

M08-Unit 3 Monitor a load balancer resource using Azure Monitor

Task 1: Create the virtual network

1. Log in to the Azure portal. 2. On the Azure portal home page, search Virtual Network and select virtual network under services.

Create virtual network

[Basics](#) [IP Addresses](#) [Security](#) [Tags](#) [Review + create](#)

Azure Virtual Network (VNet) is the fundamental building block for your private network in Azure. VNet enables many types of Azure resources, such as Azure Virtual Machines (VM), to securely communicate with each other, the internet, and on-premises networks. VNet is similar to a traditional network that you'd operate in your own data center, but brings with it additional benefits of Azure's infrastructure such as scale, availability, and isolation. [Learn more about virtual network](#)

Project details

Subscription * ⓘ
Resource group * ⓘ

Azure for Students
Create new

Instance details

Name *
Region *

West Europe

[Review + create](#) [< Previous](#) [Next : IP Addresses >](#) [Download a template for automation](#)

2. Click + Create. +4. On the Basics tab, use the information in the table below to create the virtual network.

Create virtual network

[Basics](#) [IP Addresses](#) [Security](#) [Tags](#) [Review + create](#)

Azure Virtual Network (VNet) is the fundamental building block for your private network in Azure. VNet enables many types of Azure resources, such as Azure Virtual Machines (VM), to securely communicate with each other, the internet, and on-premises networks. VNet is similar to a traditional network that you'd operate in your own data center, but brings with it additional benefits of Azure's infrastructure such as scale, availability, and isolation. [Learn more about virtual network](#)

Project details

Subscription * ⓘ
Resource group * ⓘ

Azure for Students
(New) IntLB-RG
Create new

Instance details

Name *
Region *

IntLB-VNet
West US

[Review + create](#) [< Previous](#) [Next : IP Addresses >](#) [Download a template for automation](#)

5. Click Next : IP Addresses.+ 6. On the IP Addresses tab, in the IPv4 address space box, type 10.1.0.0/16.

Basics

IP Addresses

Security

Tags

Review + create

The virtual network's address space, specified as one or more address prefixes in CIDR notation (e.g. 192.168.1.0/24).

IPv4 address space

10.1.0.0/16

✓

☐ Add IPv6 address space ⓘ

The subnet's address range in CIDR notation (e.g. 192.168.1.0/24). It must be contained by the address space of the virtual network.

+

 Add subnet Remove subnet

Subnet name	Subnet address range	NAT gateway
This virtual network doesn't have any subnets.		

✗

 This virtual network doesn't have any subnets.

7. Above Subnet name, select + Add subnet. +8. In the Add subnet pane, provide a subnet name of myBackendSubnet, and a subnet address range of 10.1.0.0/24.

. 192.168.1.0/24).

✓

less space of the virtual

ay

[Download a template for automation](#)

Add subnet

Subnet name *

myBackendSubnet ✓

Subnet address range * ⓘ

10.1.0.0/24 ✓

10.1.0.0 - 10.1.0.255 (251 + 5 Azure reserved addresses)

NAT GATEWAY

Simplify connectivity to the internet using a network address translation gateway. Outbound connectivity is possible without a load balancer or public IP addresses attached to your virtual machines. [Learn more](#)

NAT gateway

None

SERVICE ENDPOINTS

Create service endpoint policies to allow traffic to specific azure resources from your virtual network over service endpoints. [Learn more](#)

Add

Cancel

9. Click Add. +10. Click Next : Security.+ 11. Under BastionHost select Enable, then enter the information from the table below.

Create virtual network

Basics IP Addresses **Security** Tags Review + create

BastionHost ⓘ

☐ Disable
☒ Enable

Bastion name *

myBastionHost ✓

AzureBastionSubnet address space *

10.1.1.0/24 ✓

10.1.1.0 - 10.1.1.255 (256 addresses)

Public IP address *

(New) myBastionIP

[Create new](#)

DDoS Protection Standard ⓘ

☒ Disable
☐ Enable

Firewall ⓘ

☒ Disable
☐ Enable

[Review + create](#)

[< Previous](#)

[Next : Tags >](#)

[Download a template for automation](#)

12. Click Review + create.+13. Click Create

The screenshot shows the 'Overview' page for a Microsoft Virtual Network deployment. The title bar reads 'Microsoft.VirtualNetwork-20220927103723 | Overview'. Below the title bar is a search bar and a row of action buttons: Delete, Cancel, Redeploy, Download, and Refresh. A left-hand navigation pane contains links for Overview (selected), Inputs, Outputs, and Template. The main content area features a green checkmark icon and the text 'Your deployment is complete'. Below this, deployment details are listed: Deployment name (Microsoft.VirtualNetwork-20220927...), Subscription (Azure for Students), and Resource group (intLB-RG). It also shows the Start time (9/27/2022, 10:56:10 AM) and Correlation ID (2c771595-1d66-4e67-bb54-14516833940d). A 'Go to resource' button is present. On the right, there are three informational cards: 'Cost Management' (with a dollar sign icon), 'Microsoft Defender for Cloud' (with a shield icon), and 'Free Microsoft tutorials' (with a book icon).

Task 2: Create the load balancer

1.On the Azure home page, in the search bar, enter Load Balancer +2.Select Create Load Balancer.

The screenshot shows the 'Create load balancer' wizard in the Azure portal. The title bar says 'Create load balancer'. The wizard has several tabs: Basics (selected), Frontend IP configuration, Backend pools, Inbound rules, Outbound rules, Tags, and Review + create. A descriptive paragraph about Azure load balancers is provided. The 'Project details' section includes dropdowns for 'Subscription' (set to 'Azure for Students') and 'Resource group' (with a 'Create new' link). The 'Instance details' section includes a 'Name' text box, a 'Region' dropdown (set to 'West Europe'), and a 'SKU' section with radio buttons for 'Standard' (selected) and 'Gateway'. At the bottom, there are navigation buttons: 'Review + create', '< Previous', 'Next : Frontend IP configuration >', 'Download a template for automation', and 'Give feedback'.

3.On the Basics tab, use the information in the table below to create the load balancer.

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 * IntLB-RG

Create new

Instance details

Name * myIntLoadBalancer

Region * West US

SKU * ☒ Standard ☐ Gateway

or outbound communication as defined within load balancing, inbound NAT, and outbound ru

is Virtual network

Add frontend IP configuration ×

Name * LoadBalancerFrontEnd

Virtual network IntLB-VNet

Subnet * myBackendSubnet (10.1.0.0/24)

Assignment ☒ Dynamic ☐ Static

4. Click Review + create. +5. Click Create.

The screenshot shows the 'Overview' page for a Microsoft Load Balancer deployment. The deployment name is 'Microsoft.LoadBalancer-20220927111735'. The status is 'Your deployment is complete'. The deployment details show it was created on 9/27/2022 at 11:24:19 AM. The subscription is 'Azure for Students' and the resource group is 'IntLB-RG'. The page includes a sidebar with navigation links for Overview, Inputs, Outputs, and Template. On the right, there are links to Cost Management, Microsoft Defender for Cloud, and Free Microsoft tutorials.

