (c) agree that Microsoft may share my contact, usage and transactional information with the provider(s) of the offering(s) for support, billing and other transactional activities. Microsoft does not provide rights for third-party offerings. See the Azure Marketplace Terms for additional details.

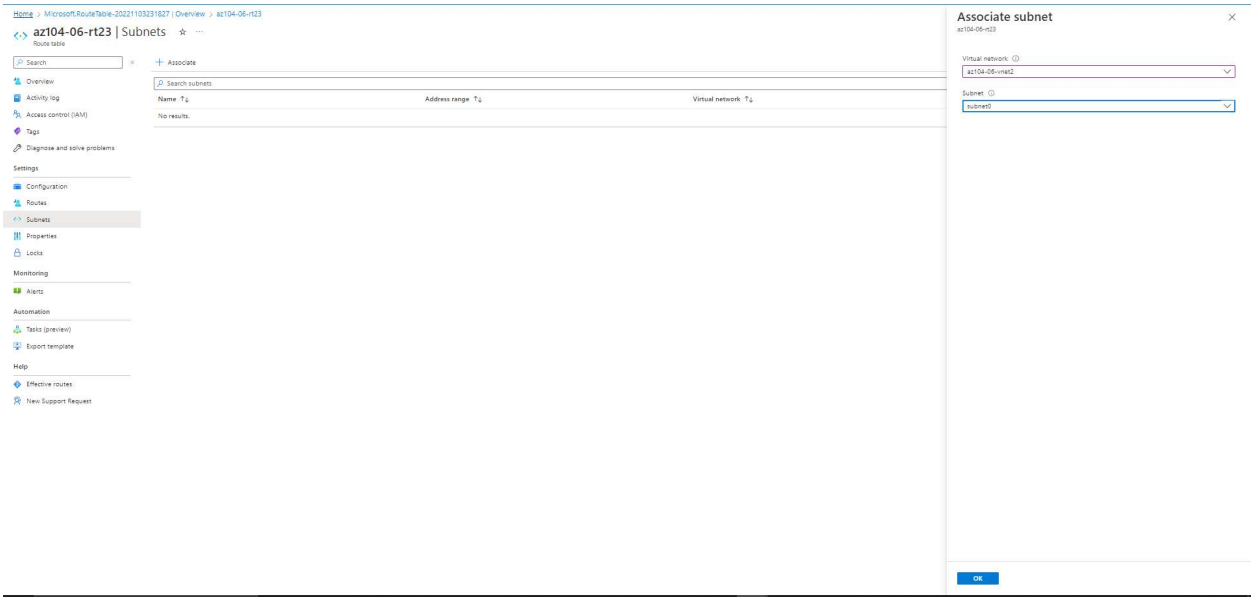
Basics

Subscription	Azure for Students
Resource group	az104-06-rg1
Region	East US
Name	az104-06-rt23
Propagate gateway routes	No

Create < Previous Next Download a template for automation


Microsoft.RouteTable-20221103230731 | Overview
Your deployment is complete
Deployment succeeded
Pin to dashboard
Go to resource group
Cost Management
Microsoft Defender for Cloud
Free Microsoft tutorials
Work with an expert


az104-06-rt23 | Routes
Add route
Route name *
Address prefix destination *
Destination IP addresses/CIDR ranges *
Next hop type *
Next hop address *
Add


Home > Microsoft.RouteTable-20221103231627 | Overview > az104-06-rt23
az104-06-rt23 | Subnets
Route table
Search
Associate
Search subnets
Name
Address range
Virtual network
No results.
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Settings
Configuration
Routes
Subnets
Properties
Locks
Monitoring
Alerts
Automation
Tasks (preview)
Export template
Help
Effective routes
New Support Request
Associate subnet
az104-06-rt23
Virtual network
az104-06-vnet2
Subnet
subnet0
OK

Home > Route tables >

Create Route table ...

Validation Passed

Basics Tags Review + create

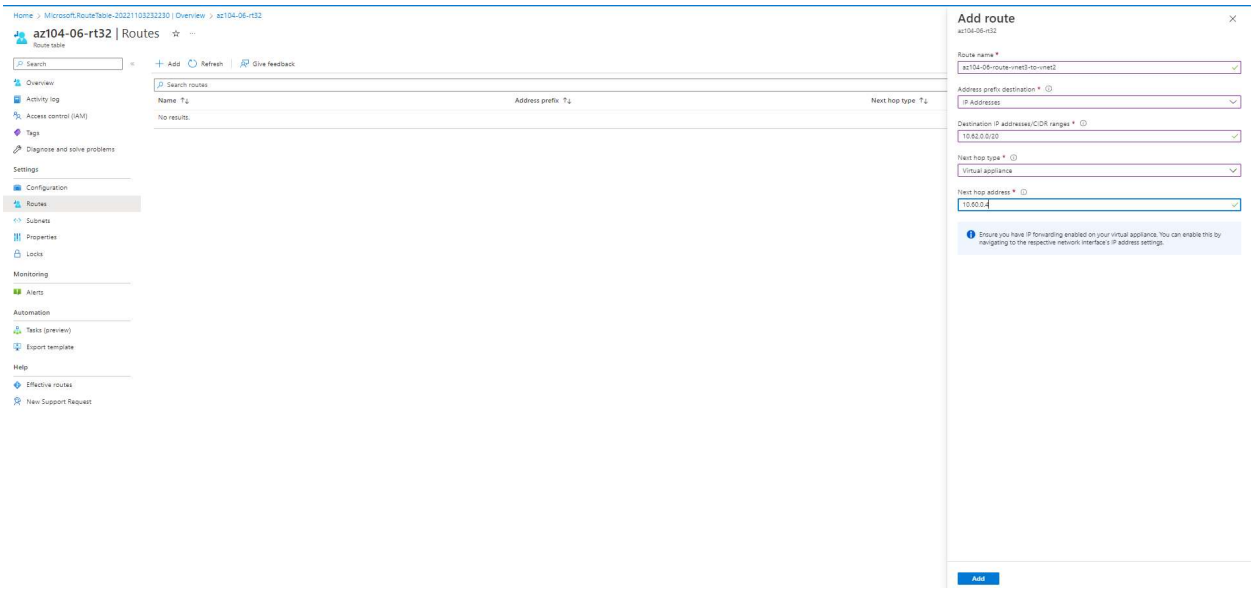
TERMS

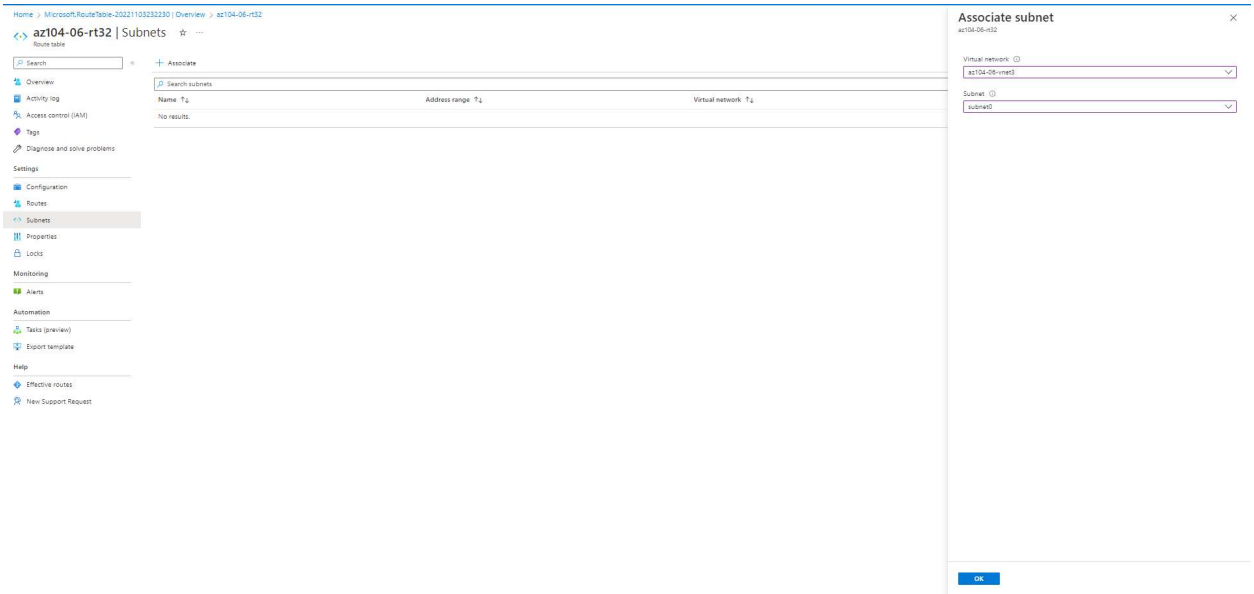
By clicking "Create", I (a) agree to the legal terms and privacy statement(s) associated with the Marketplace offering(s) listed above; (b) authorize Microsoft to bill my current payment method for the fees associated with the offering(s), with the same billing frequency as my Azure subscription; and (c) agree that Microsoft may share my contact, usage and transactional information with the provider(s) of the offering(s) for support, billing and other transactional activities. Microsoft does not provide rights for third-party offerings. See the Azure Marketplace Terms for additional details.

