

Assignment 1

Tasks To Be Performed:

1. Deploy 2 VMs with Ubuntu and Apache2 installed
2. Change index.html to include the following text
 - a. "This is VM1" on VM1
 - b. "This is VM2" on VM2
3. Create a load balancer which will balance the traffic between these two VMs

Create two ubuntu VM with 80 and SSH port open create the availability set for connecting to load balancer- both VM have same availability set with same VNET.

[Home](#) > [Virtual machines](#) >

Create a virtual machine ...

Instance details

Virtual machine name * ⓘ

VM1 ✓

Region * ⓘ

(US) East US ▼

Availability options ⓘ

Availability set ▼

i Based on your input, you might want to consider creating this resource as a virtual machine scale set, which allows you to manage, configure and scale load balanced virtual machines. [Create as VMSS](#) ↗

Availability set * ⓘ

No existing availability sets in current resource group and location. ▼


[Create new](#)

Security type ⓘ

Trusted launch virtual machines ▼

[Configure security features](#)

Image * ⓘ

 Ubuntu Server 20.04 LTS - x64 Gen2 (free services eligible) ▼

[See all images](#) | [Configure VM generation](#)

VM architecture ⓘ

☐ Arm64

☒ x64

Run with Azure Spot discount ⓘ

☐

[Review + create](#)

[< Previous](#)

[Next : Disks >](#)

Create availability set



Group two or more VMs in an availability set to ensure that at least one is available during planned or unplanned maintenance events. [Learn more](#)

Name *

set12 ✓

Fault domains ⓘ

2

Update domains ⓘ

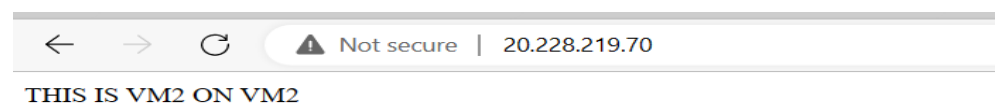
5

Use managed disks ⓘ

No (Classic)

☒ Yes (Aligned)

[OK](#)



Add a frontend ip configuration and create new public ip address.

Home > Load balancing | Load Balancer >

Create load balancer

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 *

Resource group * [Create new](#)

Instance details

Name *

Region *

SKU * ☒ Standard ☐ Gateway ☐ Basic

Type * ☒ Public ☐ Internal

Tier * ☒ Regional ☐ Global

[Review + create](#)

[< Previous](#)

[Next : Frontend IP configuration >](#)

[Download a template for automation](#)

Home >

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

Add frontend IP configuration

Name *

IP version ☒ IPv4 ☐ IPv6

IP type ☒ IP address ☐ IP prefix

Public IP address * [Create new](#)

Gateway Load balancer

Public IP address *

[Create new](#)

Add a public IP address

Name *

SKU ☒ Standard ☐ Basic

Tier ☒ Regional ☐ Global

Static IPs are assigned at the time the resource is created

Add backend pool ...

Name *

Backendone

Virtual network ⓘ

VM1-vnet (27-01-24) ✓

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 | X Remove

✓

Resource Name	Resource group	Type	IP configuration	IP Address	Availability set
---------------	----------------	------	------------------	------------	------------------

Add backend pool ...

Name *

Backendone

Virtual network ⓘ

VM1-vnet (27-01-24) ✓

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 | X Remove

Resource Name	Resource group	Type	IP configuration	IP Address	Availability set	
VM1	27-01-24	Virtual machine	ipconfig1	10.0.0.4	SET12	🗑
VM2	27-01-24	Virtual machine	ipconfig1	10.0.0.5	SET12	🗑

Add IP configurations to backend pool

IP configurations associated to virtual machines and virtual machine scale sets r

Filter by name...

Location : eastus

Virtual network

☐ Show resources that are not available for selection

	Resource Name	Resource group	Type
Virtual machine (2)			
<input checked="" type="checkbox"/>	VM1 ✓	27-01-24	Virtual machine
<input checked="" type="checkbox"/>	VM2 ✓	27-01-24	Virtual machine

✓

Add

Cancel



Create load balancer ...

