

1. Deploy Linux and Windows virtual machine and access them using SSH and RDP

```
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

Your Cloud Shell session will be ephemeral so no files or system changes will persist beyond your current session.
ayush [ ~ ]$ az group create --name ResourceGroup1 --location eastus
{
  "id": "/subscriptions/4af928af-144b-44ea-a5ad-9fe8d622bd21/resourceGroups/ResourceGroup1",
  "location": "eastus",
  "managedBy": null,
  "name": "ResourceGroup1",
  "properties": {
    "provisioningState": "Succeeded"
  },
  "tags": null,
  "type": "Microsoft.Resources/resourceGroups"
}
```

```
ayush [ ~ ]$ az vm create --resource-group ResourceGroup1 --name vml --image win2019datacenter --admin-username azureuser --size Standard_B2s
Admin Password:
Confirm Admin Password:
{
  "fqdns": "",
  "id": "/subscriptions/4af928af-144b-44ea-a5ad-9fe8d622bd21/resourceGroups/ResourceGroup1/providers/Microsoft.Compute/virtualMachines/vml",
  "location": "eastus",
  "macAddress": "00-0D-3A-9B-D8-DB",
  "powerState": "VM running",
  "privateIpAddress": "10.0.0.4",
  "publicIpAddress": "20.168.194.202",
  "resourceGroup": "ResourceGroup1",
  "zones": ""
}
```

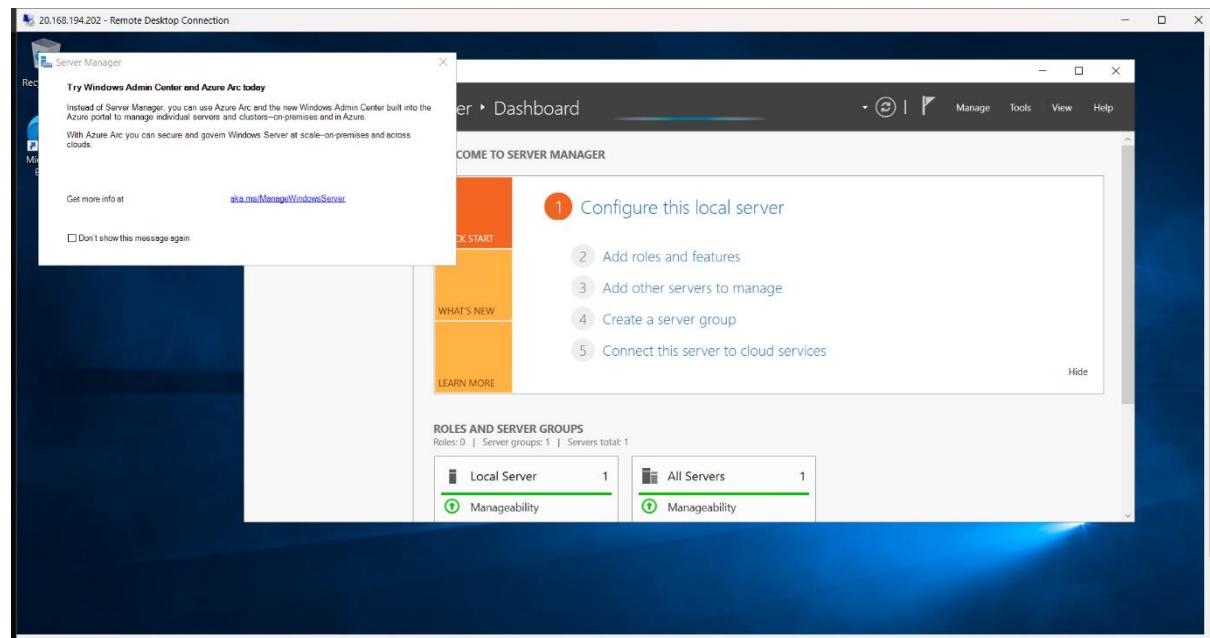
```
ayush [ ~ ]$ az vm open-port --port 80 --resource-group ResourceGroup1 --name vml
{
  "defaultSecurityRules": [
    {
      "access": "Allow",
      "description": "Allow inbound traffic from all VMs in VNET",
      "destinationAddressPrefix": "VirtualNetwork",
      "destinationAddressPrefixes": [],
      "destinationPortRange": "*",
      "destinationPortRanges": [],
      "direction": "Inbound",
      "etag": "W/\"3858adc-27f3-48ef-bbad-8becef3a5906\"",
      "id": "/subscriptions/4af928af-144b-44ea-a5ad-9fe8d622bd21/resourceGroups/ResourceGroup1/providers/Microsoft.Network/networkSecurityGroups/vmlNSG/defaultSecurityRule
S/AllowVnetInBound",
      "name": "AllowVnetInBound",
      "priority": 65000,
      "protocol": "*",
      "provisioningState": "Succeeded",
      "resourceGroup": "ResourceGroup1",
      "sourceAddressPrefix": "VirtualNetwork",
      "sourceAddressPrefixes": [],
      "sourcePortRange": "*",
      "sourcePortRanges": [],
      "type": "Microsoft.Network/networkSecurityGroups/defaultSecurityRules"
    },
    {
      "access": "Allow",
      "description": "Allow inbound traffic from azure load balancer",
      "destinationAddressPrefix": "*",
      "destinationAddressPrefixes": [],
      "destinationPortRange": "*",
      "destinationPortRanges": []
    }
  ]
}
```

```
ayush [ ~ ]$ az vm list -o table
Name     ResourceGroup     Location     Zones
-----  -----
vml      RESOURCEGROUP1   eastus
```

```

PS C:\WINDOWS\system32> mstsc /v:20.168.194.202
PS C:\WINDOWS\system32> mstsc /v:20.168.194.202
PS C:\WINDOWS\system32> mstsc /v:20.168.194.202
PS C:\WINDOWS\system32>

```



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

```

Your Cloud Shell session will be ephemeral so no files or system changes will persist beyond your current session.
ayush [ ~ ]$ az group create --name ResourceGroup2 --location eastus
{
  "id": "/subscriptions/4af928af-144b-44ea-a5ad-9fe8d622bd21/resourceGroups/ResourceGroup2",
  "location": "eastus",
  "managedBy": null,
  "name": "ResourceGroup2",
  "properties": {
    "provisioningState": "Succeeded"
  },
  "tags": null,
  "type": "Microsoft.Resources/resourceGroups"
}

```

```

ayush [ ~ ]$ az vm create --resource-group ResourceGroup2 --name linuxVM --image Ubuntu2204 --admin-username azureuser --generate-ssh-keys --size Standard_B1s
{
  "fqdns": "",
  "id": "/subscriptions/4af928af-144b-44ea-a5ad-9fe8d622bd21/resourceGroups/ResourceGroup2/providers/Microsoft.Compute/virtualMachines/linuxVM",
  "location": "eastus",
  "macAddress": "7C-1E-52-4A-29-28",
  "powerState": "VM running",
  "privateIpAddress": "10.0.0.4",
  "publicIpAddress": "20.169.129.99",
  "resourceGroup": "ResourceGroup2",
  "zones": ""
}

```

```
ayush [ ~ ]$ ssh azureuser@20.169.129.99
The authenticity of host '20.169.129.99 (20.169.129.99)' can't be established.
ED25519 key fingerprint is SHA256:Z0tTFvInCGAk5+zErSDNYiRKzQJzxR32mntImTZpUTg.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? y
Please type 'yes', 'no' or the fingerprint: yes
Warning: Permanently added '20.169.129.99' (ED25519) to the list of known hosts.
Welcome to Ubuntu 22.04.5 LTS (GNU/Linux 6.8.0-1029-azure x86_64)

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

System information as of Wed May 28 21:10:18 UTC 2025

System load:  0.12           Processes:          106
Usage of /:   5.3% of 28.89GB Users logged in:    0
Memory usage: 29%           IPv4 address for eth0: 10.0.0.4
Swap usage:   0%

* Strictly confined Kubernetes makes edge and IoT secure. Learn how MicroK8s
just raised the bar for easy, resilient and secure K8s cluster deployment.

https://ubuntu.com/engage/secure-kubernetes-at-the-edge

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.