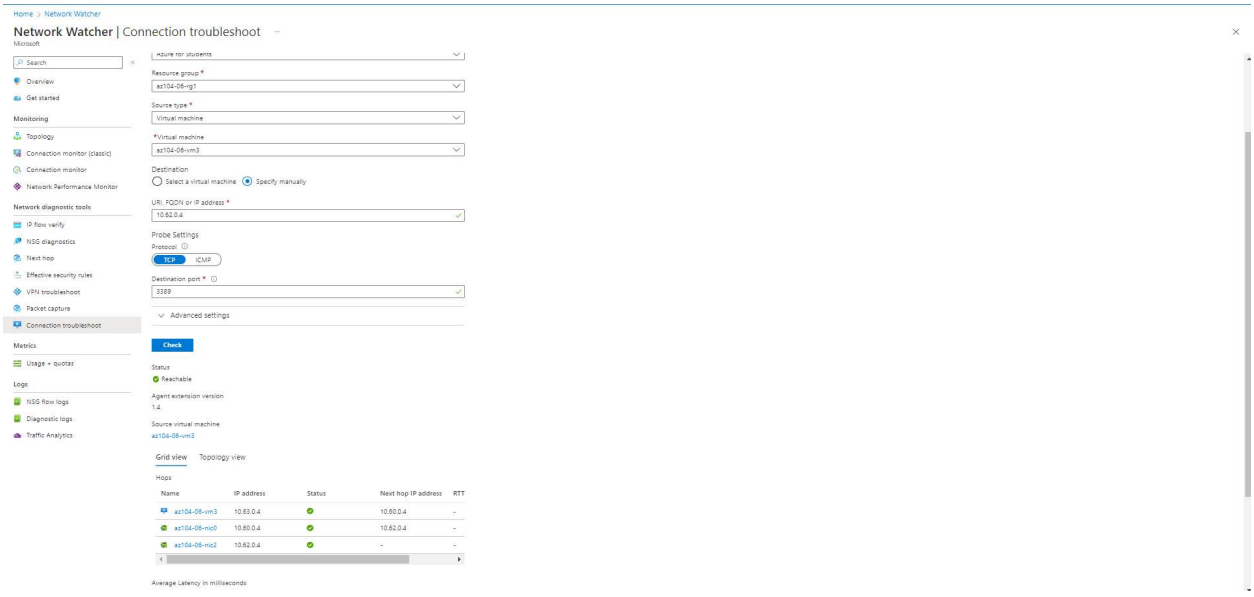
Basics

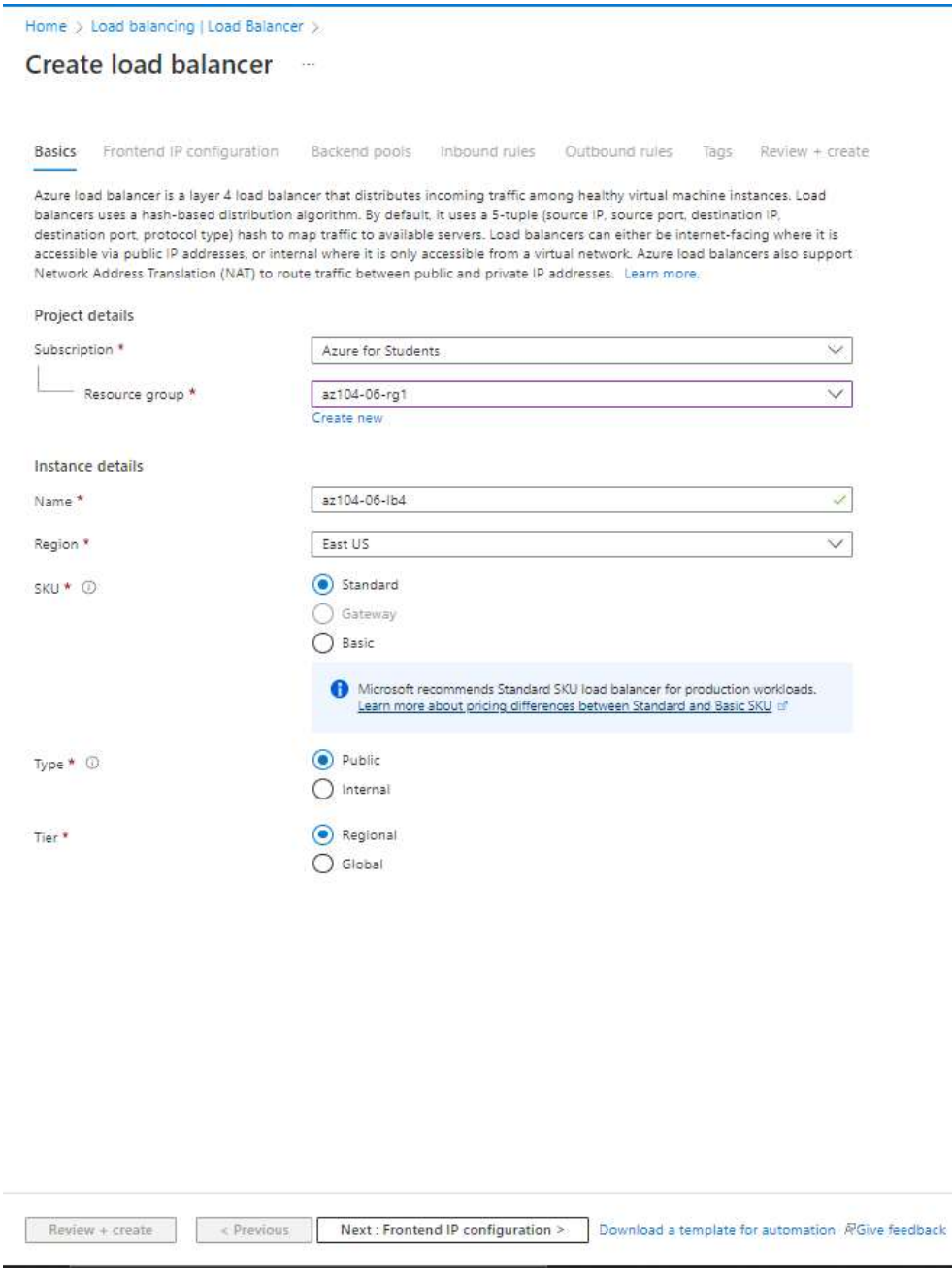
Subscription	Azure for Students
Resource group	az104-06-rg1
Region	East US
Name	az104-06-rt32
Propagate gateway routes	No

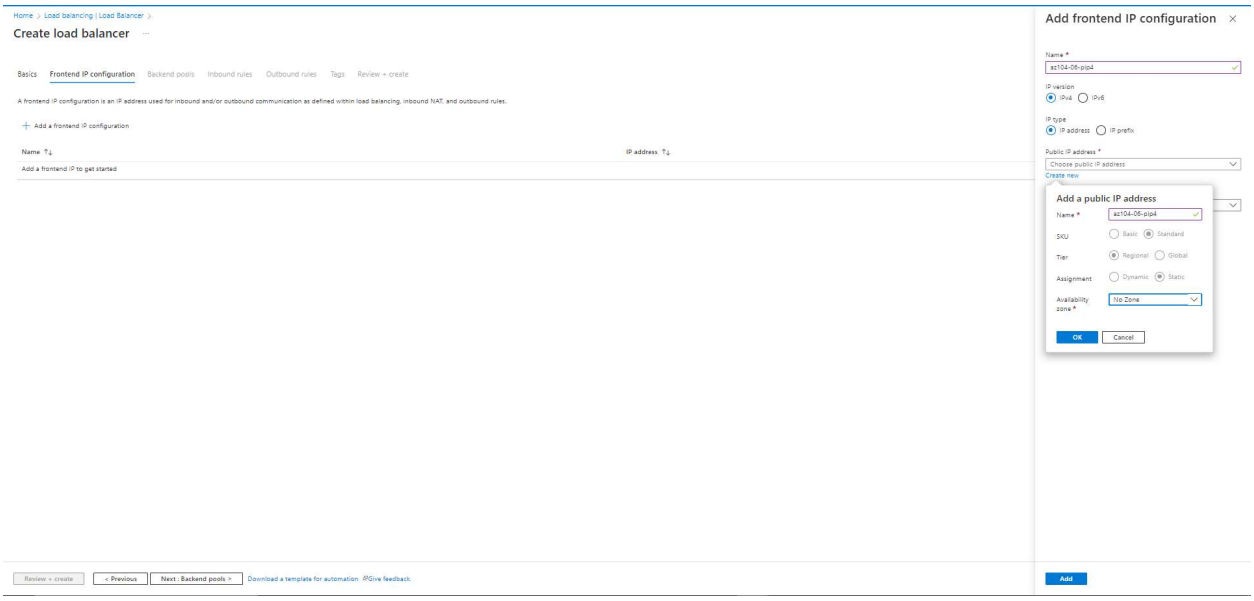
Create < Previous Next Download a template for automation


Home > Microsoft.RouteTable-20221103232230 | Overview > az104-06-rt32
az104-06-rt32 | Routes
Route table
Search
Add
Refresh
Give feedback
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Settings
Configuration
Routes
Subnets
Properties
Locks
Monitoring
Alerts
Automation
Tasks (preview)
Export template
Help
Effective routes
New Support Request
Search routes
Name
Address prefix
Next hop type
No results.
Add route
az104-06-rt32
Route name *
az104-06-route-vnet3-to-vnet2
Address prefix destination *
IP Addresses
Destination IP addresses/CIDR ranges *
10.62.0.0/20
Next hop type *
Virtual appliance
Next hop address *
10.60.0.4
Ensure you have IP forwarding enabled on your virtual appliance. You can enable this by navigating to the respective network interface's IP address settings.
Add


Home > Microsoft.RouteTable-20221103232230 | Overview > az104-06-rt32
az104-06-rt32 | Subnets
Route table
Search
Associate
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Settings
Configuration
Routes
Subnets
Properties
Locks
Monitoring
Alerts
Automation
Tasks (preview)
Export template
Help
Effective routes
New Support Request
Search subnets
Name
Address range
Virtual network
No results.
Associate subnet
az104-06-rt32
Virtual network
az104-06-vnet3
Subnet
subnet0
OK


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
NSG flow logs
Diagnostic logs
Traffic Analytics
Azure for students
Resource group *
az104-06-rg1
Source type *
Virtual machine
*Virtual machine
az104-06-vm3
Destination
Select a virtual machine
Specify manually
URI, FQDN or IP address *
10.62.0.4
Probe Settings
Protocol
TCP
ICMP
Destination port *
3389
Advanced settings
Check
Status
Reachable
Agent extension version
1.4
Source virtual machine
az104-06-vm3
Grid view
Topology view
Hops
Name
IP address
Status
Next hop IP address
RTT
az104-06-vm3
10.63.0.4
10.60.0.4
-
az104-06-nic0
10.60.0.4
10.62.0.4
-
az104-06-nic2
10.62.0.4
-
-
Average Latency in milliseconds