Task 3: Create a backend pool

1. On the Azure portal home page, click All resources, then click on myIntLoadBalancer from the resources list. + 2. Under Settings, select Backend pools, and then click Add.

The screenshot shows the 'Add backend pool' form for the 'myIntLoadBalancer' resource. The form includes fields for Name (myBackendPool), Virtual network (IntLB-VNet), and Backend Pool Configuration (NIC selected). Below the form, there is a section for IP configurations with a message: 'Unable to find any IP configuration that matches the above criteria.' At the bottom, there is a table with columns: Resource Name, Resource group, Type, IP configuration, IP Address, and Availability. The table is currently empty. The form has 'Save', 'Cancel', and 'Give feedback' buttons at the bottom.

4.Click Add.

myIntLoadBalancer | Backend pools

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

Properties

Locks

Filter by name...

Backend pool == all Resource Name == all Resource Status == all IP address == all Network interface == all Availability zone == all

Group by Backend pool

Backend pool	Resource Name	Resource Status	IP address	Network interface	Availability zone	Resources
myBackendPool						0
myBackendPool						

Task 4: Create a health probe

- 1.From the Backend pools page of your load balancer, under Settings, click Health probes, then click Add+ 2.On the Add health probe page, enter the information from the table below.

Add health probe

myIntLoadBalancer

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 *

myHealthProbe

Protocol *

HTTP

Port *

80

Path *

/

Interval *

15

seconds

Used by

Not used

3. Click Add.

myIntLoadBalancer | Health probes ...

Load balancer

Search << + Add Refresh Give feedback

Filter by name...

Name ↑↓	Protocol ↑↓	Port ↑↓	Path ↑↓	Used By ↑↓	
myHealthProbe	HTTP	80	/	-	**

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

Properties

Locks

Task 5: Create a load balancer rule

1. From the Backend pools page of your load balancer, under Settings, click Load balancing rules, then click Add.+2. On the Add load balancing rule page, enter the information from the table below.

Add load balancing rule ...

myIntLoadBalancer

backend pool instances. Only backend instances that the health probe considers healthy receive new traffic.

Name * myHTTPRule ✓

IP Version * ☒ IPv4 ☐ IPv6

Frontend IP address * ① LoadBalancerFrontEnd (10.1.0.4) ✓

Backend pool * ① myBackendPool ✓

☐ HA Ports ①

Protocol * ☒ TCP ☐ UDP

Port * 80 ✓

Backend port * ① 80 ✓

Health probe * ① myHealthProbe (HTTP:80) ✓
[Create new](#)

Health probe * ① myHealthProbe (HTTP:80) ✓
[Create new](#)

Session persistence ① None ✓

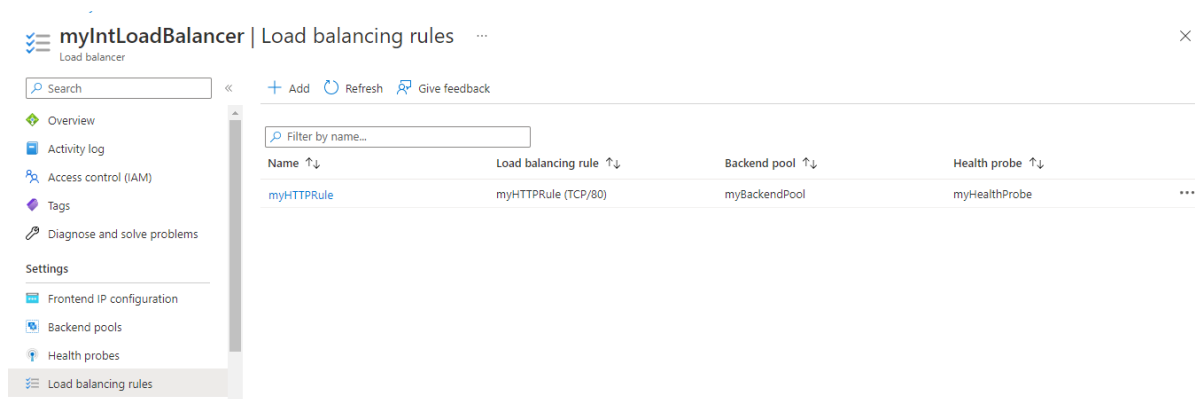
Idle timeout (minutes) * ① 15

TCP reset ☒ Disabled ☐ Enabled

Floating IP ① ☒ Disabled ☐ Enabled

Add Give feedback

3.Click Add.



Task 6: Create backend servers

1.In the Azure portal, open the PowerShell session within the Cloud Shell pane. + 2.In the toolbar of the Cloud Shell pane, click the Upload/Download files icon, in the drop-down menu, click Upload and upload the following files azuredeploy.json, azuredeploy.parameters.vm1.json, azuredeploy.parameters.vm2.json and azuredeploy.parameters.vm3.json into the Cloud Shell home directory one by one from the source folder F:\Allfiles\Exercises\M08.

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

Welcome to Azure Cloud Shell

Type "az" to use Azure CLI
Type "help" to learn about Cloud Shell

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

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

Upload destination: /home/ilunga

azuredeploy.parameters.vm3.json COMPLETE

3. Deploy the following ARM templates to create the virtual network, subnets, and VMs needed for this exercise:

```
vmSize      String      "Standard_DS1_v2"
adminUsername String      "TestUser"
adminPassword SecureString null

Outputs
:
DeploymentDebugLogLevel :

PS /home/ilunga> New-AzResourceGroupDeployment -ResourceGroupName $RGName -TemplateFile azuredeploy.json -TemplateParameterFile azuredeploy.parameters.vm3.json

DeploymentName      : azuredeploy
ResourceGroupName   : IntLB-RG
ProvisioningState    : Succeeded
Timestamp           : 9/27/2022 4:51:35 PM
Mode                : Incremental
TemplateLink        :
Parameters          :
Name               Type               Value
=====
vmName             String             "myVM3"
nicName            String             "myVMnic3"
vmSize             String             "Standard_DS1_v2"
adminUsername      String             "TestUser"
adminPassword      SecureString        null

Outputs
:
DeploymentDebugLogLevel :
```

Task 7: Add VMs to the backend pool

1. On the Azure portal home page, click All resources, then click on myIntLoadBalancer from the resources list. +2. Under Settings, select Backend pools., and then select myBackendPool.

myBackendPool

myIntLoadBalancer

Name *

myBackendPool

Virtual network

IntLB-VNet

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

<input type="checkbox"/>	Resource Na...	Resource gro...	Type	IP configurat...	IP Address	Availability ...
--------------------------	----------------	-----------------	------	------------------	------------	------------------

Save

Cancel

[Give feedback](#)

3.In the Associated to box, select Virtual machines.4.Under Virtual machines, click Add.