```
azureuser@linuxVM:~$ sudo shutdown now
Connection to 20.169.129.99 closed by remote host.
Connection to 20.169.129.99 closed.
ayush [ ~ ]$ az vm deallocate --resource-group ResourceGroup2 --name linuxVM
ayush [ ~ ]$ []
```

2. Create an App Service Plan Provision a Web App in the existing App Service Plan and deploy a simple welcome page on it .

Create Web App

Basics Database Deployment Networking Monitor + secure Tags Review + create

App Service Web Apps lets you quickly build, deploy, and scale enterprise-grade web, mobile, and API apps running on any platform. Meet rigorous performance, scalability, security and compliance requirements while using a fully managed platform to perform infrastructure maintenance. [Learn more](#)

Project Details

Select a subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription * ⓘ

Azure subscription 1

Resource Group * ⓘ

ResourceGroup2

[Create new](#)

Instance Details

Name

demonetapp

.azurewebsites.net

Secure unique default hostname on. [More about this update](#)

Publish *

Code Container

Runtime stack *

.NET 8 (LTS)

Operating System *

Linux Windows

Region *

Central US

i Not finding your App Service Plan? Try a different region or select your App Service Environment.

Pricing plans

App Service plan pricing tier determines the location, features, cost and compute resources associated with your app. [Learn more](#)

Linux Plan (Central US) * ⓘ

(New) demonetappservice

[Create new](#)

Pricing plan

Free F1 (Shared infrastructure)

[Explore pricing plans](#)

Zone redundancy

An App Service plan can be deployed as a zone redundant service in the regions that support it. Your initial instance count will be set based on your zone redundancy configuration. To ensure you'll be able to enable zone redundancy at any point in the lifecycle of your app, enable zone redundancy now. You can decrease the instance count after the App Service plan is created. [Learn more](#)

Zone redundancy

- Enabled:** Your App Service plan and the apps in it will be zone redundant. The minimum App Service plan instance count will be two.
- Disabled:** Your App Service plan and the apps in it will not be zone redundant. The minimum App Service plan instance count will be one.

[Review + create](#)

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[Next : Database >](#)

Create Web App ...

Basics Database Deployment Networking Monitor + secure Tags **Review + create**

Summary



Web App
by Microsoft

Free sku

Estimated price - Free

i Basic authentication for this app is currently disabled and may impact deployments. Click to learn more.

Details

Subscription	4af928af-144b-44ea-a5ad-9fe8d622bd21
Resource Group	ResourceGroup2
Name	demonetapp
Secure unique default hostname	Enabled
Publish	Code
Runtime stack	.NET 8 (LTS)

App Service Plan (New)

Name demonetappservice

Create

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Download a template for automation

Microsoft.Web-WebApp-Portal-7e5b1b8e-a758 | Overview ✖ ...

Deployment

Overview

Your deployment is complete

Deployment name: Microsoft.Web-WebApp-Portal-7e5b1b8e-a758 Start time: 5/29/2025, 1:19:26 PM
Subscription: Azure subscription 1 Correlation ID: 9770ef6b-eb14-4bc6-89b1-621ae670338e

Deployment details

Next steps

Manage deployments for your app. Recommended
Protect your app with authentication. Recommended

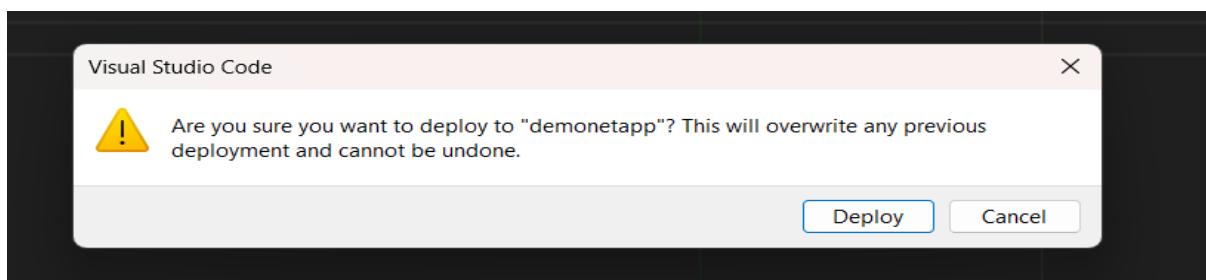
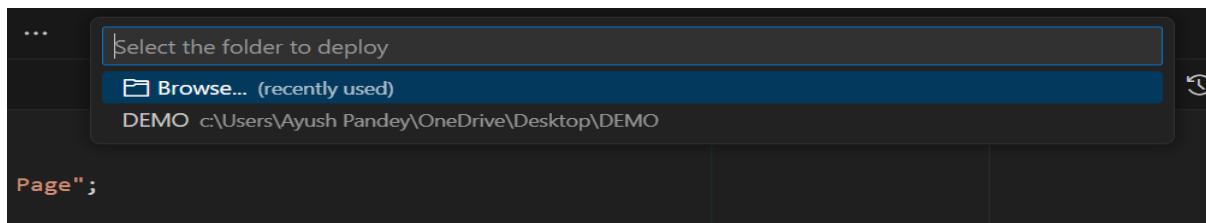
Go to resource

[Give feedback](#)
[Tell us about your experience with deployment](#)

The screenshot shows the Visual Studio Code interface with the Azure extension installed. In the center, there's a code editor window displaying an `Index.cshtml` file with some basic HTML and C# Razor code. Below the code editor is the Output and Debug Console panes, which show deployment logs for the application named 'demonetapp'. On the right side of the screen, the Azure extension sidebar is open, showing a tree view of Azure resources under 'AZURE'. The 'demonetapp' App Service is selected. A context menu is open over the 'demonetapp' item, with 'Deploy to Web App...' highlighted in blue.

```
1 @[
2     ViewData["Title"] = "Home Page";
3 }
4
5 <div class="text-center">
6     <h1 class="display-4">Welcome Everyone</h1>
7     <p>This is my Demo Web application deployment on Azure Web App</p>
8 </div>
```

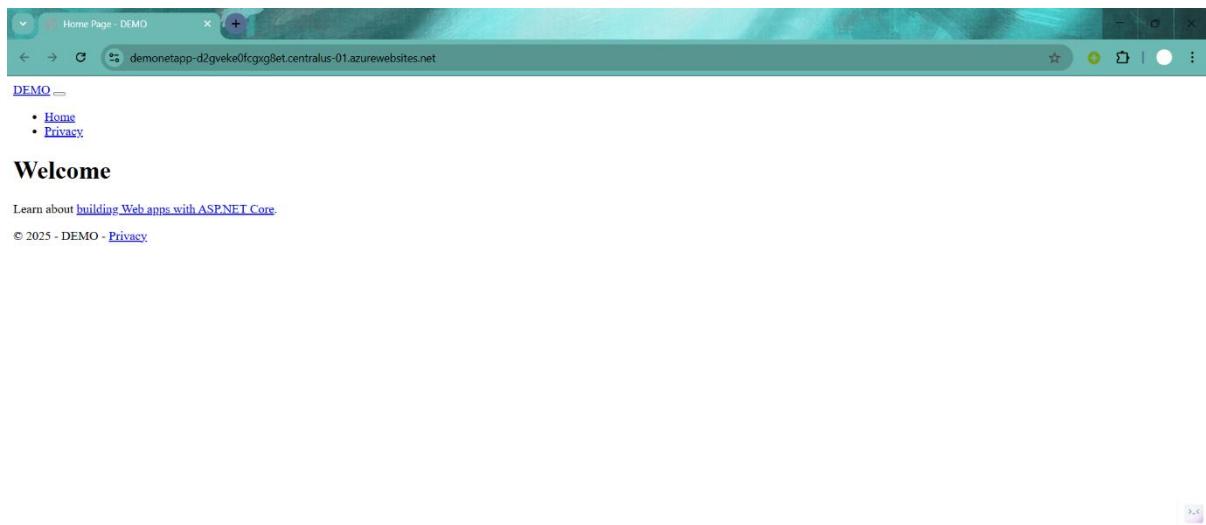
Application started. Press Ctrl+C to shut down.
info: Microsoft.Hosting.Lifetime[0]
Hosting environment: Development
info: Microsoft.Hosting.Lifetime[0]
Content root path: C:\Users\Ayush Pandey\OneDrive\Desktop\DEMO
warn: Microsoft.AspNetCore.HttpsPolicy.HttpsRedirectionMiddleware[3]
Failed to determine the https port for redirect.
info: Microsoft.Hosting.Lifetime[0]
Application is shutting down...



The screenshot shows the Visual Studio Code interface again, with the code editor and Azure sidebar visible. The bottom status bar indicates that the deployment to 'demonetapp' has succeeded twice. A notification message at the bottom right states 'Deployment to "demonetapp" completed.' with options to 'Browse Website', 'Stream Logs', and 'Upload Settings'.