Home > Load balancing | Load Balancer >
Create load balancer ...
Basics
Frontend IP configuration
Backend pools
Inbound rules
Outbound rules
Tags
Review + create
Azure load balancer is a layer 4 load balancer that distributes incoming traffic among healthy virtual machine instances. Load balancers uses a hash-based distribution algorithm. By default, it uses a 5-tuple (source IP, source port, destination IP, destination port, protocol type) hash to map traffic to available servers. Load balancers can either be internet-facing where it is accessible via public IP addresses, or internal where it is only accessible from a virtual network. Azure load balancers also support Network Address Translation (NAT) to route traffic between public and private IP addresses. Learn more.
Project details
Subscription *
Azure for Students
Resource group *
az104-06-rg1
Create new
Instance details
Name *
az104-06-lb4
Region *
East US
SKU *
Standard
Gateway
Basic
Microsoft recommends Standard SKU load balancer for production workloads.
Learn more about pricing differences between Standard and Basic SKU
Type *
Public
Internal
Tier *
Regional
Global
Review + create
< Previous
Next : Frontend IP configuration >
Download a template for automation
Give feedback


Home > Load balancing | Load Balancer >
Create load balancer
Basics
Frontend IP configuration
Backend pools
Inbound rules
Outbound rules
Tags
Review + create
A frontend IP configuration is an IP address used for inbound and/or outbound communication as defined within load balancing, inbound NAT, and outbound rules.
Add a frontend IP configuration
Name
IP address
Add a frontend IP to get started
Review + create
< Previous
Next : Backend pools >
Download a template for automation
Give feedback
Add frontend IP configuration
Name *
az104-06-pip4
IP version
IPv4
IPv6
IP type
IP address
IP prefix
Public IP address *
Choose public IP address
Create new
Add a public IP address
Name *
az104-06-pip4
SKU
Basic
Standard
Tier
Regional
Global
Assignment
Dynamic
Static
Availability zone *
No Zone
OK
Cancel
Add

Home > Load balancing | Load Balancer > Create load balancer > Add backend pool >

Add IP configurations to backend pool ...

IP configurations associated to virtual machines and virtual machine scale sets must be in same location as the load balancer and be in the same virtual network.

Filter by name... | Location : eastus | Virtual network : az104-06-vnet01 | Add filter

Show resources that are not available for selection

	Resource Name	Resource group	Type	IP configuration	IP Address	Availability set	Tags
∨	Virtual machine (2)						
☑	az104-06-vm0	az104-06-rg1	Virtual machine	ipconfig1	10.60.0.4	-	-
☑	az104-06-vm1	az104-06-rg1	Virtual machine	ipconfig1	10.60.1.4	-	-

Add | Cancel | Give feedback

Home > Load balancing | Load Balancer > Create load balancer >

Add backend pool ...

Name * az104-06lb4-be1

Virtual network az104-06-vnet01 (az104-06-rg1)

Backend Pool Configuration

- (•) NIC
- ( ) IP address

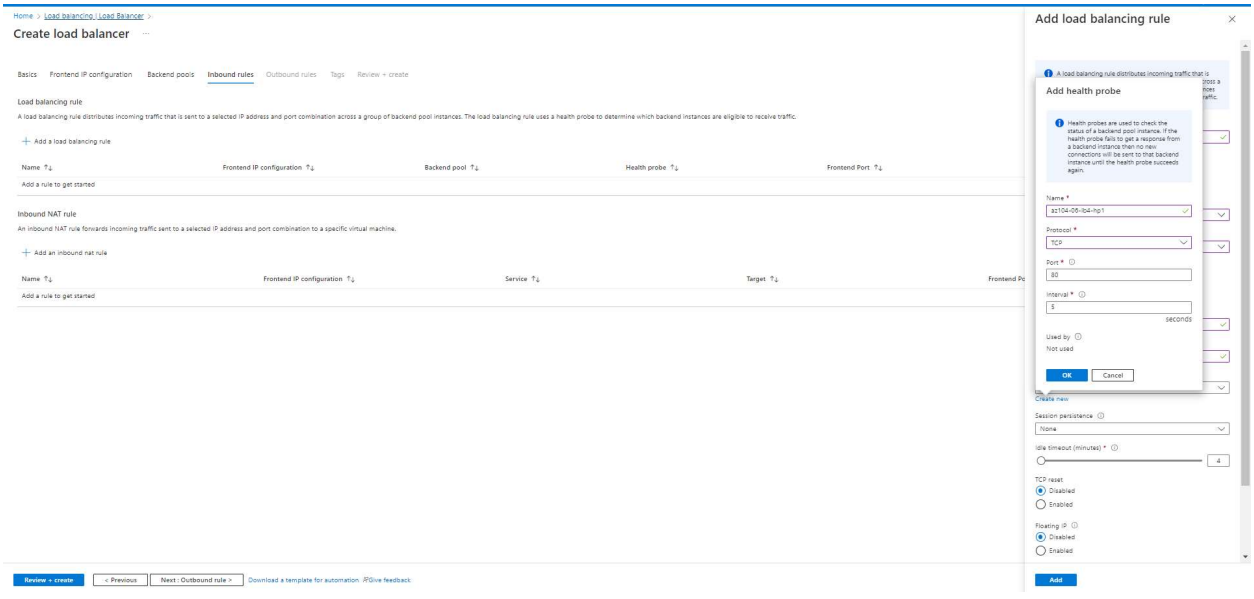
IP configurations

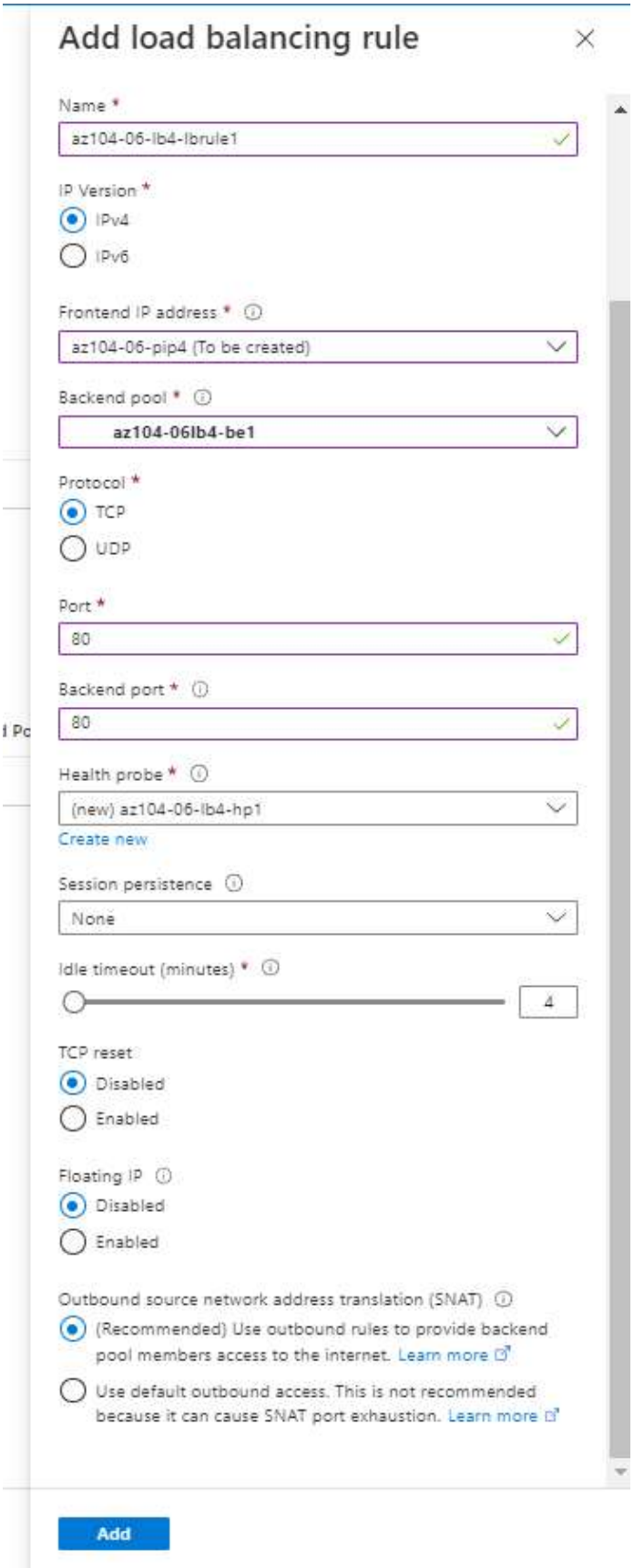
IP configurations associated to virtual machines and virtual machine scale sets must be in same location as the load balancer and be in the same virtual network.