1

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 : IntLB-VNet

Add filter

☐ Show resources that are not available for selection

Resource Name	Resource group	Type	IP configuration	IP Address	Availability set	Tags
Virtual machine (3)						
<input checked="" type="checkbox"/> myVM1	IntLB-RG	Virtual machine	ipconfig1	10.1.0.5	-	-
<input checked="" type="checkbox"/> myVM2	IntLB-RG	Virtual machine	ipconfig1	10.1.0.6	-	-
<input checked="" type="checkbox"/> myVM3	IntLB-RG	Virtual machine	ipconfig1	10.1.0.7	-	-

Add

Cancel

Give feedback

5.Select the checkboxes for all 3 VMs (myVM1, myVM2, and myVM3), then click Add. +6.On the myBackendPool page, click Save.

myIntLoadBalancer | Backend pools

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

Properties

Locks

Filter by name...

Backend pool == all

Resource Name == all

Resource Status == all

IP address == all

Network interface == all

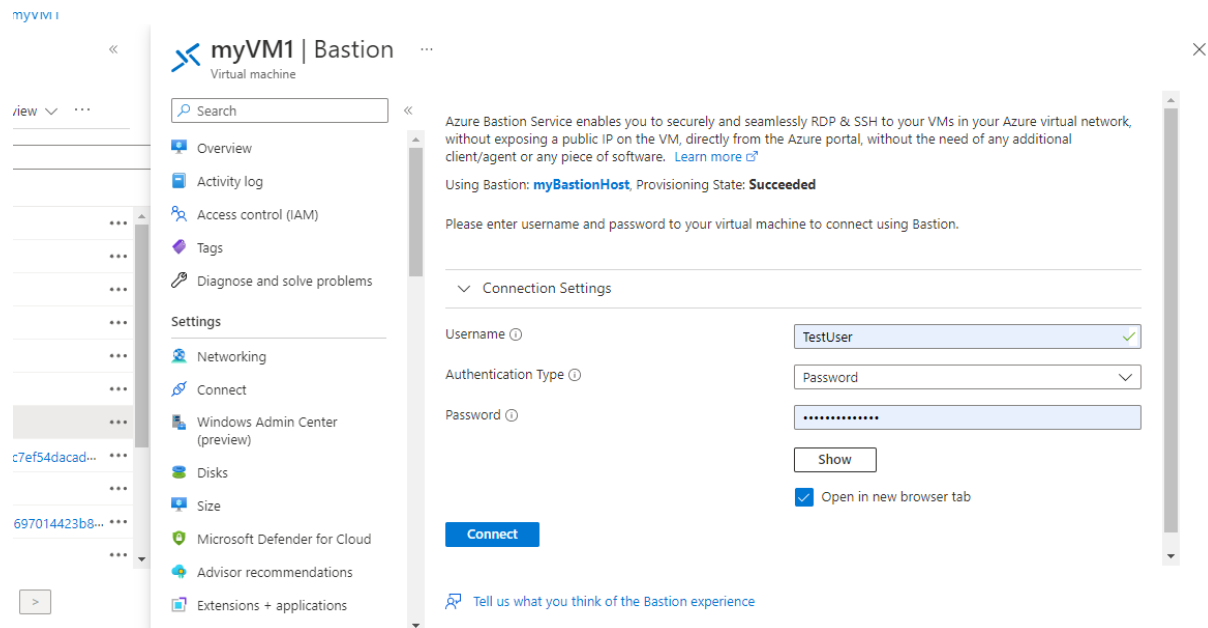
Availability zone == all

Group by Backend pool

Backend pool	Resource Name	Resource Status	IP address	Network interface	Availability zone	R
myBackendPool						
myBackendPool	myVM3	Running	10.1.0.7	myVMnic3		1
myBackendPool	myVM1	Running	10.1.0.5	myVMnic1		1
myBackendPool	myVM2	Running	10.1.0.6	myVMnic2		1

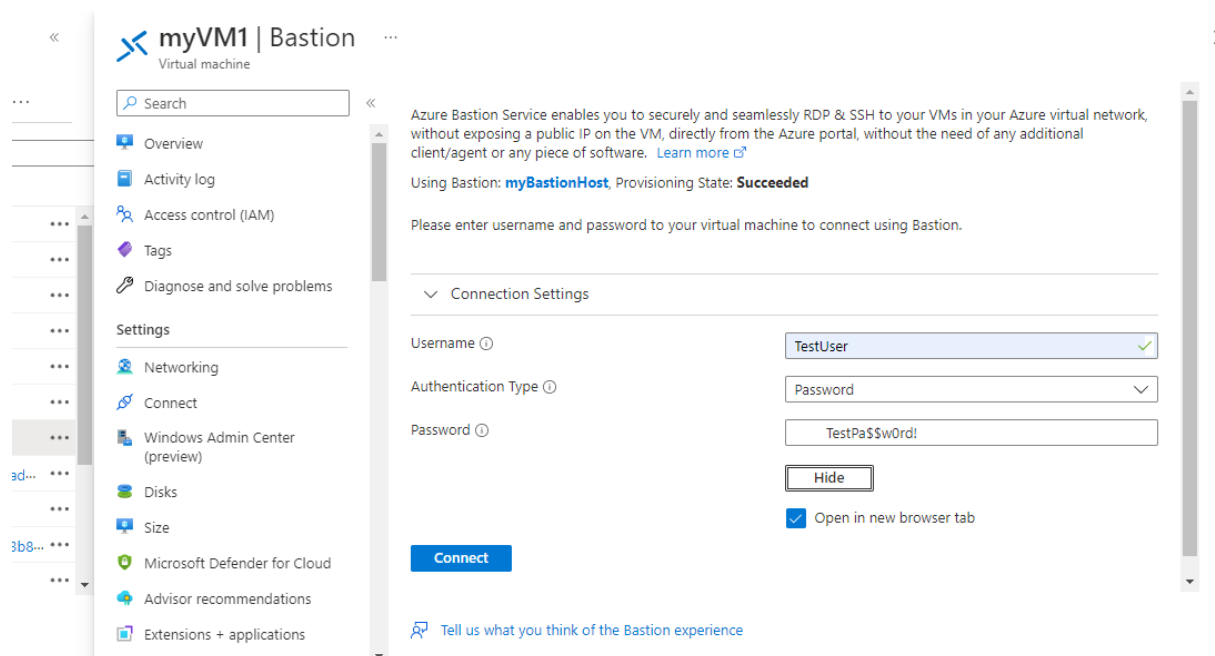
Task 8: Install IIS on the VMs

1. On the Azure portal home page, click All resources, then click on myVM1 from the resources list. + 2. On the Overview page, select Connect, then Bastion.