Basics Frontend IP configuration Backend pools Inbound rules

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

+ Add a load balancing rule

Name ↑↓

Frontend IP configuration ↑↓

Add a rule to get started

i 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 * probe1

Protocol * TCP

Port * ① 80

Interval (seconds) * ① 5

Used by * ① Not used

Save

Cancel

Health probe * (i) NO EXISTING PROBES

Add load balancing rule

loadbalancerVM

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

Name * rule1 ✓

IP Version * ☒ IPv4 ☐ IPv6

Frontend IP address * ① newfeip (To be created) ✓

Backend pool * ① pool1 ✓

Protocol ☒ TCP ☐ UDP

Port * 80

Backend port * ① 80

Health probe * ① No existing probes

Session persistence ① None

Idle timeout (minutes) * ① 4

Enable TCP Reset ☐


Enable Floating IP ① ☐

Outbound source network address translation (SNAT) ① ☒ (Recommended) Use outbound rules to

Create new health probe

Save

Cancel

 Give feedback

Move into frontend Ip configuration- copy the ip and browse- keep refresh to see the distributing traffic.


[Home](#) > [Microsoft.LoadBalancer-20240128161958](#) | [Overview](#) > [loadbalancerVM](#)

loadbalancerVM | Frontend IP configuration ☆ ...


Load balancer


<<


[+](#) Add [↻](#) Refresh [🗨](#) Give feedback

 Overview



 Activity log

 Access control (IAM)

 Tags

 Diagnose and solve problems

Settings

 Frontend IP configuration 

Name ↑↓

IP address ↑↓

[newfeip](#)

4.246.251.174 (newip)



Not secure | 4.246.251.174

SET12

THIS IS VM1 ON VM1.

SET12.



Not secure | 4.246.251.174

THIS IS VM2 ON VM2

Assignment 2

Tasks To Be Performed:

Create an application gateway with the following configuration:

- a. /vm1 should point to VM1
- b. /vm2 should point to VM2

In VM1 keep the default html page and cd /var/www/html , here add new directory – inside this directory create another index.html file
In VM2 remove the default html page but here also cd /var/www/html , here add new directory – inside this directory create another index.html file

```
sid@vm1:~$ cd /var/www/html
sid@vm1:/var/www/html$ ls
index.html
sid@vm1:/var/www/html$ sudo mkdir vm1
sid@vm1:/var/www/html$ ls
index.html  vm1
sid@vm1:/var/www/html$ cd vm1
sid@vm1:/var/www/html/vm1$ sudo nano index.html
sid@vm1:/var/www/html/vm1$ ls
index.html
sid@vm1:/var/www/html/vm1$
```

```
sid@vm2:~$ cd /var/www/html
sid@vm2:/var/www/html$ ls
index.html
sid@vm2:/var/www/html$ sudo rm index.html
sid@vm2:/var/www/html$ ls
sid@vm2:/var/www/html$ sudo mkdir vm2
sid@vm2:/var/www/html$ ls
vm2
sid@vm2:/var/www/html$ cd vm2
sid@vm2:/var/www/html/vm2$ sudo nano index.html
sid@vm2:/var/www/html/vm2$
```

[Home](#) > [Load balancing](#) | [Application Gateway](#) >

Create application gateway

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 * ⓘ Free Trial

Resource group * ⓘ 29-01-24 [Create new](#)

Instance details

Application gateway name * newappgateway

Region * East US

Tier ⓘ Standard V2

Enable autoscaling ☒ Yes ☐ No

Minimum instance count * ⓘ 0

Maximum instance count 5

Availability zone ⓘ None

Standard V2 allow autoscaling

Select at least two zones

Availability zone ⓘ None

HTTP2 ⓘ

☐ Disabled ☒ Enabled

Configure virtual network

Virtual network * ⓘ

VM1-vnet

[Create new](#)

Subnet * ⓘ

newsubnet (10.0.1.0/24)

[Manage subnet configuration](#)

[Previous](#)

[Next : Frontends >](#)

Create the same virtual network in which both VM running and create new subnet for App GATEWAY.