```
1 @[
2     ViewData["Title"] = "Home Page";
3 }
4
5 <div class="text-center">
6     <h1 class="display-4">Welcome Everyone</h1>
7     <p>This is my Demo Web application deployment on Azure Web App</p>
8 </div>
```

Deployment to "demonetapp" completed.



3. Create ACR and pull image from ACR and Create a container from it

Create container registry

Validation passed

Basics Networking Encryption Tags Review + create

Registry details

Basics

Registry name	Demo1Registry
Subscription	Azure subscription 1
Resource Group	DemoResourceGroup
Location	East US
Domain name label scope	Unsecure
Availability zones	Disabled
Pricing plan	Basic
Role assignment permissions mode (Preview)	RBAC Registry Permissions

Networking

Public network access	Yes
-----------------------	-----

Encryption

Create < Previous Next > Download a template for automation

Home >

Microsoft.ContainerRegistry | Overview

Deployment

Search X Cancel Redeploy Download Refresh

Overview

Your deployment is complete

Deployment name : Microsoft.ContainerRegistry
Subscription : Azure subscription 1
Resource group : DemoResourceGroup

Start time : 5/29/2025, 10:46:23 PM
Correlation ID : 34e41071-7bc9-476d-ba85-7a416e151c05

Deployment details
Next steps

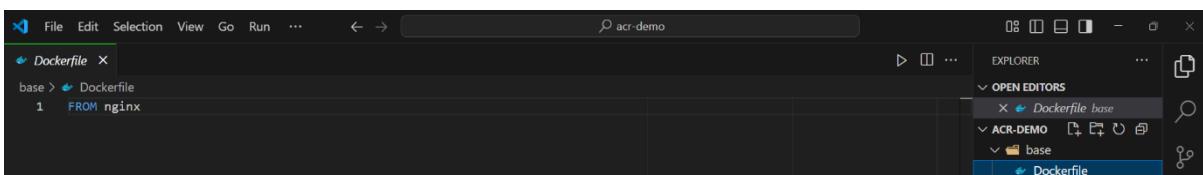
Go to resource

Give feedback
Tell us about your experience with deployment

```
C:\Users\Ayush Pandey>docker login demolregistery.azurecr.io
Username: Demo1Registery
Password:

Login Succeeded

C:\Users\Ayush Pandey>
```



```
PS S:\acr-demo\base> docker build -t demolregistery.azurecr.io/base .
[+] Building 11.6s (6/6) FINISHED
          docker:desktop-linux
=> [internal] load build definition from Dockerfile
=> => transferring dockerfile: 47B
=> [internal] load metadata for docker.io/library/nginx:latest
=> [auth] library/nginx:pull token for registry-1.docker.io
=> [internal] load .dockerrcignore
=> => transferring context: 2B
=> [1/1] FROM docker.io/library/nginx:latest@sha256:fb39280b7b9eba5727c884a
=> => resolve docker.io/library/nginx:latest@sha256:fb39280b7b9eba5727c884a
=> => sha256:fb39280b7b9eba5727c884a3c7810002e69e8f961cc3 10.25kB / 10.25kB
=> => sha256:61320b01ae5e0798393ef25f2dc72faf43703e60ba08 28.23MB / 28.23MB
=> => sha256:ccbcb30b4057f9364bf31e27e25c773f5f83cb3ed908bb 2.29kB / 2.29kB
=> => sha256:be69f2940aaaf64fdf50c9c99420cbd57e10ee655ec7204 8.58kB / 8.58kB
=> => sha256:670a101d432b0e52cb5f8d3967b3bc86da43afc7a814 44.15MB / 44.15MB
=> => sha256:405bd2df85b636e5a16d11297acab724a2f9df4d95bc0d2dd9 629B / 629B
=> => sha256:cc80efff84572c52581d5634549d033cc031cb152260e6aede 956B / 956B
=> => sha256:2b9310b2ee4ba21a0416b-fe25d18c7dda359813ea2d907eb1d 405B / 405B
=> => sha256:6c4aa022e8e1dca9b830363d0279588cfa2a40fdd3bdba 1.21kB / 1.21kB
=> => sha256:abddc69cb49d0c4b10088f9f2e23f7bcd4b75fde71140a 1.40kB / 1.40kB
=> => extracting sha256:61320b01ae5e0798393ef25f2dc72faf43703e60ba089b07d71
=> => extracting sha256:670a101d432b0e52cb5f8d3967b3bc86da43afc7a814fffc0590
=> => extracting sha256:405bd2df85b636e5a16d11297acab724a2f9df4d95bc0d2dd94
=> => extracting sha256:cc80efff84572c52581d5634549d033cc031cb152260e6aede2
=> => extracting sha256:2b9310b2ee4ba21a0416b-fe25d18c7dda359813ea2d907eb1d6
=> => extracting sha256:6c4aa022e8e1dca9b830363d0279588cfa2a40fdd3bdba97266
=> => extracting sha256:abddc69cb49d0c4b10088f9f2e23f7bcd4b75fde71140a17178
=> => exporting to image
=> => exporting layers
=> => writing image sha256:be69f2940aaaf64fdf50c9c99420cbd57e10ee655ec7204df
=> => naming to demolregistery.azurecr.io/base
```

```

PS S:\acr-demo\base> docker push demoregistry.azurecr.io/base
Using default tag: latest
The push refers to repository [demoregistry.azurecr.io/base]
941dd9dd8ee4: Pushed
f6e33ee35fd0: Pushed
9fd8b974f616: Pushed
a8b606cdf152: Pushed
cb857378ec55: Pushed
deb7d8874f38: Pushed
ace34d1d784c: Pushed
latest: digest: sha256:e5e2c4be5cea9bf49b2c976c65b4fca33d9d094b276a5e517d8e5748100a3c73 size: 1778
PS S:\acr-demo\base>

```

The screenshot shows the Microsoft Container Registry interface. On the left, a sidebar menu includes 'Overview', 'Activity log', 'Access control (IAM)', 'Tags', 'Quick start', 'Resource visualizer', 'Events', 'Settings', and 'Services'. The 'Repositories' item is selected. In the main area, the 'base' repository is selected. The 'Essentials' section shows the repository name 'base', tag count '1', manifest count '1', and last updated date '5/30/2025, 1:24 AM GMT+5:30'. Below this is a table with columns 'Tags', 'Digest', and 'Last modified', showing one entry for 'latest'. To the right, there are two Dockerfile tabs: 'site1' and 'site2'. The 'site1' tab contains the following Dockerfile:

```

site1 > Dockerfile
1 FROM demoregistry.azurecr.io/base
2 COPY site/ /usr/share/nginx/html/

```

The 'site2' tab has a similar Dockerfile. The Explorer sidebar on the right shows a tree structure with 'GROUP 1' containing 'base' and 'site1', and 'GROUP 2' containing 'ACR-DEMO' which has 'site1' and 'site2' under it, each with its own 'Dockerfile'.