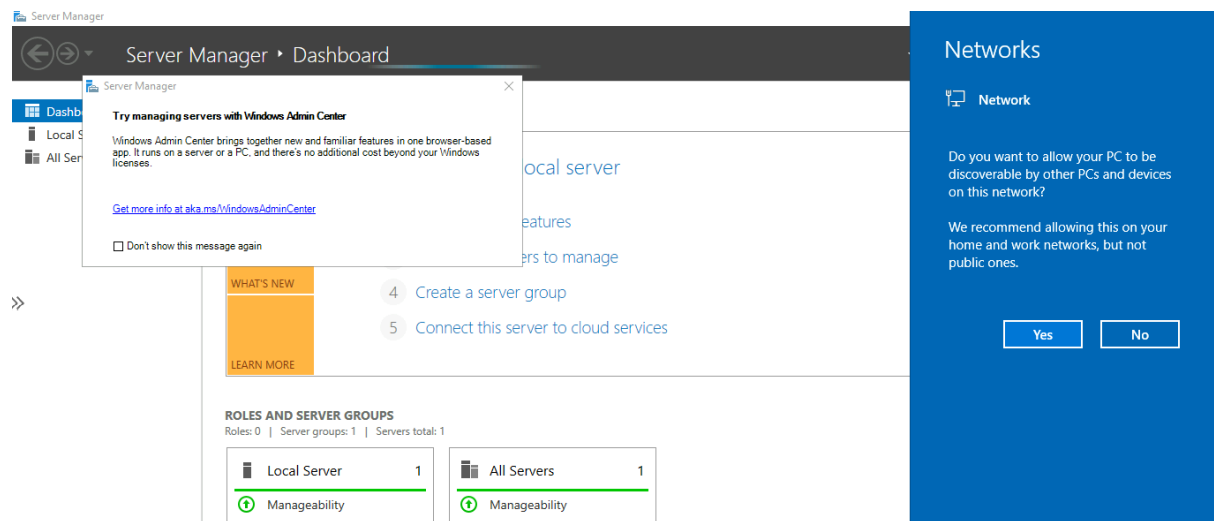


3. Click Use Bastion.

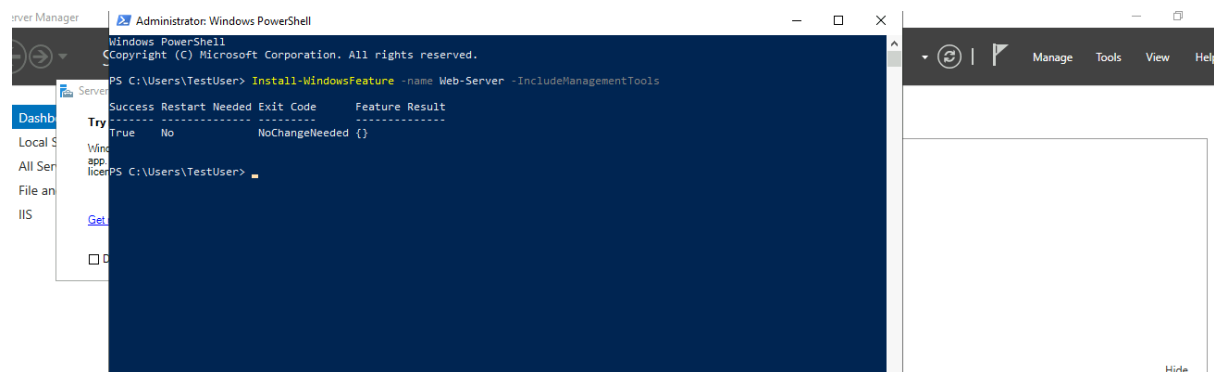
4. In the Username box, type TestUser and in the Password box, type TestPa\$\$w0rd!, then click Connect.



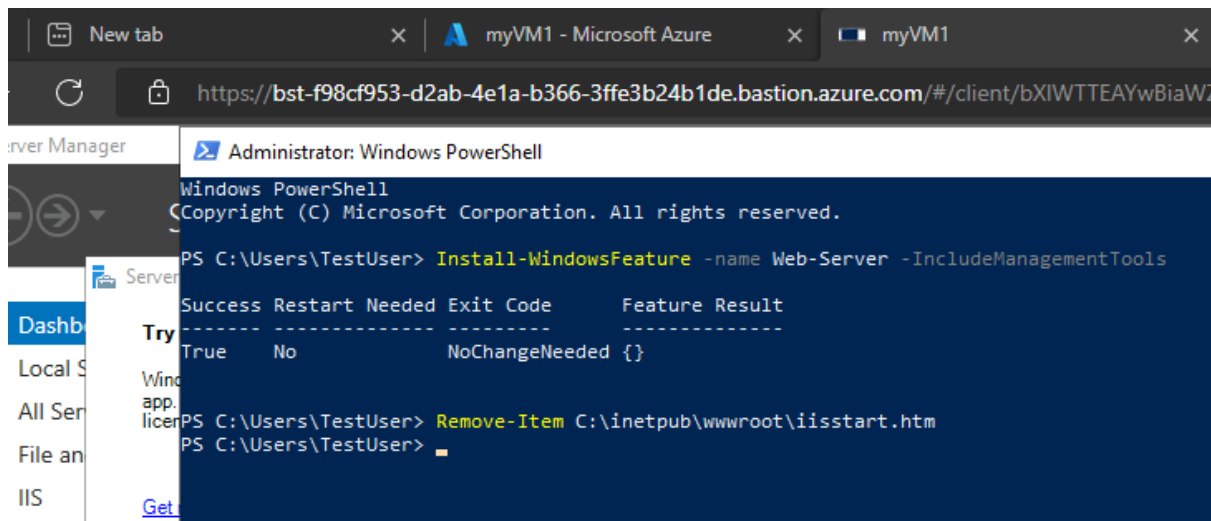
5.The myVM1 window will open in another browser tab. +6.If a Networks pane appears, click Yes.



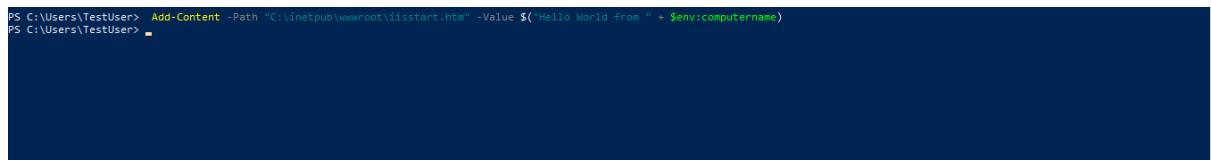
7.Click the Windows Start icon in the bottom left corner of the window, then click the Windows PowerShell tile. +8.To install IIS, run the following command in PowerShell: `Install-WindowsFeature -name Web-Server -IncludeManagementTools` .