VM1-vnet | Subnets

Virtual network

Search

+ Subnet

+ Gateway subnet

Refresh

Manage users

Delete

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

Search subnets

Name ↑↓	IPv4 ↑↓	IPv6 ↑↓	Available IPs ↑↓
default	10.0.0.0/24	-	249

Add subnet

Name *

newsubnet

Subnet address range *

10.0.1.0/24

10.0.1.0 - 10.0.1.255 (251 + 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

Save

Cancel

Give feedback

✓ 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 *

newpubip

SKU

☐ Basic☒ Standard

Assignment

☐ Dynamic☒ Static

Availability zone

None

OK

Cancel

Add a backend pool.

A backend pool is a collection of resources to which your application gateway can send traffic. A backend pool can contain virtual machines, virtual machines scale sets, IP addresses, domain names, or an App Service.

Name *

pool1

Add backend pool without targets

Yes

No

Backend targets

1 item

Target type

Virtual machine

Target

vm1857 (10.0.0.4)

IP address or FQDN

Add a backend pool.



A backend pool is a collection of resources to which your application gateway can send traffic. A backend pool can contain virtual machines, virtual machines scale sets, IP addresses, domain names, or an App Service.

Name *

pool2



Add backend pool without targets

Yes

No

Backend targets

1 item

Target type

Target

Virtual machine



newvm2855 (10.0.0.5)



IP address or FQDN



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	
pool1	1 target	...
	vm1857	...
pool2	1 target	...
	newvm2855	...

Create application gateway



✓ Basics

✓ Frontends

✓ Backends

4 Configuration

5 Tags

6 Review + create

Create routing rules that link your frontend(s) and backend(s). You can also add more backend pools, add a second frontend IP configuration if you haven't already, or edit previous configurations. [↗](#)



Frontends

+ Add a frontend IP

Public: (new) newpubip



Routing rules



Add a routing rule



Backend pools

+ Add a backend pool

pool1



pool2



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 *

Rule1 ✓

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 * ⓘ

port_80 ✓

Frontend IP * ⓘ

Public ✓

Protocol ⓘ

☒ HTTP ☐ HTTPS

Port * ⓘ

80 ✓

Listener type ⓘ

☒ Basic ☐ Multi site

Custom error pages

Show customized error pages for different response codes generated by Application Gateway. This section lets you configure Listener-specific error pages. [Learn more](#) ↗

Bad Gateway - 502

Enter Html file URL

Forbidden - 403

Enter Html file URL

[Show more status codes](#)

Add

Cancel

Target type

☒ Backend pool ☐ Redirection

Backend target * ⓘ

pool1

Add that pool here which has default html page

[Add new](#)

Backend settings * ⓘ

[Add new](#)

Path-based routing

Add Backend setting

[← Discard changes and go back to routing rules](#)

Backend settings name *

defaultpage ✓

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, the Application Gateway sends the same HTTP host header to the backend application/service requires a specific host value, you can override it using this s

Yes

No

Override with new host name

Yes

No

Create custom probes

Add

Cancel

* Listener

* Backend targets

Choose a backend pool to which this routing rule will send traffic. You will also need to specify a set of Backend settings that define the behavior of the routing rule. [↗](#)

Target type

☒ Backend pool
 ☐ Redirection

Backend target *

pool1

Add new

Backend settings *

defaultpage

Add new

Path-based routing

You can route traffic from this rule's listener to different backend targets based on the URL path of the request. You can also apply a different set of Backend settings based on the URL path. [↗](#)

Path	Target name	Backend setting name	Backend pool
No additional targets to display			

[Add multiple targets to create a path-based rule](#) ✓

Add

Cancel

We were creating the path to get inside the /var/www/html/VM1,VM2 folder to see the file inside them.