```

PS S:\acr-demo\site1> docker build -t demoregistry.azurecr.io/site1 .
[+] Building 0.2s (7/7) FINISHED                                            docker:desktop-linux
=> [internal] load build definition from Dockerfile                      0.0s
=> => transferring dockerfile: 106B                                         0.0s
=> [internal] load metadata for demoregistry.azurecr.io/base:latest      0.0s
=> [internal] load .dockerignore                                         0.0s
=> => transferring context: 2B                                           0.0s
=> [internal] load build context                                         0.0s
=> => transferring context: 26B                                         0.0s
=> CACHED [1/2] FROM demoregistry.azurecr.io/base:latest                 0.0s
=> [2/2] COPY site/ /usr/share/nginx/html/                                0.0s
=> exporting to image                                                 0.0s
=> => exporting layers                                              0.0s
=> => writing image sha256:b99a060e5568aa069a86b6006350b2ba7320dc522ef72410 0.0s
=> => naming to demoregistry.azurecr.io/site1                           0.0s
PS S:\acr-demo\site1> docker push demoregistry.azurecr.io/site1
Using default tag: latest
The push refers to repository [demoregistry.azurecr.io/site1]
bbc5407765c4: Pushed
941dd9dd8ee4: Mounted from base
f6e33ee35fd0: Mounted from base
9fd8b974f616: Mounted from base
a8b606cdf152: Mounted from base
cb857378ec55: Mounted from base
deb7d8874f38: Mounted from base
ace34d1d784c: Mounted from base
latest: digest: sha256:1d41029b8d5a69be7a0f6d2c30305dc2402823e2f075b843286a304d289dda8a size: 1985
PS S:\acr-demo\site1>

```

The screenshot shows the Microsoft Container Registry interface. The 'base' repository is still selected in the sidebar. The 'site1' repository is now selected. The 'Essentials' section shows the repository name 'site1', tag count '1', manifest count '1', and last updated date '5/30/2025, 1:31 AM GMT+5:30'. Below this is a table with columns 'Tags', 'Digest', and 'Last modified', showing one entry for 'latest'. The Dockerfile for 'site1' is identical to the one in 'base':

```

site1 > Dockerfile
1 FROM demoregistry.azurecr.io/base
2 COPY site/ /usr/share/nginx/html/

```

The Explorer sidebar on the right shows the same tree structure as before, with 'base' and 'site1' under 'GROUP 1' and 'site1' under 'ACR-DEMO'.