+ Add | × Remove

Resource Na...	Resource gro...	Type	IP configurat...	IP Address	Availability ...
az104-06-vm0	az104-06-rg1	Virtual machine	ipconfig1	10.60.0.4	-
az104-06-vm1	az104-06-rg1	Virtual machine	ipconfig1	10.60.1.4	-

Save Cancel Give feedback


Home > Load balancing | Load Balancer >
Create load balancer
Basics
Frontend IP configuration
Backend pools
Inbound rules
Outbound rules
Tags
Review + create
Load balancing rule
A load balancing rule distributes incoming traffic that is sent to a selected IP address and port combination across a group of backend pool instances. The load balancing rule uses a health probe to determine which backend instances are eligible to receive traffic.
Add a load balancing rule
Name
Frontend IP configuration
Backend pool
Health probe
Frontend Port
Add a rule to get started
Inbound NAT rule
An inbound NAT rule forwards incoming traffic sent to a selected IP address and port combination to a specific virtual machine.
Add an inbound nat rule
Name
Frontend IP configuration
Service
Target
Add a rule to get started
Review + create
< Previous
Next : Outbound rule >
Download a template for automation
Give feedback
Add load balancing rule
Add health probe
Health probes are used to check the status of a backend pool instance. If the health probe fails to get a response from a backend instance then no new connections will be sent to that backend instance until the health probe succeeds again.
Name *
az104-06-lb4-hp1
Protocol *
TCP
Port *
80
Interval *
5
seconds
Used by
Not used
OK
Cancel
Create new
Session persistence
None
Idle timeout (minutes) *
4
TCP reset
Disabled
Enabled
Floating IP
Disabled
Enabled
Add


Add load balancing rule
Name *
az104-06-lb4-lbrule1
IP Version *
IPv4
IPv6
Frontend IP address *
az104-06-pip4 (To be created)
Backend pool *
az104-06lb4-be1
Protocol *
TCP
UDP
Port *
80
Backend port *
80
Health probe *
(new) az104-06-lb4-hp1
Create new
Session persistence
None
Idle timeout (minutes) *
4
TCP reset
Disabled
Enabled
Floating IP
Disabled
Enabled
Outbound source network address translation (SNAT)
(Recommended) Use outbound rules to provide backend pool members access to the internet. Learn more
Use default outbound access. This is not recommended because it can cause SNAT port exhaustion. Learn more
Add

Create load balancer

Validation passed

Basics | Frontend IP configuration | Backend pools | Inbound rules | Outbound rules | Tags | Review + create

Basics

Subscription	Azure for Students
Resource group	az104-06-rg1
Name	az104-06-lb4
Region	East US
SKU	Standard
Tier	Regional
Type	Public

Frontend IP configuration

Frontend IP configuration name	az104-06-pip4
Frontend IP configuration IP address	To be created

Backend pools

Backend pool name	az104-06lb4-be1

Inbound rules

Load balancing rule name	az104-06-lb4-lbrule1
Health probe name	az104-06-lb4-hp1

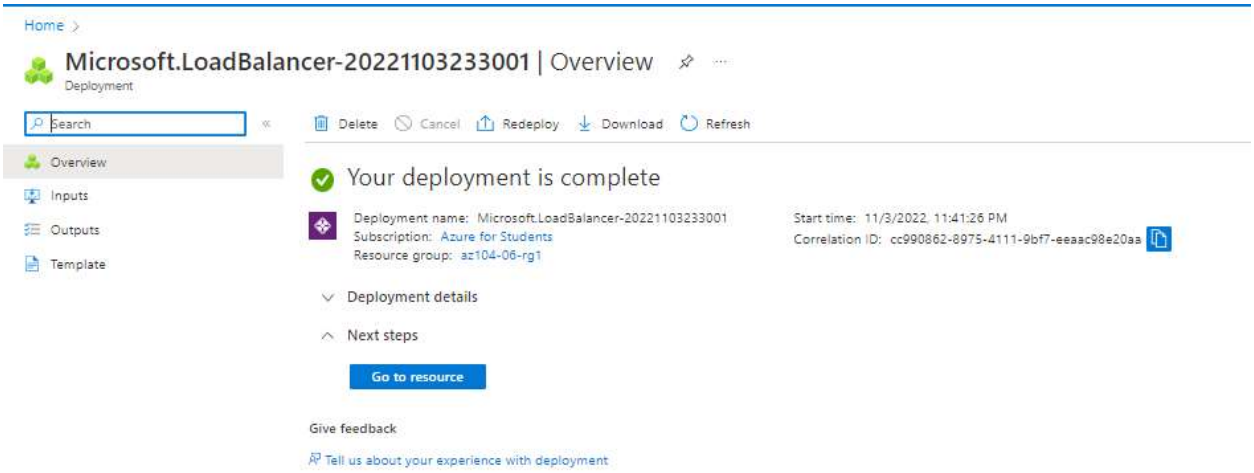
Outbound rules

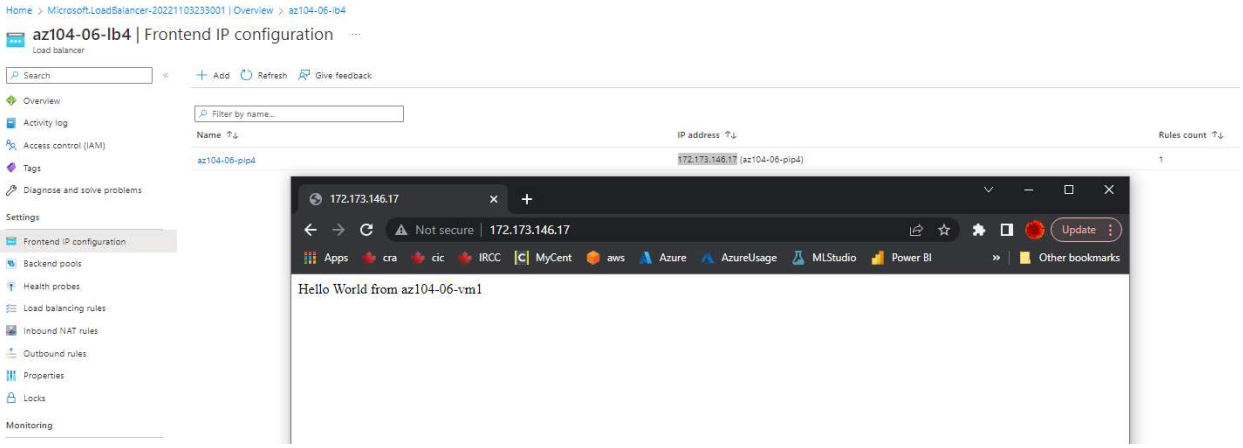
None

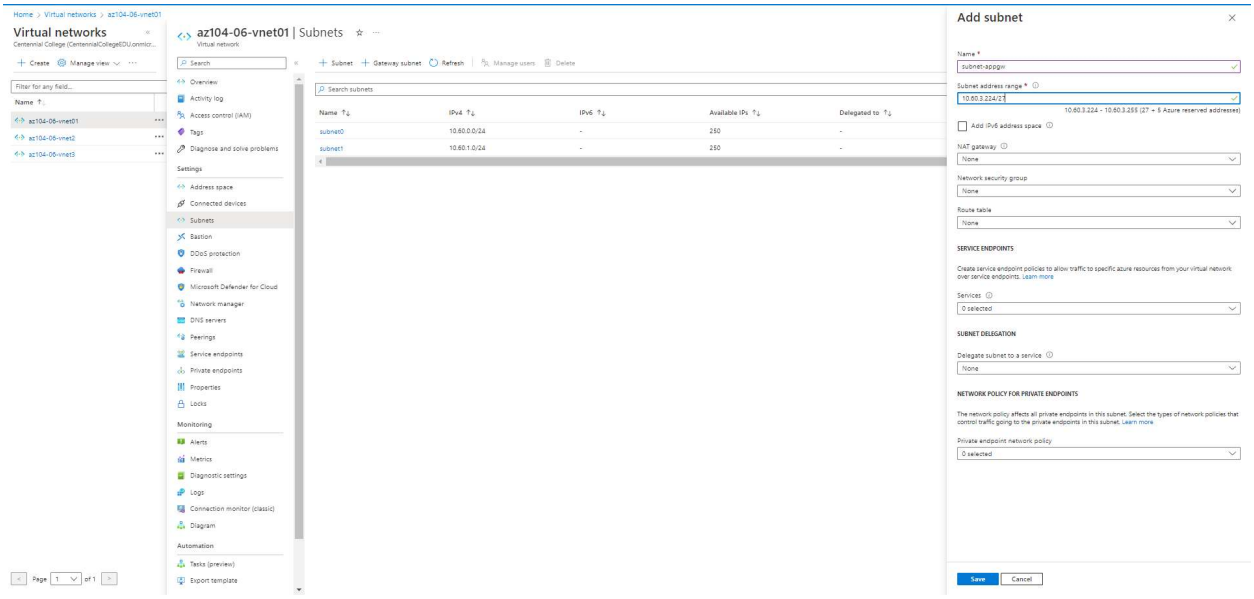
Tags

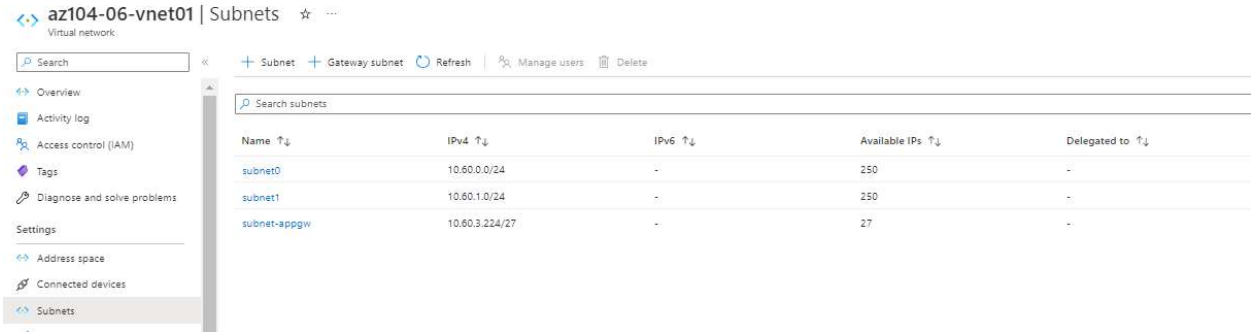
None

Create | < Previous | Next > | Download a template for automation | Give feedback


Home
Microsoft.LoadBalancer-20221103233001 | Overview
Deployment
Search
Overview
Inputs
Outputs
Template
Delete
Cancel
Redeploy
Download
Refresh
Your deployment is complete
Deployment name: Microsoft.LoadBalancer-20221103233001
Subscription: Azure for Students
Resource group: az104-06-rg1
Start time: 11/3/2022, 11:41:26 PM
Correlation ID: cc990862-8975-4111-9bf7-eeaac98e20aa
Deployment details
Next steps
Go to resource
Give feedback
Tell us about your experience with deployment