9. To remove the existing default web home page, run the following command in PowerShell:
Remove-Item C:\inetpub\wwwroot\iisstart.htm +10. To add a new default web home page and add content to it, run the following command in PowerShell: Add-Content -Path "C:\inetpub\wwwroot\iisstart.htm" -Value \$("Hello World from " + \$env:computername)



10. To add a new default web home page and add content to it, run the following command in PowerShell: Add-Content -Path "C:\inetpub\wwwroot\iisstart.htm" -Value \$("Hello World from " + \$env:computername)



MYVM2

Home > myVM2

myVM2 | Bastion

Virtual machine

Search

- Overview
- Activity log
- Access control (IAM)
- Tags
- Diagnose and solve problems

Settings

- Networking
- Connect
- Windows Admin Center (preview)
- Disks
- Size
- Microsoft Defender for Cloud
- Advisor recommendations

Azure Bastion protects your virtual machines by providing lightweight, browser-based connectivity without the need to expose them through public IP addresses. Deploying will automatically create a Bastion host on a subnet in your virtual network. [Learn more](#)

Using Bastion: **myBastionHost**, Provisioning State: **Succeeded**

Please enter username and password to your virtual machine to connect using Bastion.

Connection Settings

Username

Authentication Type

Password

Show

☒ Open in new browser tab

Connect

Server Manager

Server Manager Dashboard

Try managing servers with Windows Admin Center

Windows Admin Center brings together new and familiar features in one browser-based app. It runs on a server or a PC, and there's no additional cost beyond your Windows licenses.

[Get more info at aka.ms/WindowsAdminCenter](#)

☐ Don't show this message again

WHAT'S NEW

- 4 Create a server group
- 5 Connect this server to cloud services

LEARN MORE

ROLES AND SERVER GROUPS

Roles: 0 | Server groups: 1 | Servers total: 1

Local Server	1	All Servers	1
Manageability		Manageability	

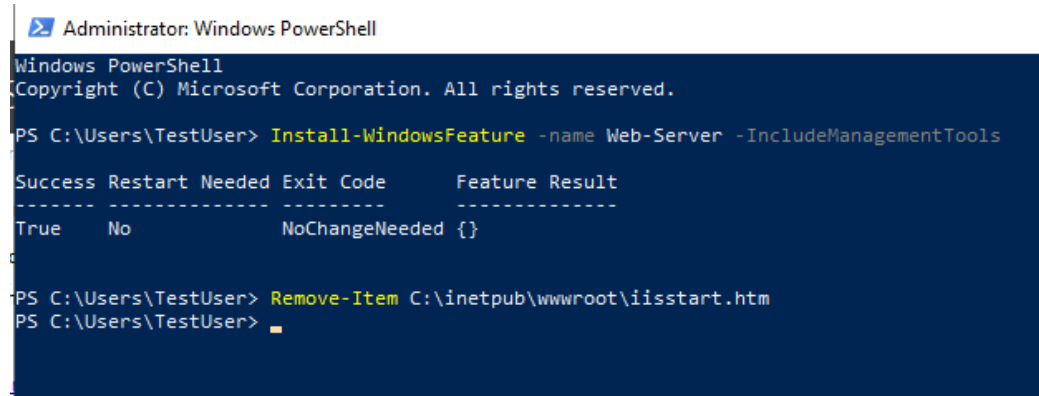
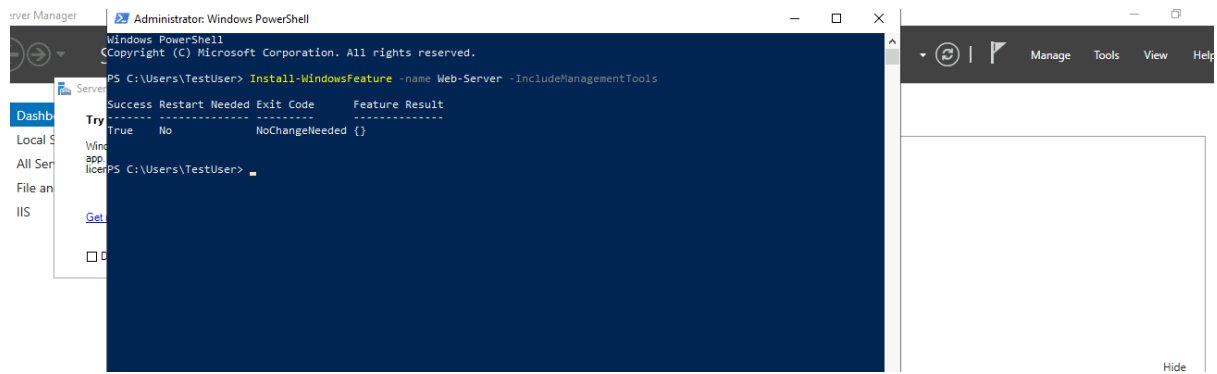
Networks

Network

Do you want to allow your PC to be discoverable by other PCs and devices on this network?

We recommend allowing this on your home and work networks, but not public ones.

Yes No



MYVM 3

HOME / All resources / myVM3

All resources

CTU Career

+ Create Manage view

Filter for any field...

Name

- myNSG
- myVM1
- myVM1_disk1_d490f63c7ef54dacad...
- myVM2
- myVM2_disk1_79724cd697014423b8...
- myVM3
- myVM3_disk1_d9e35e4e1b5541bf90...
- myVMnic1
- myVMnic2
- myVMnic3
- NetworkWatcher_eastus

Page 1 of 1

myVM3 | Bastion

Virtual machine

Search

- Overview
- Activity log
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Settings

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- Advisor recommendations
- Extensions + applications

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Please enter username and password to your virtual machine to connect using Bastion.

Connection Settings

Username

Authentication Type

Password

Show

☒ Open in new browser tab

Connect

[Tell us what you think of the Bastion experience](#)

Server Manager

Server Manager Dashboard

Try managing servers with Windows Admin Center

Windows Admin Center brings together new and familiar features in one browser-based app. It runs on a server or a PC, and there's no additional cost beyond your Windows licenses.

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☐ Don't show this message again

WHAT'S NEW

- Create a server group
- Connect this server to cloud services

LEARN MORE

ROLES AND SERVER GROUPS

Roles: 0 | Server groups: 1 | Servers total: 1

Local Server	1	All Servers	1
Manageability		Manageability	

Networks

Network

Do you want to allow your PC to be discoverable by other PCs and devices on this network?