```

PS S:\acr-demo\site2> docker build -t demoregistry.azurecr.io/site2 .
[+] Building 0.2s (7/7) FINISHED                                            docker:desktop-linux
=> [internal] load build definition from Dockerfile                      0.0s
=> => transferring dockerfile: 106B                                         0.0s
=> [internal] load metadata for demoregistry.azurecr.io/base:latest      0.0s
=> [internal] load .dockerignore                                         0.0s
=> => transferring context: 2B                                           0.0s
=> [internal] load build context                                         0.0s
=> => transferring context: 26B                                         0.0s
=> [1/2] FROM demoregistry.azurecr.io/base:latest                         0.0s
=> CACHED [2/2] COPY site/ /usr/share/nginx/html/                           0.0s
=> exporting to image                                                 0.0s
=> => exporting layers                                              0.0s
=> => writing image sha256:b99a060e5568aa069a86b6006350b2ba7320dc522ef72410 0.0s
=> => naming to demoregistry.azurecr.io/site2                            0.0s
PS S:\acr-demo\site2> docker push demoregistry.azurecr.io/site2
Using default tag: latest
The push refers to repository [demoregistry.azurecr.io/site2]
bbc5407765c4: Mounted from site1
941dd9dd8ee4: Mounted from site1
f6e33ee35fd0: Mounted from site1
9fd8b974f616: Mounted from site1
a8b606cdf152: Mounted from site1
cb857378ec55: Mounted from site1
deb7d8874f38: Mounted from site1
ace34d1d784c: Mounted from site1
latest: digest: sha256:1d41029b8d5a69be7a0f6d2c30305dc2402823e2f075b843286a304d289dda8a size: 1985
PS S:\acr-demo\site2> |

```

Demo1Registry | Repositories

site2

Repository site2 Tag count 1 Manifest count 1

Last updated date 5/30/2025, 1:34 AM GMT+5:30

Tags latest Digest sha256:1d41029b8d5a69be7a0f6d2c30305dc24... Last modified 5/30/2025, 1:34 AM GMT+5:30

Create container instance

✓ Validation passed

Basics Networking Monitoring Advanced Tags Review + create

Basics

Subscription	Azure subscription 1
Resource group	DemoResourceGroup
Region	East US
Container name	acrsite1
SKU	Standard
Image type	Private
Image registry login server	demoregistry.azurecr.io
Image	demoregistry.azurecr.io/site1:latest
Image registry user name	Demo1Registry
OS type	Linux
Memory (GiB)	1.5
Number of CPU cores	1
GPU type (preview)	None
GPU count	0

 Microsoft.ContainerInstances-20250530013711 | Overview ...

Search X <> Delete Cancel Redeploy Download Refresh

Overview

Your deployment is complete

Deployment name : Microsoft.ContainerInstances-20250530013711
Subscription : Azure subscription 1
Resource group : DemoResourceGroup

Start time : 5/30/2025, 1:44:53 AM
Correlation ID : 06697bf2-f313-42f2-a499-2368b7273a1a

> Deployment details
Next steps

Go to resource

Give feedback
Tell us about your experience with deployment

Create container instance

 Validation passed

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

Basics

Subscription	Azure subscription 1
Resource group	DemoResourceGroup
Region	East US
Container name	acrsite2
SKU	Standard
Image type	Private
Image registry login server	demo1registry.azurecr.io
Image	demo1registry.azurecr.io/site2:latest
Image registry user name	Demo1Registry
OS type	Linux
Memory (GiB)	1.5
Number of CPU cores	1
GPU type (preview)	None
GPU count	0

[Create](#) [< Previous](#) [Next >](#) [Download a template for automation](#)

 Microsoft.ContainerInstances-20250530015008 | Overview

Deployment

Search Delete Cancel Redeploy Download Refresh

Overview Inputs Outputs Template

Your deployment is complete

Deployment name : Microsoft.ContainerInstances-20250530015008
Subscription : Azure subscription 1
Resource group : DemoResourceGroup

Start time : 5/30/2025, 1:50:58 AM
Correlation ID : 31c5aa38-6867-4a5e-8aee-614b61dec0a5

> Deployment details
< Next steps

Go to resource

Give feedback
Tell us about your experience with deployment

 DemoResourceGroup Resource group

Search Create Manage view Delete resource group Refresh Export to CSV Open query Assign tags Move Delete Export template ...

Overview Essentials

Activity log Access control (IAM) Tags Resource visualizer Events Settings Cost Management Monitoring Automation Help

Resources Recommendations

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

Showing 1 to 3 of 3 records. Show hidden types

Type	Location	...
Container instances	East US	...
Container instances	East US	...
Container registry	East US	...

Welcome to nginx!

Not secure 20.72.174.15

Welcome to nginx!

If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

For online documentation and support please refer to nginx.org. Commercial support is available at nginx.com.

Thank you for using nginx.

Welcome to nginx!

Not secure 20.120.127.52

Welcome to nginx!

If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

For online documentation and support please refer to nginx.org. Commercial support is available at nginx.com.

Thank you for using nginx.

4. Create Container Instance and deploy a simple docker application on it. Create Container Groups and test functionality

Create container instance

X

Validation passed

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

Basics

Subscription	Azure subscription 1
Resource group	ACIResource
Region	East US
Container name	acidemo
SKU	Standard
Image type	Public
Image	mcr.microsoft.com/oss/nginx/nginx:1.21.6
OS type	Linux
Memory (GiB)	1.5
Number of CPU cores	1
GPU type (preview)	None
GPU count	0

Networking

Networking type	Public
Ports	80 (TCP)

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

Microsoft.ContainerInstances-20250530131129 | Overview

Deployment

Search X <> Delete Cancel Redeploy Download Refresh

Overview

Your deployment is complete

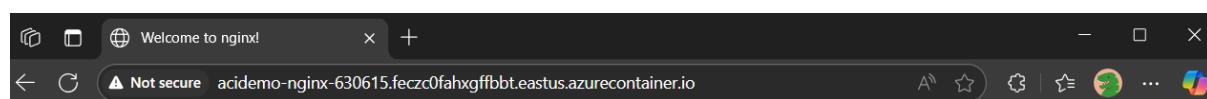
Deployment name : Microsoft.ContainerInstances-20250530131129
Subscription : Azure subscription 1
Resource group : ACIResource

Start time : 5/30/2025, 1:16:32 PM
Correlation ID : aa7c174e-1d0f-4e62-a40d-0c33014c2ebb

Deployment details
Next steps

Go to resource

Give feedback Tell us about your experience with deployment



Welcome to nginx!

If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

For online documentation and support please refer to nginx.org.
Commercial support is available at nginx.com.

Thank you for using nginx.

5. A. Create a Vnet, 2 Subnets Subnet-1: Linux VM, WindowsVM Subnet-2: SQL DB, B. Create 4 VNets 1. Management Vnet (HUB) 2. Production Vnet 3. Testing Vnet 4. Developing Vnet And Configure Hub and Spoke Architecture and verify it's working by launching VM in each VNet and ping from Management VM to every other VM

A.

Create network security group

Validation passed

Basics Tags Review + create

Basics

Subscription	Azure subscription 1
Resource group	ResourceGroup1
Region	East US
name	Demo-NSG