Home > Microsoft.LoadBalancer-20221103233001 | Overview > az104-06-lb4
az104-06-lb4 | Frontend IP configuration
Load balancer
Search
Add
Refresh
Give feedback
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Settings
Frontend IP configuration
Backend pools
Health probes
Load balancing rules
Inbound NAT rules
Outbound rules
Properties
Locks
Monitoring
Filter by name...
Name
IP address
Rules count
az104-06-pip4
172.173.146.17 (az104-06-pip4)
1
172.173.146.17
Not secure | 172.173.146.17
Update
Apps
cra
cic
IRCC
MyCent
aws
Azure
AzureUsage
MLStudio
Power BI
Other bookmarks
Hello World from az104-06-vm1


Home > Virtual networks > az104-06-vnet01
Virtual networks
Centennial College (CentennialCollegeEDU.onmic...
+ Create
Manage view
Filter for any field...
Name
az104-06-vnet01
az104-06-vnet2
az104-06-vnet3
Page 1 of 1
az104-06-vnet01 | Subnets
Virtual network
Search
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
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
Monitoring
Alerts
Metrics
Diagnostic settings
Logs
Connection monitor (classic)
Diagram
Automation
Tasks (preview)
Export template
+ Subnet
+ Gateway subnet
Refresh
Manage users
Delete
Search subnets
Name
IPv4
IPv6
Available IPs
Delegated to
subnet0
10.60.0.0/24
-
250
-
subnet1
10.60.1.0/24
-
250
-
Add subnet
Name *
subnet-appgw
Subnet address range *
10.60.3.224/27
10.60.3.224 - 10.60.3.255 (27 + 5 Azure reserved addresses)
Add IPv6 address space
NAT gateway
None
Network security group
None
Route table
None
SERVICE ENDPOINTS
Create service endpoint policies to allow traffic to specific azure resources from your virtual network over service endpoints. Learn more
Services
0 selected
SUBNET DELEGATION
Delegate subnet to a service
None
NETWORK POLICY FOR PRIVATE ENDPOINTS
The network policy affects all private endpoints in this subnet. Select the types of network policies that control traffic going to the private endpoints in this subnet. Learn more
Private endpoint network policy
0 selected
Save
Cancel


az104-06-vnet01 | Subnets
Virtual network
Search
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Settings
Address space
Connected devices
Subnets
+ Subnet
+ Gateway subnet
Refresh
Manage users
Delete
Search subnets
Name
IPv4
IPv6
Available IPs
Delegated to
subnet0
10.60.0.0/24
-
250
-
subnet1
10.60.1.0/24
-
250
-
subnet-appgw
10.60.3.224/27
-
27
-

Home > Load balancing | Application Gateway >

Create application gateway ...

1 Basics 2 Frontends 3 Backends 4 Configuration 5 Tags 6 Review + create

An application gateway is a web traffic load balancer that enables you to manage traffic to your web application. Learn more about application gateway

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 * : az104-06-rg1

Create new

Instance details

Application gateway name * : az104-06-appgw5

Region * : East US

Tier : Standard V2

Enable autoscaling : Yes / No

Instance count : 2

Availability zone : None

HTTP2 : Disabled / Enabled

Configure virtual network

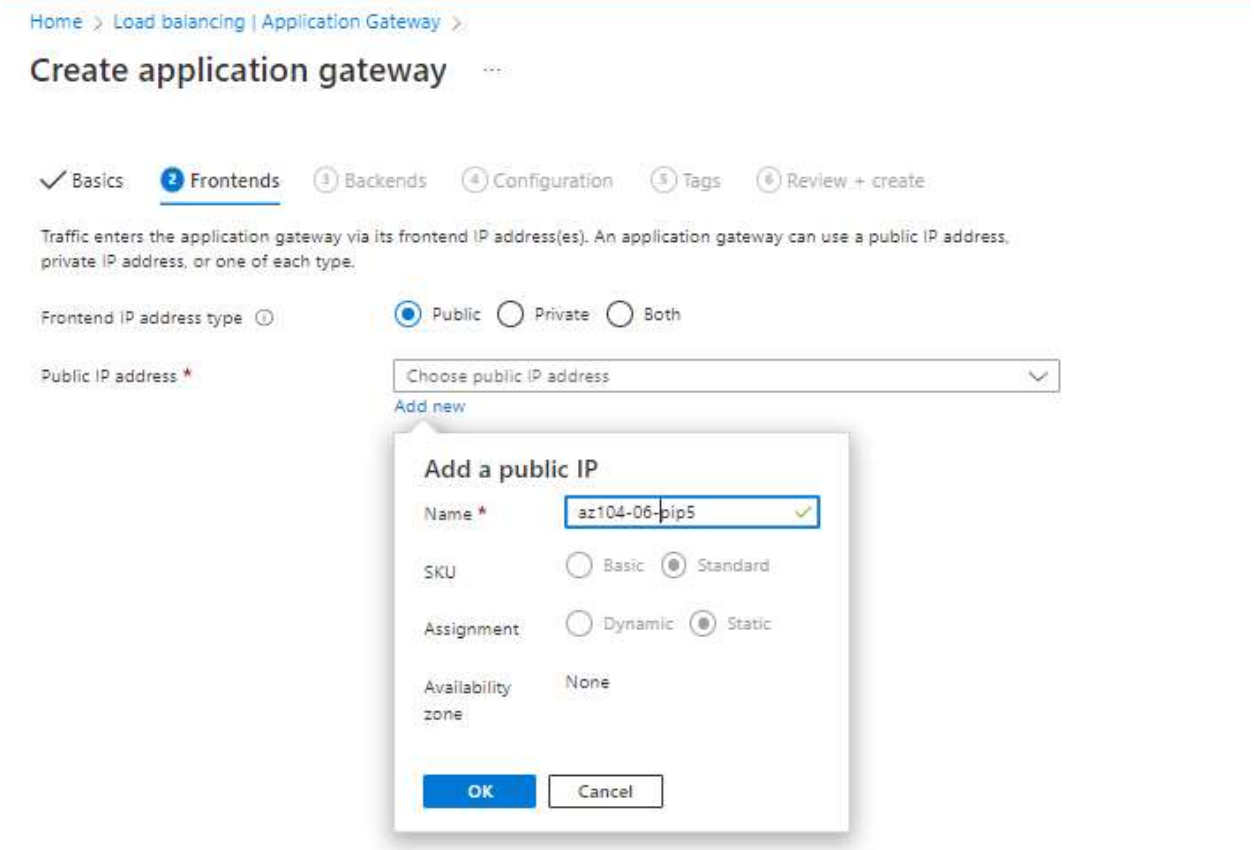
Virtual network * : az104-06-vnet01

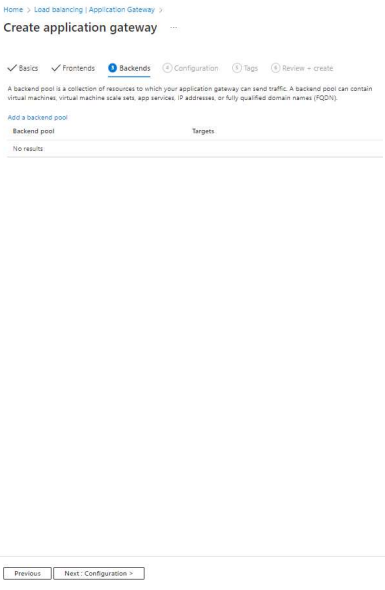
Create new

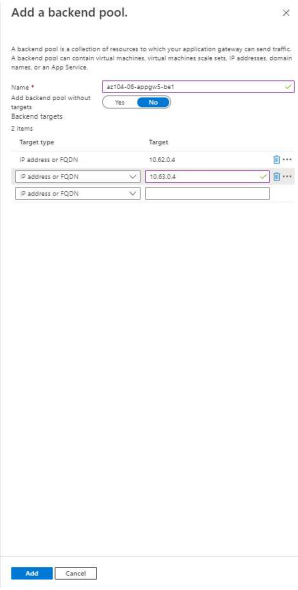
Subnet * : subnet-appgw (10.60.3.224/27)