We recommend allowing this on your home and work networks, but not public ones.

Yes No

```
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

PS C:\Users\TestUser> Install-WindowsFeature -name Web-Server -IncludeManagementTools

Success Restart Needed Exit Code      Feature Result
-----
True     No             NoChangeNeeded {}

PS C:\Users\TestUser>
```

```
Administrator: Windows PowerShell

Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

PS C:\Users\TestUser> Install-WindowsFeature -name Web-Server -IncludeManagementTools

Success Restart Needed Exit Code      Feature Result
-----
True     No             NoChangeNeeded {}

PS C:\Users\TestUser> Remove-Item C:\inetpub\wwwroot\iisstart.htm
PS C:\Users\TestUser>
```

Task 9: Test the load balancer

Create test VM

1. On the Azure home page, using the global search type Virtual Machines and select virtual machines under services. + 2. Select + Create; + Virtual machine, on the Basics tab, use the information in the table below to create the first VM.

Create a virtual machine

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 * ⓘ IntLB-RG
[Create new](#)

Instance details

Virtual machine name * ⓘ myTestVM ✓

Region * ⓘ

Availability options ⓘ Availability zone

Availability zone * ⓘ Zones 1
☒ You can now select multiple zones. Selecting multiple zones will create one VM per zone. [Learn more](#)

Security type ⓘ Standard

[Review + create](#) < Previous Next : Disks >

3. Click Next : Disks, then click Next : Networking. + 4. On the Networking tab, use the information in the table below to configure networking settings.

Create a virtual machine

Networking

Virtual network * ⓘ IntLB-VNet
[Create new](#)

Subnet * ⓘ myBackendSubnet (10.1.0.0/24)
[Manage subnet configuration](#)

Public IP ⓘ None
[Create new](#)

NIC network security group ⓘ
☐ None
☐ Basic
☒ Advanced

Configure network security group * ⓘ myNSG
[Create new](#)

Delete NIC when VM is deleted ⓘ ☐

Enable accelerated networking ⓘ ☒

Load balancing

You can place this virtual machine in the backend pool of an existing Azure load balancing solution. [Learn more](#)

[Review + create](#) < Previous Next : Management > [Give feedback](#)

Connect to the test VM to test the load balancer

1. On the Azure portal home page, click All resources, then click on myIntLoadBalancer from the resources list. + 2. On the Overview page, make a note of the Private IP address, or copy it to the clipboard. Note: you may have to select See more to see the Private IP address.

myIntLoadBalancer

Search

Move

Delete

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

Properties

Locks

Essentials

Resource group (move)

Location

Subscription (move)

Subscription ID

SKU

Backend pool

Load balancing rule

Health probe

NAT rules

Tier

Private IP address

Tags (edit)

See less

JSON View

Configure high availability and scalability for your applications

Create highly-available and scalable applications in minutes by using built-in load balancing for cloud services and virtual machines. Azure Load Balancer supports TCP/UDP-based protocols and protocols used for real-time voice and video messaging applications. [Learn more](#)

3. Click Home, then on the Azure portal home page, click All resources, then click on the myTestVM virtual machine that you just created. +4. On the Overview page, select Connect, then Bastion.

myTestVM | Bastion

Virtual machine

Search

Overview

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Access control (IAM)

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Diagnose and solve problems

Settings

Networking

Connect

Windows Admin Center (preview)

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Advisor recommendations

Extensions + applications

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Using Bastion: **myBastionHost**, Provisioning State: **Succeeded**

Please enter username and password to your virtual machine to connect using Bastion.

Connection Settings

Username

TestUser

Authentication Type

Password

Password

.....

Show

☒ Open in new browser tab

Connect

Tell us what you think of the Bastion experience

Task 10: Create a Log Analytics Workspace

1. On the Azure portal home page, click All services, then in the search box at the top of the page type Log Analytics, and select Log Analytics workspaces from the filtered list. +3. On the Create Log Analytics workspace page, on the Basics tab, use the information in the table below to create the workspace.



Create Log Analytics workspace



you should use when creating a new Log Analytics workspace. [Learn more](#)

With Azure Monitor Logs you can easily store, retain, and query data collected from your monitored resources in Azure and other environments for valuable insights. A Log Analytics workspace is the logical storage unit where your log data is collected and stored.



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 *  IntLB-RG 
[Create new](#)




Instance details

Name *  myLAworkspace 







Region *  East US 

[Review + Create](#) [Previous](#) [Next: Tags >](#)


4. Click Review + Create, then click Create.


 **Microsoft.LogAnalyticsOMS** | Overview  


Deployment



  Delete  Cancel  Redeploy  Download  Refresh


Overview



 Inputs


 Outputs


 Template

 We'd love your feedback! 


 **Your deployment is complete**


 Deployment name: Microsoft.LogAnalyticsOMS Start time: 9/27/2022, 9:08:41 PM
Subscription: [Azure for Students](#) Correlation ID: 622730b9-3707-4bfb-a2b2-0e302fa0c3d9 
Resource group: [IntLB-RG](#)

 Deployment details

 Next steps

[Go to resource](#)

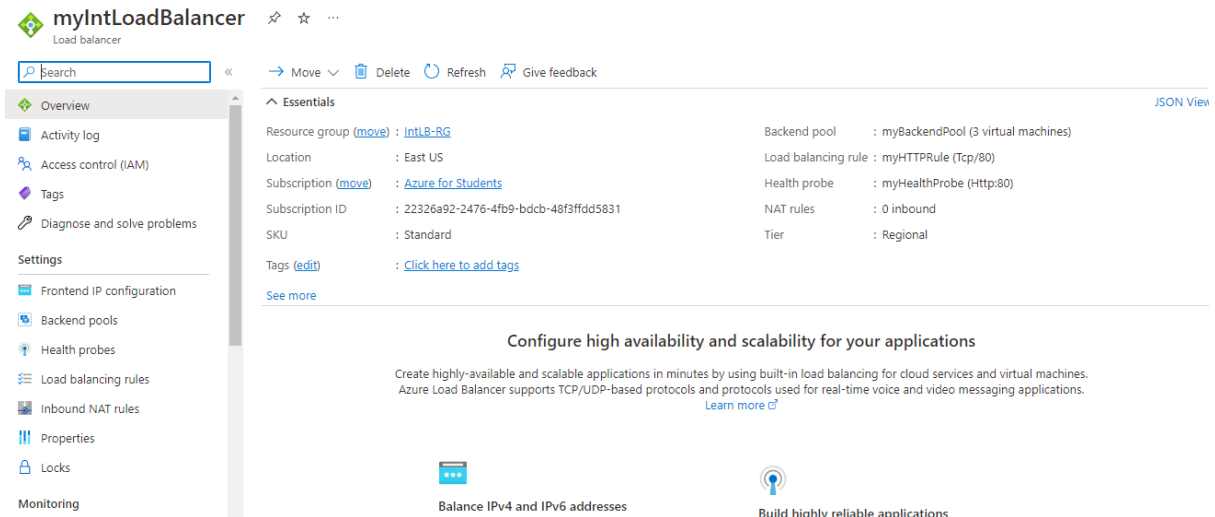
 **Cost Management**
Get notified to stay within your budget and prevent unexpected charges on your bill.
[Set up cost alerts >](#)