Tags

None

NetworkRG

< Previous Next > Download a template for automation

Overview

- Activity log
- Access control (IAM)
- Tags
- Resource visualizer
- Events
- Settings
- Cost Management
- Monitoring
- Automation
- Help

Essentials

Resources Recommendations

Filter for any field...

Type equals all × Location equals all × Add filter

Showing 0 to 0 of 0 records. Show hidden types ⓘ No grouping List view

Name ↑ Type ↑ Location ↑

No resources match your filters

Try changing or clearing your filters. Give feedback

Create resources Clear filters

Add or remove favorites by pressing *Ctrl+Shift+F*

Create virtual network

...

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

Subscription Azure subscription 1

Resource Group NetworkRG

Name MainVNet

Region East US

Security

Azure Bastion Disabled

Azure Firewall Disabled

Azure DDoS Network Protection Disabled

IP addresses

Address space 10.0.0.0/16 (65,536 addresses)

Subnet default (10.0.0.0/24) (256 addresses)

Subnet Subnet-1 (10.0.1.0/24) (256 addresses)

Subnet Subnet-2 (10.0.2.0/24) (256 addresses)

Previous

Next

Create

MainVNet-1748625379893 | Overview

Deployment

Search X <>

Delete Cancel Redeploy Download Refresh

✓ Your deployment is complete

Deployment name : MainVNet-1748625379893 Start time : 5/30/2025, 10:46:25 PM

Subscription : Azure subscription 1 Correlation ID : 2e3a2ad6-4f5b-4baa-9332-97e916d5e185

Resource group : NetworkRG

Deployment details

Resource	Type	Status	Operation details
MainVNet	Virtual network	OK	Operation details

Next steps

Give feedback

Tell us about your experience with deployment

Create network security group

Validation passed

Basics Tags Review + create

Basics

Subscription	Azure subscription 1
Resource group	NetworkRG
Region	East US
name	Subnet1-NSG

Tags

None

Create

< Previous

Next >

Download a template for automation

Microsoft.NetworkSecurityGroup-20250530224726 | Overview ...

Deployment

Search X << Delete Cancel Redeploy Download Refresh

Overview Inputs Outputs Template

✓ Your deployment is complete

Deployment name : Microsoft.NetworkSecurityGroup-20250530224726 Start time : 5/30/2025, 10:48:09 PM
Subscription : Azure subscription 1 Correlation ID : 1756d382-5e3a-4fa5-a0c2-6786e5327355
Resource group : NetworkRG

> Deployment details
▽ Next steps

Go to resource

Give feedback
Tell us about your experience with deployment

Create network security group

Validation passed

Basics Tags Review + create

Basics

Subscription	Azure subscription 1
Resource group	NetworkRG
Region	East US
name	Subnet2-NSG

Tags

None

Create

< Previous

Next >

Download a template for automation



Microsoft.NetworkSecurityGroup-20250530224925 | Overview

Deployment

Search

x <<

Delete

Cancel

Redeploy

Download

Refresh

Overview

Inputs

Outputs

Template

Your deployment is complete

Deployment name : Microsoft.NetworkSecurityGroup-20250530224925 Start time : 5/30/2025, 10:50:00 PM
Subscription : Azure subscription 1 Correlation ID : 3ebfe1ef-60a4-4ebd-af71-276c55306129
Resource group : NetworkRG

Deployment details

Next steps

Go to resource

Give feedback

Tell us about your experience with deployment

Edit subnet

X

Size ⓘ ▼

Subnet address range ⓘ

IPv6

Include an IPv6 address space This virtual network has no IPv6 address ranges.

Private subnet

Private subnets enhance security by not providing default outbound access. To enable outbound connectivity for virtual machines to access the internet, it is necessary to explicitly grant outbound access. A NAT gateway is the recommended way to provide outbound connectivity for virtual machines in the subnet. [Learn more ↗](#)

Enable private subnet (no default outbound access)

Security

Simplify internet access for virtual machines network security group. [Learn more ↗](#)

NAT gateway ⓘ

i A NAT gateway is recommended for our [Learn more ↗](#)

Network security group ⓘ ▼

Route table ▼

Save Cancel Give feedback

Edit subnet

X

Starting address * ⓘ

Size ⓘ ▼

Subnet address range ⓘ

IPv6

Include an IPv6 address space This virtual network has no IPv6 address ranges.

Private subnet

Private subnets enhance security by not providing default outbound access. To enable outbound connectivity for virtual machines to access the internet, it is necessary to explicitly grant outbound access. A NAT gateway is the recommended way to provide outbound connectivity for virtual machines in the subnet. [Learn more ↗](#)

Enable private subnet (no default outbound access)

Security

Simplify internet access for virtual machines network security group. [Learn more ↗](#)

NAT gateway ⓘ

i A NAT gateway is recommended for our [Learn more ↗](#)

Network security group ⓘ ▼

Save Cancel Give feedback

Home > Subnet1-NSG

Subnet1-NSG

Network security group

Search

- Overview
- Activity log
- Access control (IAM)
- Tags
- Diagnose and solve problems
- Resource visualizer
- Settings
 - Inbound security rules
 - Outbound security
 - Network interfaces
 - Subnets
 - Properties
 - Locks
- Monitoring
- Automation
- Help

Add or remove favorites by pressing ⌘ or ⌘

Add inbound security rule

Subnet1-NSG

Destination ⓘ Any

Service ⓘ SSH

Destination port ranges ⓘ 22

Protocol

- Any
- TCP
- UDP
- ICMPv4
- ICMPv6

Action

- Allow
- Deny

Priority * ⓘ 1000

Name * AllowSSH-LinuxVM

Add Cancel Give feedback

Home > Subnet1-NSG

Subnet1-NSG

Network security group

Search

- Overview
- Activity log
- Access control (IAM)
- Tags
- Diagnose and solve problems
- Resource visualizer
- Settings
 - Inbound security rules
 - Outbound security
 - Network interfaces
 - Subnets
 - Properties
 - Locks
- Monitoring
- Automation
- Help

Add or remove favorites by pressing ⌘ or ⌘

Add inbound security rule

Subnet1-NSG

Destination ⓘ Any

Service ⓘ RDP

Destination port ranges ⓘ 3389

Protocol

- Any
- TCP
- UDP
- ICMPv4
- ICMPv6

Action

- Allow
- Deny

Priority * ⓘ 1010

Name * AllowRDP-WindowsVM

Add Cancel Give feedback

The screenshot shows the Azure portal interface for managing a Network Security Group (NSG). On the left, the navigation menu is open, showing options like Overview, Activity log, Access control (IAM), Tags, Diagnose and solve problems, Resource visualizer, Settings, Inbound security rules, Outbound security rules, Network interfaces, Subnets, Properties, Locks, Monitoring, Automation, and Help. The 'Inbound security rules' option is selected.

The main content area displays a modal dialog titled 'Add inbound security rule'. The dialog has a progress bar at the top indicating 'Creating security rule' and a message 'Creating security rule 'Allow-ICMP''. The configuration fields include:

- Protocol:** ICMPv4 (selected)
- Action:** Allow (selected)
- Priority:** 1020
- Name:** Allow-ICMP
- Description:** (empty)

At the bottom of the dialog are 'Add' and 'Cancel' buttons, and a 'Give feedback' link.

Create a virtual machine

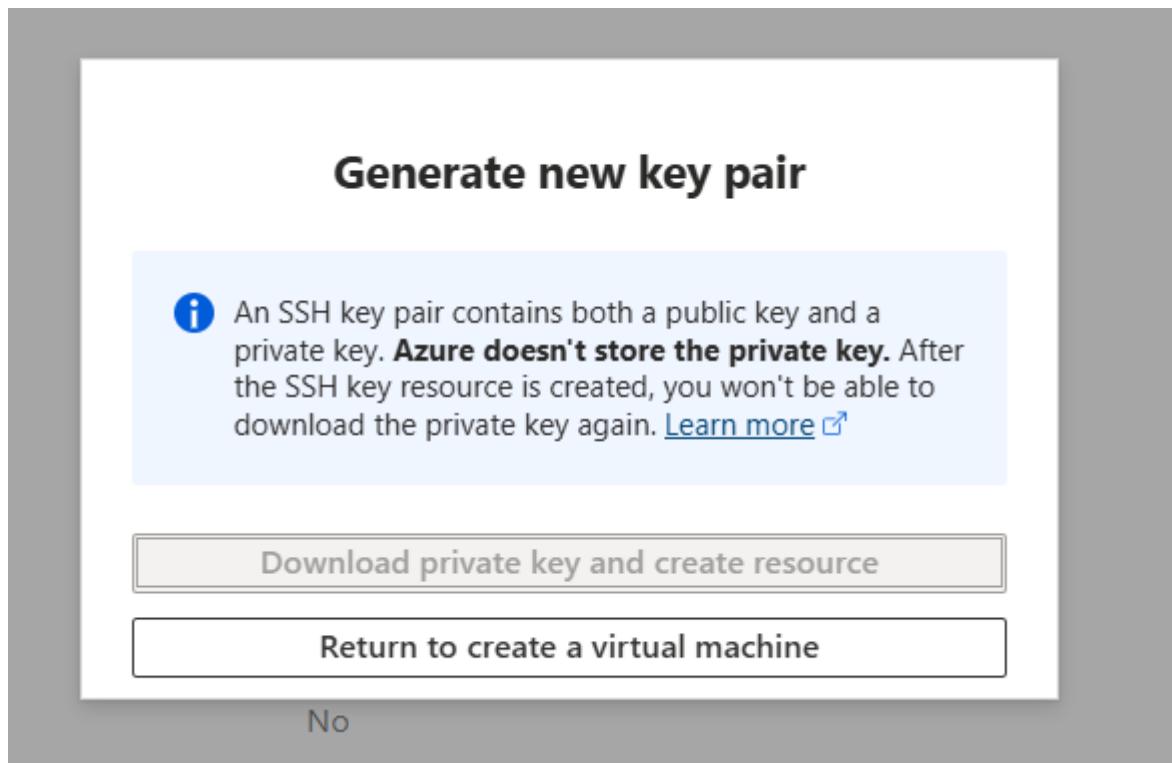