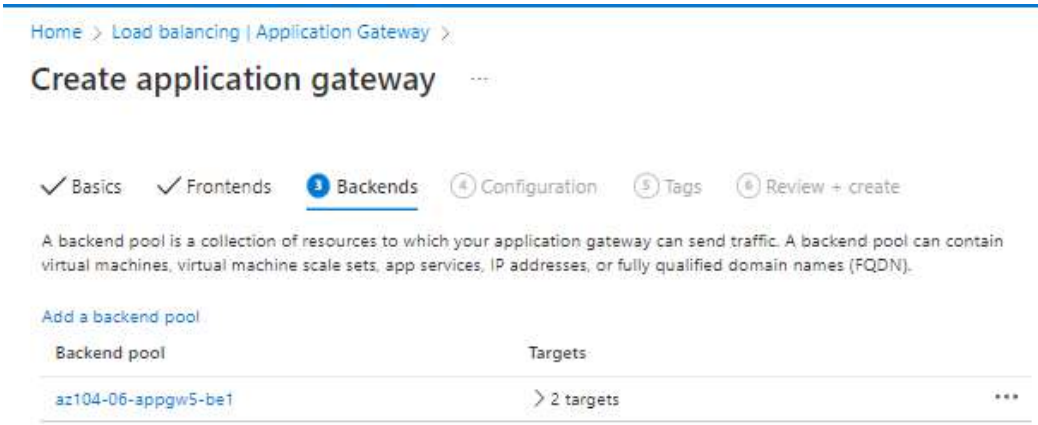
Manage subnet configuration

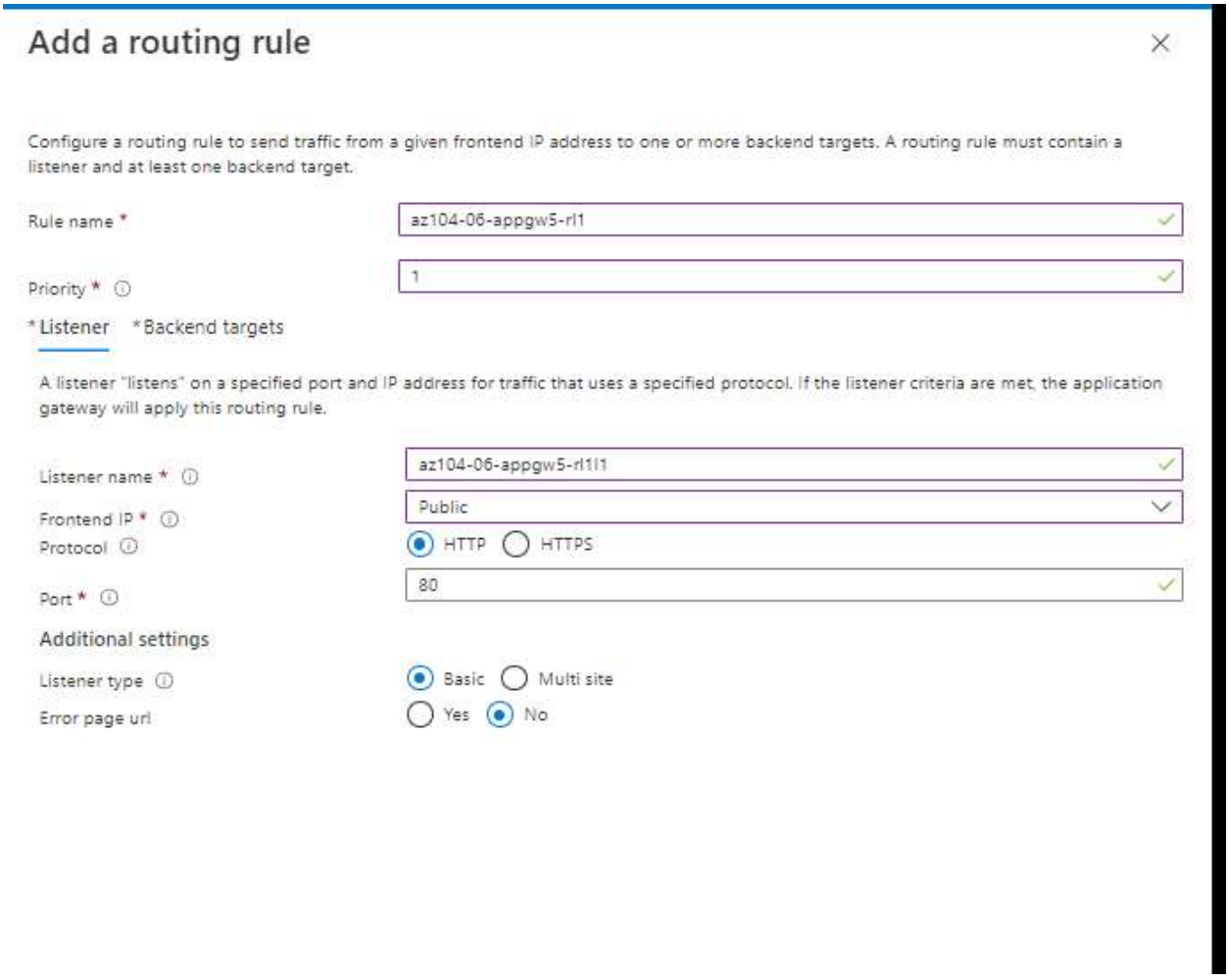
Previous | Next : Frontends >


Home > Load balancing | Application Gateway >
Create application gateway
Basics
2 Frontends
3 Backends
4 Configuration
5 Tags
6 Review + create
Traffic enters the application gateway via its frontend IP address(es). An application gateway can use a public IP address, private IP address, or one of each type.
Frontend IP address type
Public
Private
Both
Public IP address *
Choose public IP address
Add new
Add a public IP
Name *
az104-06-pip5
SKU
Basic
Standard
Assignment
Dynamic
Static
Availability zone
None
OK
Cancel


Create application gateway
Basics
Frontends
Backends
Configuration
Tags
Review + create
Add a backend pool
Backend pool
Targets
No results
Previous
Next : Configuration >


Add a backend pool.
Name *
Add backend pool without targets
Yes
No
Backend targets
Target type
Target
IP address or FQDN
10.62.0.4
10.63.0.4
Add
Cancel


Home > Load balancing | Application Gateway >
Create application gateway
Basics
Frontends
3 Backends
4 Configuration
5 Tags
6 Review + create
A backend pool is a collection of resources to which your application gateway can send traffic. A backend pool can contain virtual machines, virtual machine scale sets, app services, IP addresses, or fully qualified domain names (FQDN).
Add a backend pool
Backend pool
Targets
az104-06-appgw5-be1
2 targets


Add a routing rule
Configure a routing rule to send traffic from a given frontend IP address to one or more backend targets. A routing rule must contain a listener and at least one backend target.
Rule name *
az104-06-appgw5-rl1
Priority *
1
*Listener
*Backend targets
A listener "listens" on a specified port and IP address for traffic that uses a specified protocol. If the listener criteria are met, the application gateway will apply this routing rule.
Listener name *
az104-06-appgw5-rl1l1
Frontend IP *
Public
Protocol
HTTP
HTTPS
Port *
80
Additional settings
Listener type
Basic
Multi site
Error page url
Yes
No

Add Backend setting

← Discard changes and go back to routing rules

Backend settings name *: az104-06-appgw5-http1

Backend protocol: (•) HTTP ( ) HTTPS

Backend port *: 80

Additional settings

Cookie-based affinity: ( ) Enable (•) Disable

Connection draining: ( ) Enable (•) Disable

Request time-out (seconds) *: 20

Override backend path:

Host name

By default, Application Gateway does not change the incoming HTTP host header from the client and sends the header unaltered to the backend. Multi-tenant services like App service or API management rely on a specific host header or SNI extension to resolve to the correct endpoint. Change these settings to overwrite the incoming HTTP host header.

Override with new host name: Yes / **No**

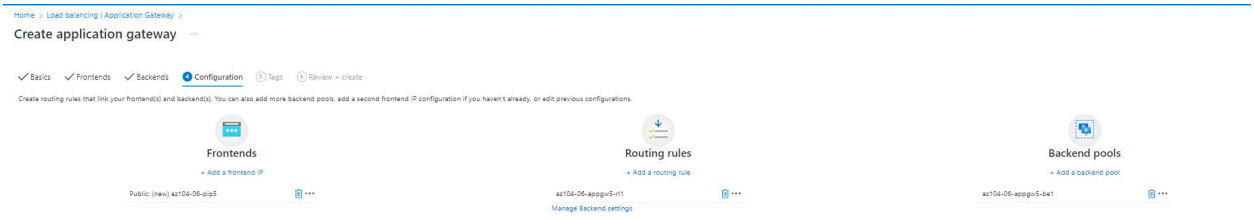
( ) Pick host name from backend target

(•) Override with specific domain name

Host name override

Host name: e.g. contoso.com

Create custom probes: Yes / No



Home > Load balancing | Application Gateway >

Create application gateway ...

Validation passed

✓ Basics ✓ Frontends ✓ Backends ✓ Configuration ✓ Tags Review + create

Basics

Subscription	Azure for Students
Resource group	az104-06-rg1
Name	az104-06-appgw5
Region	East US
Tier	Standard_v2
Enable autoscaling	Disabled
Instance count	2
Availability zone	None
HTTP2	Disabled
Virtual network	az104-06-vnet01
Subnet	subnet-appgw (10.60.3.224/27)
Subnet address space	10.60.3.224/27

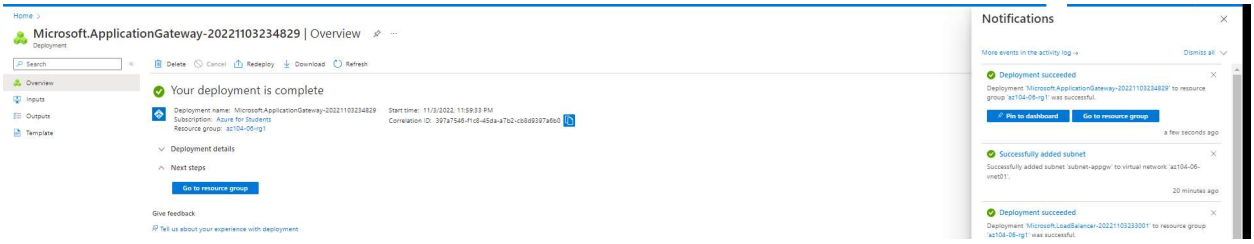
Frontends

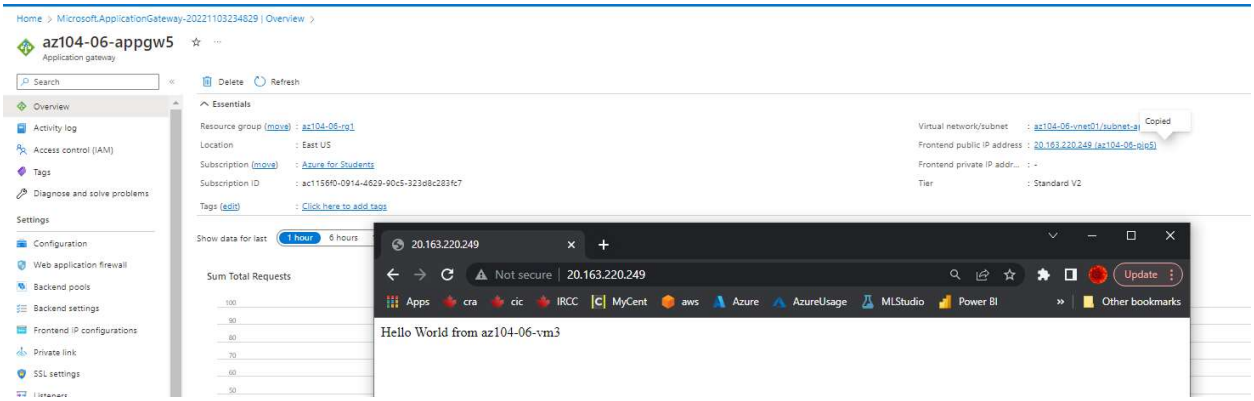
Public IP address name	az104-06-pip5
SKU	Standard
Assignment	Static
Availability zone	None