Add a routing rule

[← Discard changes and go back to routing rules](#)

Target type

☒ Backend pool
 ☐ Redirection

Path *

/vm1/

Target name *

vm1

Defaultpage

Backend settings *

Add new

pool1

Backend target *

Add new

Add a path

[← Discard changes and go back to routing rules](#)

Target type

☒ Backend pool
 ☐ Redirection

Path *

/vm2/

Target name *

vm2

Defaultpage

Backend settings *

Add new

pool2

Backend target *

Add new

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 *

Rule1



Priority * ⓘ

1



* Listener * Backend targets

Choose a backend pool to which this routing rule will send traffic. You will also need to specify a set of Backend settings that define the behavior of the routing rule. [↗](#)

Target type

☒ Backend pool ☐ Redirection

pool1



Backend target * ⓘ

[Add new](#)

Defaultpage



Backend settings * ⓘ

[Add new](#)

Path-based routing

You can route traffic from this rule's listener to different backend targets based on the URL path of the request. You can also apply a different set of Backend settings based on the URL path. [↗](#)


Path based rules

Path	Target name	Backend setting name	Backend pool	
/vm1/'	vm1	Defaultpage	pool1	...
/vm2/'	vm2	Defaultpage	pool2	...

Add

Cancel

Do not put star sign

**Appgateway1**
Application gateway

☆ ...

Copy the Frontend public IP and browse.

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Settings

Configuration

Web application firewall

Delete Refresh Feedback

Essentials

Resource group (move)
[300124](#)

Location
Central India (Zone 1, 2)

Subscription (move)
[Free Trial](#)

Subscription ID
dfe5760d-8ca2-4f3e-af83-62c16886c3b7

Virtual network/subnet
[vnet1/newsubnet](#)

Frontend public IP address
[4.224.11.92 \(newpub1\)](#)

Frontend private IP address
-


Tier
Standard V2

Availability zone
1, 2


JSON View

First it is taking us to the default web page but if we enter the path to the folder , this will show us the file inside the folder.

⚠ Not secure | 4.224.11.92



Apache2 Ubuntu Default Page



It works!

This is the default welcome page used to test the correct operation of the Apache2 server after installation on Ubuntu systems. It is based on the equivalent page on Debian, from which the Ubuntu Apache packaging is derived. If you can read this page, it means that the Apache HTTP server installed at this site is working properly. You should **replace this file** (located at `/var/www/html/index.html`)

← → ↻ ⚠ Not secure | 4.224.11.92/vm1/ ✓

/vm1 pointing to vm1.

← → ↻ ⚠ Not secure | 4.224.11.92/vm2/ ✓

/vm2 pointing to vm2.

Assignment 3

Tasks To Be Performed:

1. For the two VMs deployed previously configure DNS for the public IPs of the VM

Move inside both VM –DNS Name – Save – Copy and search.

vm1 Virtual machine

Search

Connect Start Restart Stop Hibernate (preview) Capture Delete Refresh Open in mobile

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Connect

Connect

Bastion

Networking

Essentials

Resource group (move) [300124](#)

Status Running

Location Central India

Subscription (move) [Free Trial](#)

Subscription ID dfe5760d-8ca2-4f3e-af83-62c16886c3b7

Operating system Linux (ubuntu 20.04)

Size Standard B1s (1 vcpu, 1 GiB memory)

Public IP address [20.197.31.159](#)

Virtual network/subnet [vnet1/default](#)

DNS name [Not configured](#) ✓

Health state -

JSON View

Save Discard Refresh

IP address assignment Static

IP address ⓘ

20.197.31.159

Idle timeout (minutes) ⓘ

DNS name label (optional) ⓘ

mynewvm1

ⓘ You can use the IP address as your 'A' DNS record or DNS label as your 'CNAME' record. [Learn](#)

Alias record sets

Create an alias record in Azure DNS. [Learn more](#)

Connect Start Restart Stop Hibernate (preview) Capture Delete Refresh Open in mobile

Essentials

Resource group (move) [300124](#)

Status Running

Location Central India

Subscription (move) [Free Trial](#)

Subscription ID dfe5760d-8ca2-4f3e-af83-62c16886c3b7

Operating system Linux (ubuntu 20.04)

Size Standard B1s (1 vcpu, 1 GiB memory)

Public IP address [20.197.31.159](#)

Virtual network/subnet [vnet1/default](#)

DNS name [mynewvm1.centralindia.cloudapp.azure.com](#) ✓

Health state -

JSON


Assignment 4

Tasks To Be Performed:

1. Deploy 2 VMs in different regions
2. Balance the load on these VMs geographically

To accomplish this please use Azure Traffic Manager


Launch another virtual machine in different region and install apache2 server .