Validation passed

Help me create a low cost VM Help me create a VM optimized for high availability Help me choose the right VM size for my workload

Basics

Subscription	Azure subscription 1
Resource group	NetworkRG
Virtual machine name	LinuxVM
Region	East US
Availability options	No infrastructure redundancy required
Zone options	Self-selected zone
Security type	Standard
Image	Ubuntu Server 24.04 LTS - Gen2
VM architecture	x64
Size	Standard B1ls (1 vcpu, 0.5 GiB memory)
Enable Hibernation	No
Authentication type	SSH public key
Username	azureuser
SSH Key format	RSA
Key pair name	LinuxVM_key
Azure Spot	No

< Previous Next > **Create**



 CreateVm-canonical.ubuntu-24_04-Its-server-2025... ↗ ⋮ ×

Deployment

Search X « Delete Cancel Redeploy Download Refresh

☰ Overview Inputs Outputs Template

✓ Your deployment is complete

Deployment name: CreateVm-canonical.ubuntu-24_04-Its-server-2...
Subscription: [Azure subscription 1](#)
Resource group: [NetworkRG](#)
Start time: 5/30/2025, 11:11:26 PM
Correlation ID: f549fe4b-10c2-4189-a28c-aafe5bcc4bf Copy

^ Deployment details

Resource	Type	Status
✓ LinuxVM	Microsoft.Compute/vir...	OK
✓ linuxvm591	Microsoft.Network/net...	OK
✓ LinuxVM-PIP	Microsoft.Network/pu...	OK

^ Next steps

[Setup auto-shutdown](#) Recommended
[Monitor VM health, performance and network dependencies](#) Recommended
[Run a script inside the virtual machine](#) Recommended

Go to resource Create another VM

Add or remove favorites by pressing **Ctrl+Shift+F**

Create a virtual machine ...

Validation passed

Help me create a low cost VM Help me create a VM optimized for high availability Help me choose the right VM size for my workload

Basics

Subscription	Azure subscription 1
Resource group	NetworkRG
Virtual machine name	WindowsVM
Region	East US
Availability options	No infrastructure redundancy required
Zone options	Self-selected zone
Security type	Standard
Image	Windows Server 2022 Datacenter: Azure Edition - Gen2
VM architecture	x64
Size	Standard B1s (1 vcpu, 1 GiB memory)
Enable Hibernation	No
Username	azureuser
Already have a Windows license?	No
Azure Spot	No

Disk

OS disk size Image default

< Previous Next > Create

CreateVm-MicrosoftWindowsServer.WindowsServer-202-20250530231432 | Overview ✎ ...

Deployment

Search X Delete Cancel Redeploy Download Refresh

Overview Inputs Outputs Template

✓ Your deployment is complete

Deployment name: CreateVm-MicrosoftWindowsServer.WindowsSe... Start time: 5/30/2025, 11:17:51 PM
Subscription: Azure subscription 1 Correlation ID: 6d17339d-9efc-412c-a4f6-c4ed3145ef53 Copy

Resource group: NetworkRG

Deployment details

Next steps

Setup auto-shutdown Recommended
Monitor VM health, performance and network dependencies Recommended
Run a script inside the virtual machine Recommended

Go to resource Create another VM

[Give feedback](#)
[Tell us about your experience with deployment](#)

Create SQL Database ...

Microsoft

Basics Networking Security Additional settings Tags [Review + create](#)

Product details

SQL database
by Microsoft
[Terms of use](#) | [Privacy policy](#)

Estimated cost

Storage cost 0.00 USD / month + Compute cost 0.000000 USD / vCore second



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. For additional details see [Azure Marketplace Terms](#).

Basics

Subscription Azure subscription 1
Resource group NetworkRG
Region Central US
Database name MySQLAppDatabase
Server (new) mysqlappdatabase1unqi
Authentication method SQL authentication

Cost summary

General Purpose (GP_S_Gen5_2)	
Cost per GB (in USD)	0.00
Max storage selected (in GB)	x 41.6
First 32 GB storage free	
First 100,000 vCore seconds free	
Overage billing	Disabled
ESTIMATED STORAGE COST / MONTH	0.00 USD
COMPUTE COST / VCORE SECOND ²	0.000000 USD

1 There will be no charges for usage within the free limits. The database will be paused automatically when the free limits are reached.
2 Serverless databases are billed in vCore seconds based on a combination of CPU and memory utilization. Learn more about serverless billing

Compute + storage

General Purpose - Serverless: Standard-series (Gen5), 2 vCores, 32 GB storage, zone redundant disabled

Backup storage redundancy

Locally-redundant backup storage

Overage billing

Disabled

Networking

Allow Azure services and resources to access this server No
Private endpoint (New) sql-private-endpoint
Minimum TLS version 1.2
Connection Policy Default

Security

Identity Not enabled
Transparent data encryption (Server level) Service-managed key selected
Database level customer-managed key Not configured
Database level user assigned managed identity Not configured
Advanced data security Not now
Always Encrypted with secure enclaves Not configured
Sql Ledger(Database) Disabled
Digest Storage Disabled

[Create](#)

[< Previous](#)

[Download a template for automation](#)

Microsoft.SQLDatabase.newDatabaseNewServer_7c6f4ab8daea426486c37 | Overview

Deployment

Search X < > Delete Cancel Redeploy Download Refresh

Overview

Your deployment is complete

Deployment name : Microsoft.SQLDatabase.newDatabaseNewServer_7c... Start time : 5/30/2025, 11:35:12 PM
Subscription : Azure subscription 1 Correlation ID : a4a944a8-41f8-4752-b1ef-02aa9a1b244e
Resource group : NetworkRG

Deployment details

Resource	Type	Status	Operation details
PrivateDns-pe-827a9e2d-7ad5-41b2-80f4	Deployment	OK	Operation details
PrivateEndpoint-pe-827a9e2d-7ad5-41b2	Deployment	OK	Operation details
mysqlappdatabase1unqi/MySQLAppData	Microsoft.Sql/servers/databases	Created	Operation details
mysqlappdatabase1unqi/Default	Microsoft.Sql/servers/connectio	OK	Operation details
mysqlappdatabase1unqi	Microsoft.Sql/servers	Created	Operation details
SubnetPolicies-pe-827a9e2d-7ad5-41b2-1	Deployment	OK	Operation details

Next steps

[Go to resource](#)

B.

Create virtual network

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

Basics

Subscription	Azure subscription 1
Resource Group	NetworkRG
Name	Hub-Management-VNet
Region	East US

Security

Azure Bastion	Disabled
Azure Firewall	Disabled
Azure DDoS Network Protection	Disabled

IP addresses

Address space	10.10.0.0/16 (65,536 addresses)
Subnet	default (10.10.0.0/24) (256 addresses)
Subnet	ManagementSubnet (10.10.1.0/24) (256 addresses)

[Previous](#)

[Next](#)

Create

 Hub-Management-VNet-1748630082642 | Overview ...

Deployment

Search X < Delete Cancel Redeploy Download Refresh

 Overview

 Inputs

 Outputs

 Template

✓ Your deployment is complete

Deployment name : Hub-Management-VNet-1748630082642
Subscription : Azure subscription 1
Resource group : NetworkRG

Start time : 5/31/2025, 12:04:48 AM
Correlation ID : 4c912fae-6d89-47e8-a651-19bdbbf71cd1

> Deployment details
Next steps

Go to resource

 Spoke-Production-VNet-1748630361636 | Overview ...

Deployment

Search X < Delete Cancel Redeploy Download Refresh

 Overview

 Inputs

 Outputs

 Template

✓ Your deployment is complete