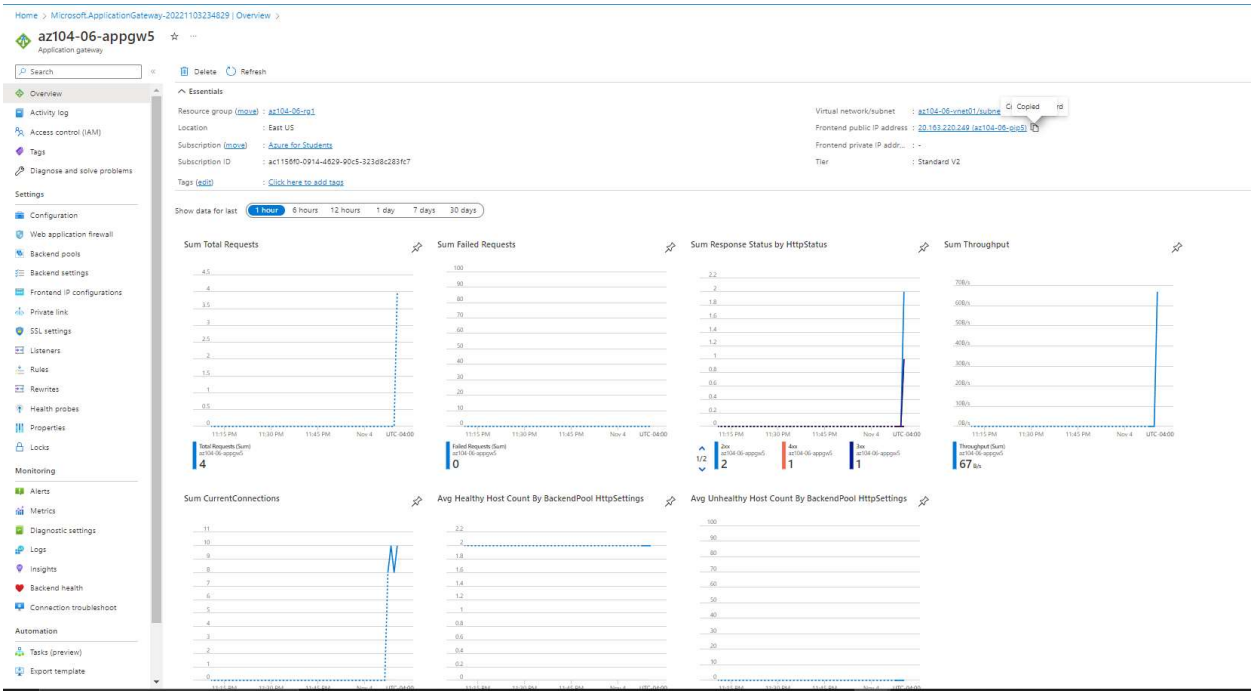
Tags

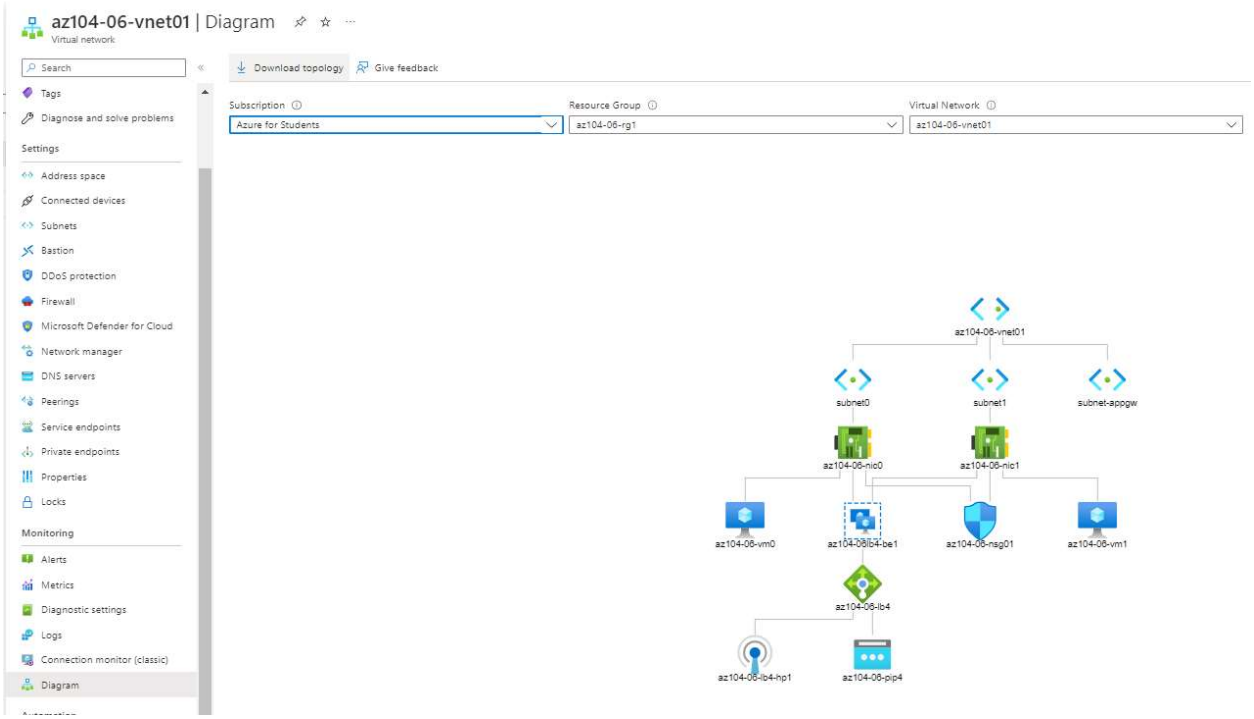
None

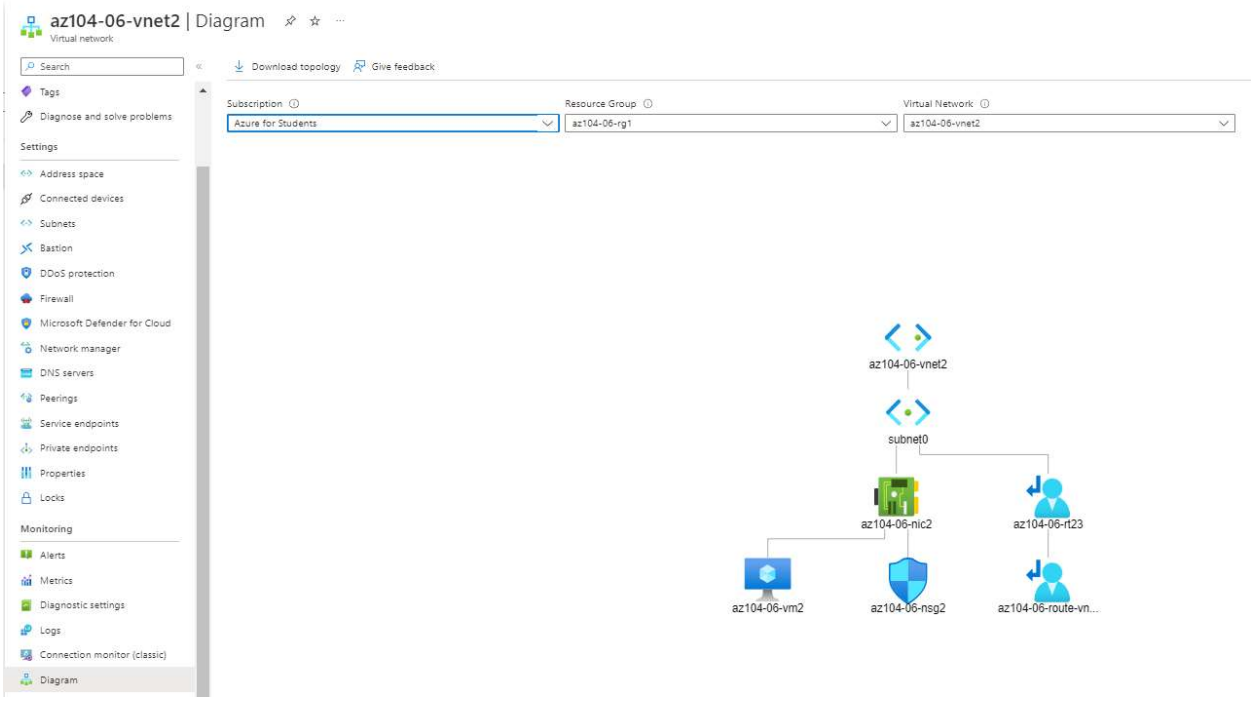
Create Previous Next Download a template for automation