Virtual machines  ...



Default Directory

+ Create ▾ ↺ Switch to classic ⌚ Reservations ▾ ⚙ Manage view ▾ ↻ Refresh ⬇ Export to CSV 🔗 Open query | 🏷 Assign tags ▶ Start ↺ Restart ☐ Stop

Filter for any field...

Subscription equals **all** Type equals **all** Resource group equals **all** X Location equals **all** X  Add filter

Showing 1 to 2 of 2 records.

<input type="checkbox"/> Name ↑↓	Type ↑↓	Subscription ↑↓	Resource group ↑↓	Location ↑↓	Status ↑↓	Operating system
<input type="checkbox"/>  vm1	Virtual machine	Free Trial	300124	Central India	Running	Linux
<input type="checkbox"/>  vm3	Virtual machine	Free Trial	300124	Japan East	Running	Linux

```
sid@vm3:~$ cd /var/www/html
sid@vm3:/var/www/html$ ls
index.html
sid@vm3:/var/www/html$ sudo rm index.html
sid@vm3:/var/www/html$ sudo nano index.html
sid@vm3:/var/www/html$ sudo cat index.html
This is vm3 for distribute load geographically.
sid@vm3:/var/www/html$
```

Search for traffic manager – create- Routing method(Geographic)- the closest region VM would respond when request comes.

Name *
new1

Routing method
Geographic ✓



Subscription *
Free Trial

Resource group *
300124
[Create new](#)

Resource group location ⓘ
Central India

✓

[Create](#) [Automation options](#)

 **new1 | Endpoints**  ☆ ...

new1

Search

+ Add ↻

Search endpoints

Name ↑↓

No results.

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Settings

Configuration

Real user measurements

Traffic view

Endpoints ✓

Properties

Locks


Monitoring

Alerts

Metrics

Diagnostic settings

Logs

Add endpoint 

Type ⓘ
Azure endpoint

Name *
ep1 ✓

Enable Endpoint
☒

Target resource type
Public IP address ✓

Public IP address *
vm1-ip (20.197.31.159) ✓

Geo-mapping

You may choose to distribute traffic based on specific geographic locations. The same location can't be specified in two endpoints.

Regional grouping	Country/Region	State/Province
All (World) ▾	Choose a Country... ▾	Choose a State/Pr... ▾
Choose a regiona... ▾	Choose a Country... ▾	Choose a State/Pr... ▾

Custom Header settings ⓘ
Configure in this format, host:contoso.com,customheader:contoso

⚠ Do NOT input sensitive customer data in this field (i.e. APIKeys, Secrets, and Auth tokens)

[Add](#) ✓

Create another endpoint with another VM IP address – if it is saying DNS not configure then go to VM and configure DNS and then add- copy the DNS of Traffic manager and search it will take you nearest region VM closest to your region.

Add endpoint

new1

Type * ⓘ
Azure endpoint

Name *
ep2

Enable Endpoint
☒

Target resource type
Public IP address

Public IP address *
vm3-ip (20.194.234.214)

Geo-mapping

You may choose to distribute traffic based on specific geographic locations. The same location can't be specified in two endpoints.

Regional grouping

Country/Region

State/Province

Australia / Pacific

Choose a Country...

Choose a State/Pr...

Choose a regiona...

Choose a Country...

Choose a State/Pr...

Custom Header settings ⓘ

Configure in this format, host:contoso.com,customheader:contoso

⚠ Do NOT input sensitive customer data in this field (i.e. APIKeys, Secrets, and Auth tokens)

Add

new1 | Endpoints

Traffic Manager profile

Search

+ Add Refresh

Search endpoints

Name ↑↓	Status ↑↓	Monitor status ↑↓	Type ↑↓	
ep1	Enabled	Online	Azure endpoint	...
ep2	Enabled	Online	Azure endpoint	...