 **Microsoft Defender for Cloud**
Secure your apps and infrastructure
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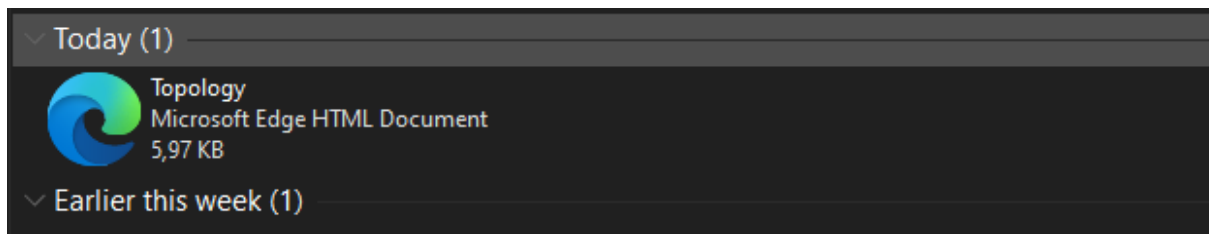
Free Microsoft tutorials
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Task 11: Use Functional Dependency View

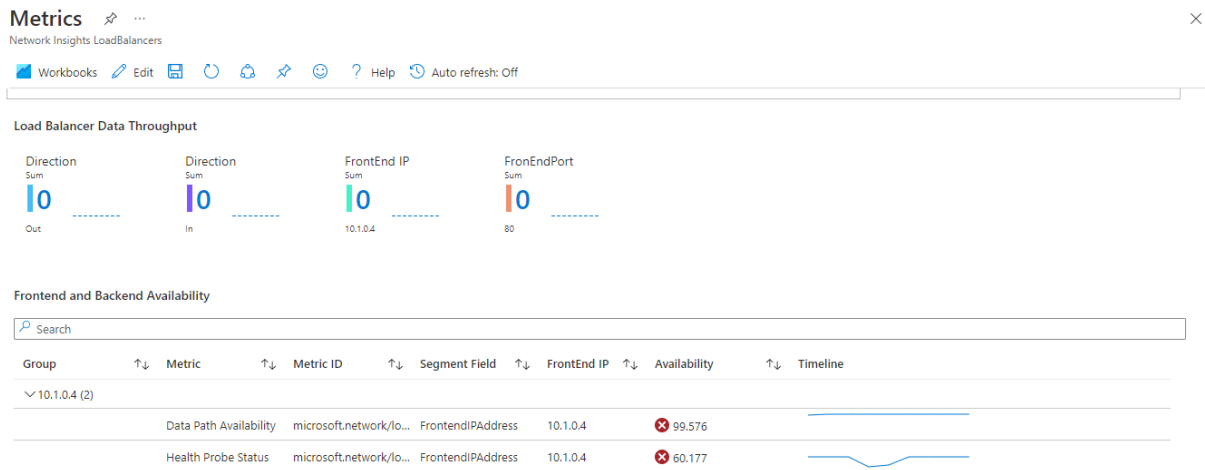
1. On the Azure portal home page, click All resources, then in the resources list, select myIntLoadBalancer.



- 2-8. To download a .SVG file copy of the topology diagram, click Download topology, and save the file in your Downloads folder.



9. -10. The Metrics pane provides a quick view of some key metrics for this load balancer resource, in the form of bar and line charts



Task 13: View resource health

1-2. On the Monitor>Overview page, in the left-hand menu click Service Health



2. -4. On the Service Health>Resource health page, in the Resource type drop-down list, scroll down the list and select Load balancer.

Service Health | Resource health

+ Add resource health alert

ACTIVE EVENTS

Service issues
Planned maintenance
Health advisories
Security advisories

HISTORY

Health history

RESOURCE HEALTH

Resource health

ALERTS

Health alerts

Subscription
Azure for Students
Resource type
Load balancer

Resource Name	Type	Location	Subscription
myintloadbalancer	Load balancer	eastus	Azure for Students

5-6. The Resource health page will identify any major availability issues with your load balancer resource. If there are any events under the Health History section, you can expand the health event to see more detail about the event. You can even save the detail about the event as a PDF file for later review and for reporting.

Service Health | Resource health

+ Add resource health alert

ACTIVE EVENTS

Service issues
Planned maintenance
Health advisories
Security advisories

HISTORY

Health history

RESOURCE HEALTH

Resource health

ALERTS

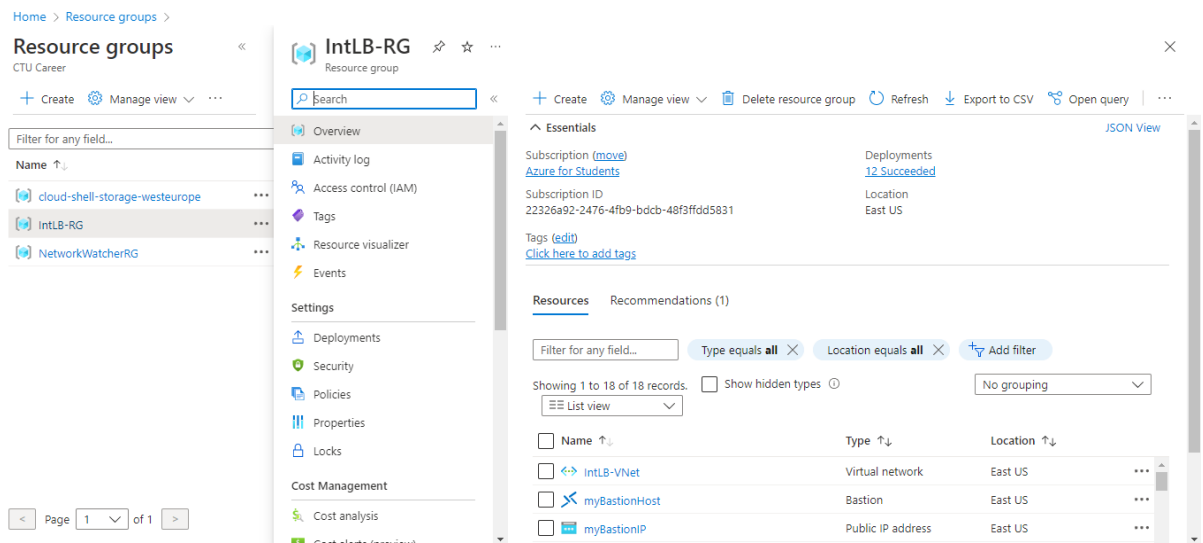
Health alerts

Subscription
Azure for Students
Resource type
Load balancer

Resource Name	Type	Location	Subscription
myintloadbalancer	Load balancer	eastus	Azure for Students

Task 14: Configure diagnostic settings

1. On the Azure portal home page, click Resource groups, then select the IntLB-RG resource group from the list.



Home > Resource groups > Resource groups

CTU Career

+ Create Manage view ...