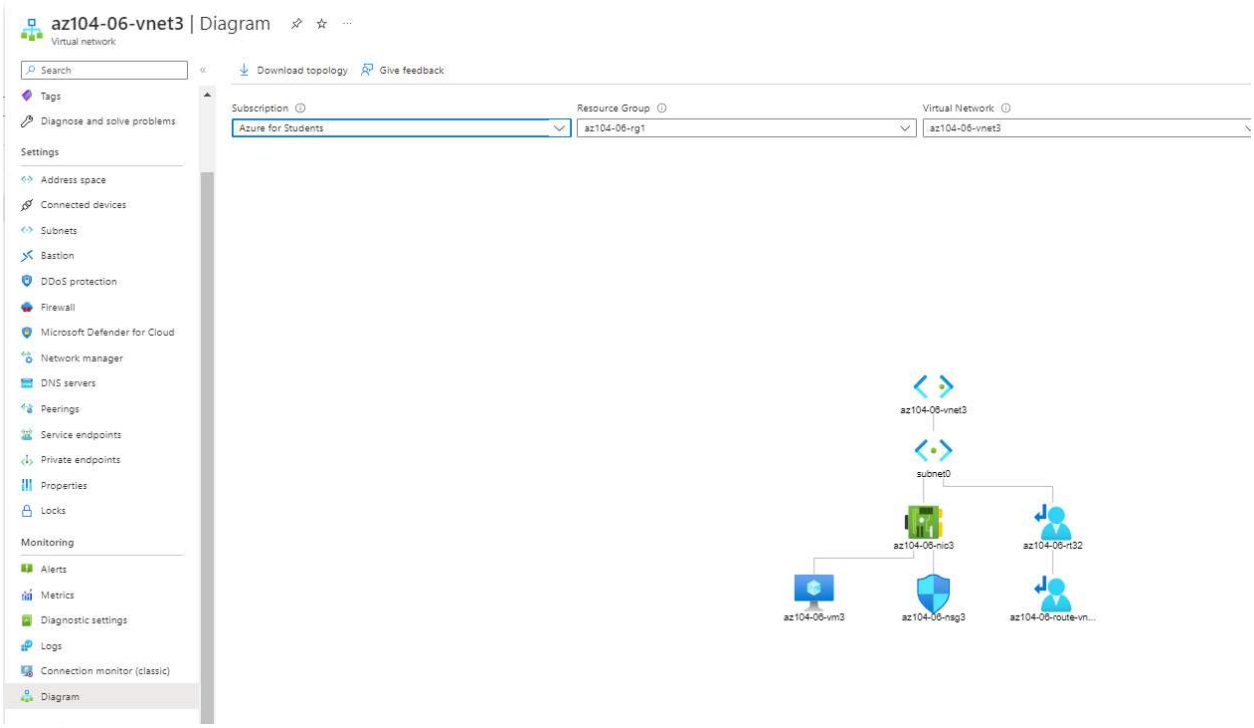

Microsoft.ApplicationGateway-20221103234829 | Overview
Your deployment is complete
Notifications
Deployment succeeded
Successfully added subnet
Deployment succeeded

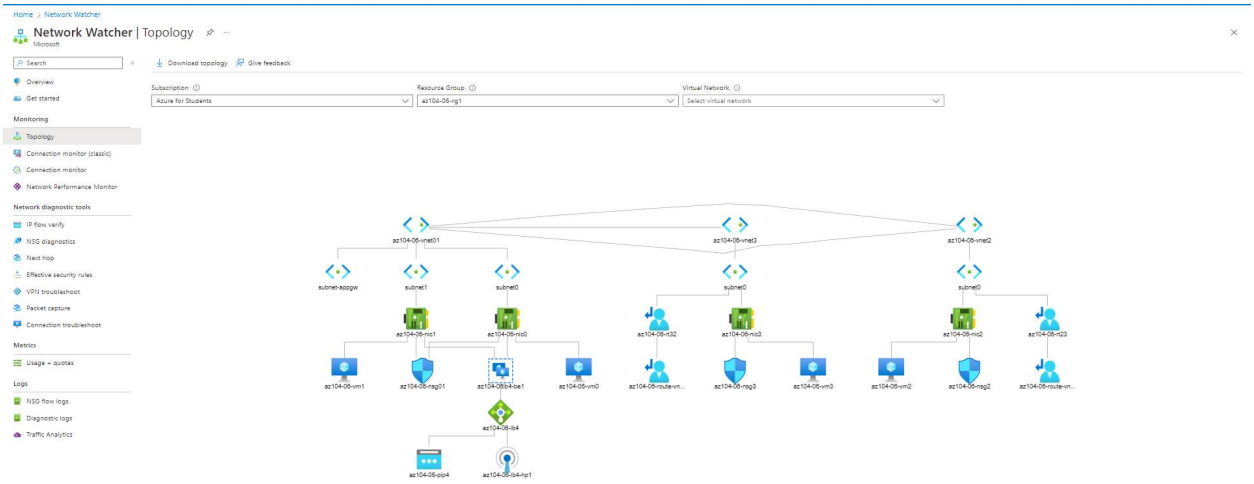

az104-06-appgw5
Application gateway
Essentials
20.163.220.249
Not secure | 20.163.220.249
Hello World from az104-06-vm3

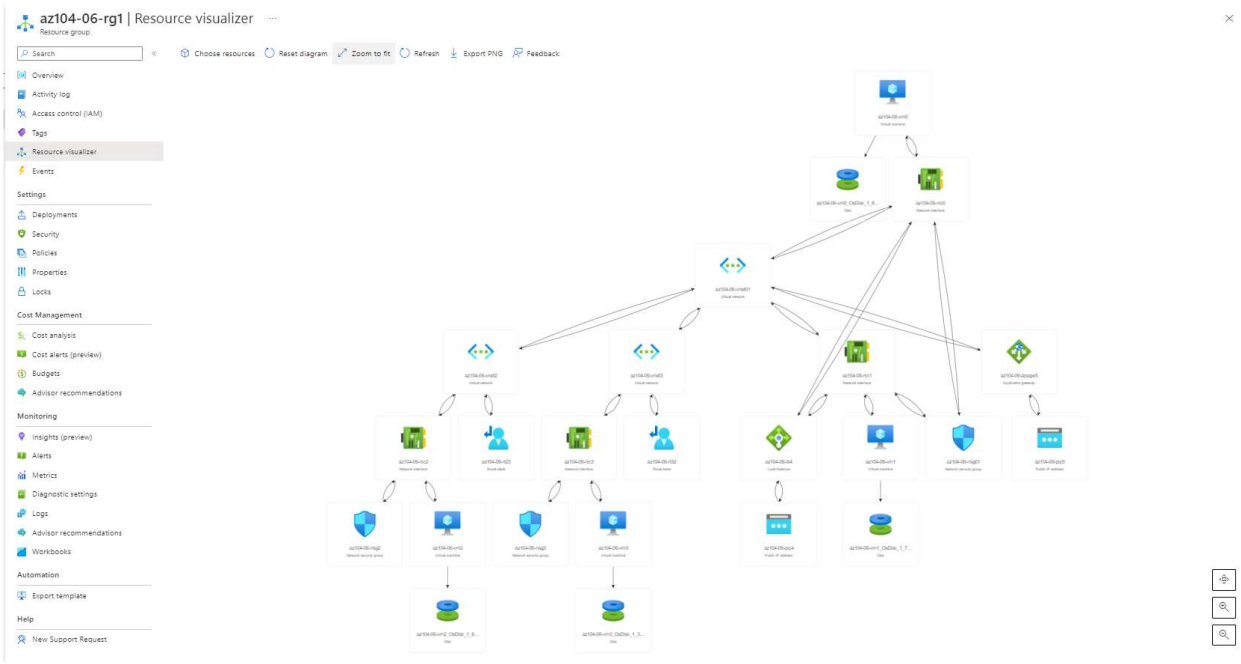

az104-06-appgw5
Application gateway
Sum Total Requests
Sum Failed Requests
Sum Response Status by HttpStatus
Sum Throughput
Sum CurrentConnections
Avg Healthy Host Count By BackendPool HttpSettings
Avg Unhealthy Host Count By BackendPool HttpSettings


az104-06-vnet01 | Diagram
Virtual network
Search
Download topology
Give feedback
Tags
Diagnose and solve problems
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
Monitoring
Alerts
Metrics
Diagnostic settings
Logs
Connection monitor (classic)
Diagram
Subscription
Azure for Students
Resource Group
az104-06-rg1
Virtual Network
az104-06-vnet01
az104-06-vnet01
subnet0
subnet1
subnet-appgw
az104-06-nic0
az104-06-nic1
az104-06-vm0
az104-06-lb4-be1
az104-06-nsg01
az104-06-vm1
az104-06-lb4
az104-06-lb4-hp1
az104-06-pip4


az104-06-vnet2 | Diagram
Virtual network
Search
Download topology
Give feedback
Tags
Diagnose and solve problems
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
Monitoring
Alerts
Metrics
Diagnostic settings
Logs
Connection monitor (classic)
Diagram
Subscription
Azure for Students
Resource Group
az104-06-rg1
Virtual Network
az104-06-vnet2
az104-06-vnet2
subnet0
az104-06-nic2
az104-06-rt23
az104-06-vm2
az104-06-nsg2
az104-06-route-vn...


az104-06-vnet3 | Diagram
Virtual network
Search
Download topology
Give feedback
Tags
Diagnose and solve problems
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
Monitoring
Alerts
Metrics
Diagnostic settings
Logs
Connection monitor (classic)
Diagram
Subscription
Azure for Students
Resource Group
az104-06-rg1
Virtual Network
az104-06-vnet3
az104-06-vnet3
subnet0
az104-06-nic3
az104-06-rt32
az104-06-vm3
az104-06-nsg3
az104-06-route-vn...


Home > Network Watcher
Network Watcher | Topology
Microsoft
Search
Download topology
Give feedback
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
NSG flow logs
Diagnostic logs
Traffic Analytics
Subscription
Azure for Students
Resource Group
az104-06-rg1
Virtual Network
Select virtual network
az104-06-vnet01
az104-06-vnet3
az104-06-vnet2
subnet-appgw
subnet1
subnet0
subnet0
subnet0
az104-06-nic1
az104-06-nic0
az104-06-rt32
az104-06-nic3
az104-06-nic2
az104-06-rt23
az104-06-vm1
az104-06-nsg01
az104-06-vm0
az104-06-route-vn...
az104-06-nsg3
az104-06-vm3
az104-06-vm2
az104-06-nsg2
az104-06-route-vn...
az104-06-lb4
az104-06-pip4
az104-06-lb4-hp1


az104-06-rg1 | Resource visualizer
Resource group
Search
Choose resources
Reset diagram
Zoom to fit
Refresh
Export PNG
Feedback
Overview
Activity log
Access control (IAM)
Tags
Resource visualizer
Events
Settings
Deployments
Security
Policies
Properties
Locks
Cost Management
Cost analysis
Cost alerts (preview)
Budgets
Advisor recommendations
Monitoring
Insights (preview)
Alerts
Metrics
Diagnostic settings
Logs
Advisor recommendations
Workbooks
Automation
Export template
Help
New Support Request