Overview

Activity log

Access control (IAM)

Tags

new1

Traffic Manager profile

Search

Enable profile Disable profile Refresh Move Delete profile

JSON View

Essentials

Resource group (move)
300124

Status
Enabled

Subscription (move)
Free Trial

DNS name
http://new1.trafficmanager.net ✓

Monitor status
Online

Routing method
Geographic

Not secure | new1.trafficmanager.net

Apache2 Ubuntu Default Page

It works!

This is the default welcome page used to test the correct operation of the Apache2 server after installation on Ubuntu systems. It is based on the equivalent page on Debian, from which the Ubuntu Apache packaging is derived. If you can read this page, it means that the Apache HTTP server installed at this site is working properly. You should **replace this file** (located at /var/www/html/index.html) before continuing to operate your HTTP server.

If you are a normal user of this web site and don't know what this page is about, this probably means that the site is currently unavailable due to maintenance. If the problem persists, please contact the site's administrator.

Assignment 5

Tasks To Be Performed:

1. Create a VM without public IP address
2. Connect to this VM using bastion host

Create the ubuntu VM – in public IP choose none.

[Home](#) > [Virtual machines](#) >

Create a virtual machine

Basics Disks **Networking** Management Monitoring Advanced Tags Review + create

Define network connectivity for your virtual machine by configuring network interface card (NIC) settings. You can control ports, inbound and outbound connectivity with security group rules, or place behind an existing load balancing solution.

[Learn more](#)

Network interface

When creating a virtual machine, a network interface will be created for you.

Virtual network * ⓘ (new) vm4-vnet

[Create new](#)

Subnet * ⓘ (new) default (10.0.0.0/24)

Public IP ⓘ None

[Create new](#)

NIC network security group ⓘ
☐ None
☒ Basic
☐ Advanced

Public inbound ports * ⓘ
☐ None
☒ Allow selected ports

Select inbound ports * HTTP (80), HTTPS (443), SSH (22)

[Review + create](#)

[< Previous](#)

[Next : Management >](#)

BastionVM
Virtual machine

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Connect

Connect

Connect

Connect via Bastion

Resource group (move)

01-02-24

Status

Running

Location

Central India

Subscription (move)

Free Trial

Operating system

Linux (ubuntu 20.04)

Size

Standard B1s (1 vcpu, 1 GiB memory)

Public IP address

Virtual network/subnet

BastionVM-vnet/default

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](#)

Create Bastion

Name ⓘ BastionVM-vnet-bastion

Resource group ⓘ 01-02-24

Virtual network ⓘ BastionVM-vnet

Public IP address ⓘ BastionVM-vnet-ip

Bastion pricing starts with an hourly base rate. [Learn more](#)

[Deploy Bastion](#)

[Configure manually](#)

Click on connect – this will redirected to new browser where VM run – allow pop-up .

BastionVM | Bastion ☆ ...
Virtual machine

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Connect

Bastion

Networking

Network settings

Load balancing

Application security groups

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: **BastionVM-vnet-bastion**

Provisioning State: **Succeeded**

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

Authentication Type [ⓘ] VM Password

Username [ⓘ] sid

VM Password [ⓘ]

Show

☒ Open in new browser tab

Connect

```
Welcome to Ubuntu 20.04.6 LTS (GNU/Linux 5.15.0-1054-azure x86_64)

* Documentation:  https://help.ubuntu.com
* Management:    https://landscape.canonical.com
* Support:        https://ubuntu.com/pro

System information as of Thu Feb  1 08:44:18 UTC 2024

System load:  0.0          Processes:            101
Usage of /:   5.2% of 28.89GB Users logged in:        0
Memory usage: 31%          IPv4 address for eth0: 10.0.0.4
Swap usage:   0%

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

>>

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

sid@BastionVM:~$ sudo apt-get update -y
```