Filter for any field...

Name ↑

- cloud-shell-storage-westurope
- IntLB-RG
- NetworkWatcherRG

Page 1 of 1

IntLB-RG Resource group

Search

+ Create Manage view ... Delete resource group Refresh Export to CSV Open query ...

Overview

- Activity log
- Access control (IAM)
- Tags
- Resource visualizer
- Events

Settings

- Deployments
- Security
- Policies
- Properties
- Locks
- Cost Management
- Cost analysis

Essentials

Subscription (move) Azure for Students Deployments 12 Succeeded

Subscription ID 22326a92-2476-4fb9-bdc9-48f3fdd5831 Location East US

Tags (edit) Click here to add tags

Resources Recommendations (1)

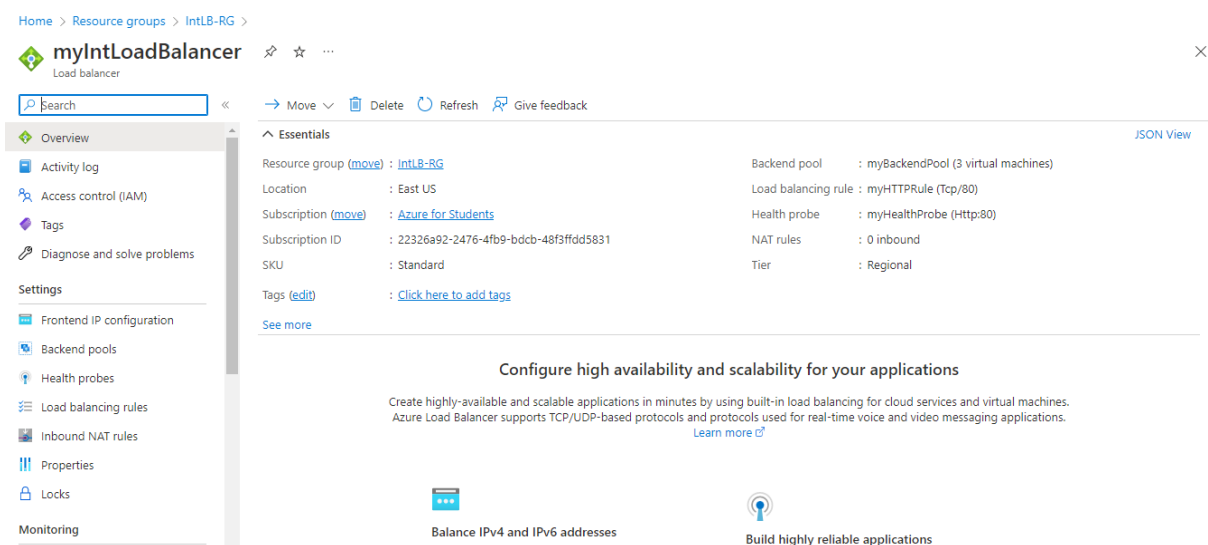
Filter for any field... Type equals all Location equals all Add filter

Showing 1 to 18 of 18 records. Show hidden types No grouping

List view

Name ↑	Type ↑	Location ↑
IntLB-VNet	Virtual network	East US
myBastionHost	Bastion	East US
myBastionIP	Public IP address	East US

2. On the IntLB-RG page, click the name of the myIntLoadBalancer load balancer resource in the list of resources.



Home > Resource groups > IntLB-RG > myIntLoadBalancer Load balancer

Search

Move Delete 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
- Properties
- Locks
- Monitoring

Essentials

Resource group (move) : IntLB-RG

Location : East US

Subscription (move) : Azure for Students

Subscription ID : 22326a92-2476-4fb9-bdc9-48f3fdd5831

SKU : Standard

Tags (edit) : Click here to add tags

See more

Backend pool : myBackendPool (3 virtual machines)

Load balancing rule : myHTTPRule (Tcp/80)

Health probe : myHealthProbe (Http/80)

NAT rules : 0 inbound

Tier : Regional

Configure high availability and scalability for your applications

Create highly-available and scalable applications in minutes by using built-in load balancing for cloud services and virtual machines. Azure Load Balancer supports TCP/UDP-based protocols and protocols used for real-time voice and video messaging applications. [Learn more](#)

Balance IPv4 and IPv6 addresses

Build highly reliable applications

3.-4. On the Diagnostic setting page, in the name box, type myLBDiagnostics.

Diagnostic setting ...

Save Discard Delete Feedback

A diagnostic setting specifies a list of categories of platform logs and/or metrics that you want to collect from a resource, and one or more destinations that you would stream them to. Normal usage charges for the destination will occur. [Learn more about the different log categories and contents of those logs](#) JSON

Diagnostic setting name *

Metrics

☐ AllMetrics

Destination details

☐ Send to Log Analytics workspace

☐ Archive to a storage account

☐ Stream to an event hub

☐ Send to partner solution

5.- 6.Select your subscription from the list, then select myLAworkspace (westus) from the workspace drop-down list.

Diagnostic setting ... ×

Save Discard Delete Feedback

A diagnostic setting specifies a list of categories of platform logs and/or metrics that you want to collect from a resource, and one or more destinations that you would stream them to. Normal usage charges for the destination will occur. [Learn more about the different log categories and contents of those logs](#) JSON View

Diagnostic setting name *

Metrics

☒ AllMetrics

Destination details

☒ Send to Log Analytics workspace

Subscription

Log Analytics workspace

☐ Archive to a storage account

☐ Stream to an event hub

☐ Send to partner solution

7. Click Save.

Task 15: Clean up resources

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

Welcome to Azure Cloud Shell

Type "az" to use Azure CLI
Type "help" to learn about Cloud Shell

MOTD: Manage Azure Active Directory: Get-Command -Module AzureAD*

VERBOSE: Authenticating to Azure ...
VERBOSE: Building your Azure drive ...
PS /home/ilunga> Remove-AzResourceGroup -Name 'IntLB-RG' -Force -AsJob

Id      Name      PSJobTypeName State      HasMoreData Location      Command
--      -
2      Long Running O... AzureLongRunni... Running    True         localhost    Remove-AzResourceGroup

PS /home/ilunga> 
```