Deployment name : Spoke-Production-VNet-1748630361636
Subscription : Azure subscription 1
Resource group : NetworkRG

Start time : 5/31/2025, 12:09:29 AM
Correlation ID : 02d0a0e7-9e4b-4cf6-9e77-b04e76a24af2

> Deployment details
Next steps

Go to resource

Create virtual network ...

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

Basics

Subscription	Azure subscription 1
Resource Group	NetworkRG
Name	Spoke-Testing-VNet
Region	East US

Security

Azure Bastion	Disabled
Azure Firewall	Disabled
Azure DDoS Network Protection	Disabled

IP addresses

Address space	10.30.0.0/16 (65,536 addresses)
Subnet	default (10.30.0.0/24) (256 addresses)
Subnet	TestingSubnet (10.30.1.0/24) (256 addresses)

Previous

Next

Create

 Spoke-Testing-VNet-1748630485449 | Overview ...

Deployment

Search X < >

 Overview

 Inputs

 Outputs

 Template

 Delete  Cancel  Redeploy  Download  Refresh

 Your deployment is complete

Deployment name : Spoke-Testing-VNet-1748630485449
Subscription : Azure subscription 1
Resource group : NetworkRG

Start time : 5/31/2025, 12:11:32 AM
Correlation ID : 78712a51-f8e9-4de7-95d0-d7d9c71a95e4

> Deployment details
Next steps

Go to resource

Create virtual network ...

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

Basics

Subscription	Azure subscription 1
Resource Group	NetworkRG
Name	Spoke-Development-VNet
Region	East US

Security

Azure Bastion	Disabled
Azure Firewall	Disabled
Azure DDoS Network Protection	Disabled

IP addresses

Address space	10.40.0.0/16 (65,536 addresses)
Subnet	default (10.40.0.0/24) (256 addresses)
Subnet	DevelopmentSubnet (10.40.1.0/24) (256 addresses)

Previous

Next

Create

 Spoke-Development-VNet-1748630620603 | Overview ...

Deployment

Search X < >

 Overview

 Inputs

 Outputs

 Template

 Delete  Cancel  Redeploy  Download  Refresh

 Your deployment is complete

Deployment name : Spoke-Development-VNet-1748630620603
Subscription : Azure subscription 1
Resource group : NetworkRG

Start time : 5/31/2025, 12:13:46 AM
Correlation ID : 923177e0-8db7-498b-98e1-e28dc0cd32a7

> Deployment details
Next steps

Go to resource

Add peering

Hub-Management-VNet

Virtual network peering enables you to seamlessly connect two or more virtual networks in either virtual network to directly connect and communicate with each other.

Remote virtual network summary

Peering link name *

Hub-to-Production

Virtual network deployment model ⓘ

 Resource manager Classic

I know my resource ID ⓘ

Subscription *

Azure subscription 1

Virtual network *

Spoke-Production-VNet (NetworkRG)

Remote virtual network peering settings

Allow 'Spoke-Production-VNet' to access 'Hub-Management-VNet' ⓘ

[Add](#)[Cancel](#)[Give feedback](#)

Add peering

Hub-Management-VNet

Virtual network peering enables you to seamlessly connect two or more virtual networks in either virtual network to directly connect and communicate with each other.

Remote virtual network summary

Peering link name *

Hub-to-Testing

Virtual network deployment model ⓘ

 Resource manager Classic

I know my resource ID ⓘ

Subscription *

Azure subscription 1

Virtual network *

Spoke-Testing-VNet (NetworkRG)

Remote virtual network peering settings

Allow 'Spoke-Testing-VNet' to access 'Hub-Management-VNet' ⓘ

[Add](#)[Cancel](#)[Give feedback](#)

Home > NetworkRG > Hub-Management-VNet | Peerings >

Add peering

Hub-Management-VNet

Remote virtual network summary

Peering link name *

Virtual network deployment model Resource manager Classic

I know my resource ID

Subscription *

Virtual network *

Remote virtual network peering settings

Allow 'Spoke-Development-VNet' to access 'Hub-Management-VNet'

Allow 'Spoke-Development-VNet' to receive forwarded traffic from 'Hub-Management-VNet'

Add **Cancel** [Give feedback](#)

Hub-Management-VNet | Peerings

Virtual network

Peering					
Peering		Peering sync status		Peering state	
Name	Peering sync status	Peering state	Remote IP range	Virtua...	Cross-tenant
Production-to-Hub	Fully Synchronized	Connected	Spoke-P...	Disabled	No
Testing-to-Hub	Fully Synchronized	Connected	Spoke-T...	Disabled	No
Development-to-Hub	Fully Synchronized	Connected	Spoke-D...	Disabled	No

Management-NSG | Subnets

Network security group

Associate

Subnets

Search subnets

Name	Address range	Virtual network
ManagementSubnet	10.10.1.0/24	Hub-Management-V...

Give feedback

- Overview
- Activity log
- Access control (IAM)
- Tags
- Diagnose and solve problems
- Resource visualizer
- Settings
 - Inbound security rules
 - Outbound security rules
 - Network interfaces

Management-NSG | Inbound security rules

Network security group

Search

«

Add

Hide default rules

Refresh

Delete

...

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Resource visualizer

Settings

Inbound security rules

Outbound security rules

Network interfaces

Subnets

Properties

Locks

Monitoring

Network security group security rules are evaluated by priority using the combination of source, source port, destination, destination port, and protocol to allow or deny the traffic. A security rule can't have the same priority and direction as an existing rule. You can't delete default security rules, but you can override them with rules that have a higher priority. [Learn more](#)

Filter by name

Port == all

Protocol == all

Source == all

Destination == all

Action == all

Priority ↑↓

Name ↑↓

Port ↑↓

<input type="checkbox"/> 1000	⚠ AllowAnySSHInbo...	22
<input type="checkbox"/> 1010	⚠ AllowAnyCustom...	Any
<input type="checkbox"/> 65000	AllowVnetInBound	Any
<input type="checkbox"/> 65001	AllowAzureLoadBalanc...	Any
<input type="checkbox"/> 65500	DenyAllInBound	Any



Microsoft.NetworkSecurityGroup-20250531003142 | ...

Deployment

Search

«

Delete

Cancel

Redeploy

Download

Refresh

Overview

Inputs

Outputs

Template

✓ Your deployment is complete



Deployment name : Microsoft.NetworkSecurityGroup-2025053100...

Subscription : Azure subscription 1

Resource group : NetworkRG

Start time : 5/31/2025, 12:32:16 AM

Correlation ID : 3bc65681-f9c3-4b14-95df-b9a2dd294d15

Deployment details

Next steps

Go to resource

Home > Microsoft.Network

Production

Network security group

Search

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Resource visualizer

Subnets

Inbound security rules

Outbound security rules

Network interfaces

Properties

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Monitoring

Automation

Help

Associate subnet

Production-NSG

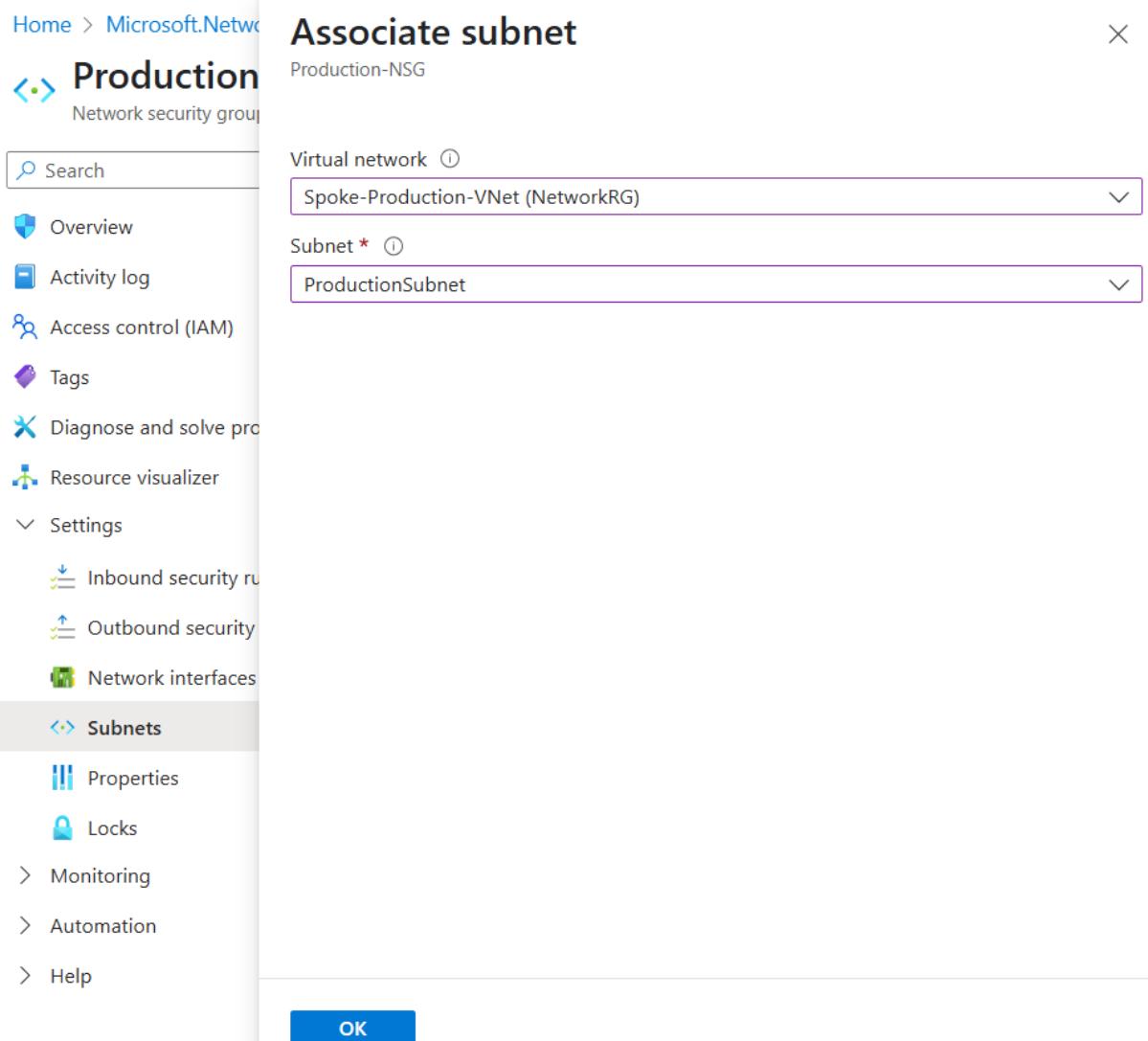
Virtual network ⓘ

Spoke-Production-VNet (NetworkRG)

Subnet * ⓘ

ProductionSubnet

OK



Microsoft.NetworkSecurityGroup-20250531004312 | ...

Deployment

Search

Delete

Cancel

Redeploy

Download

Refresh

Overview

Inputs

Outputs

Template

Your deployment is complete

Deployment name : Microsoft.NetworkSecurityGroup-2025053100...

Subscription : Azure subscription 1

Resource group : NetworkRG

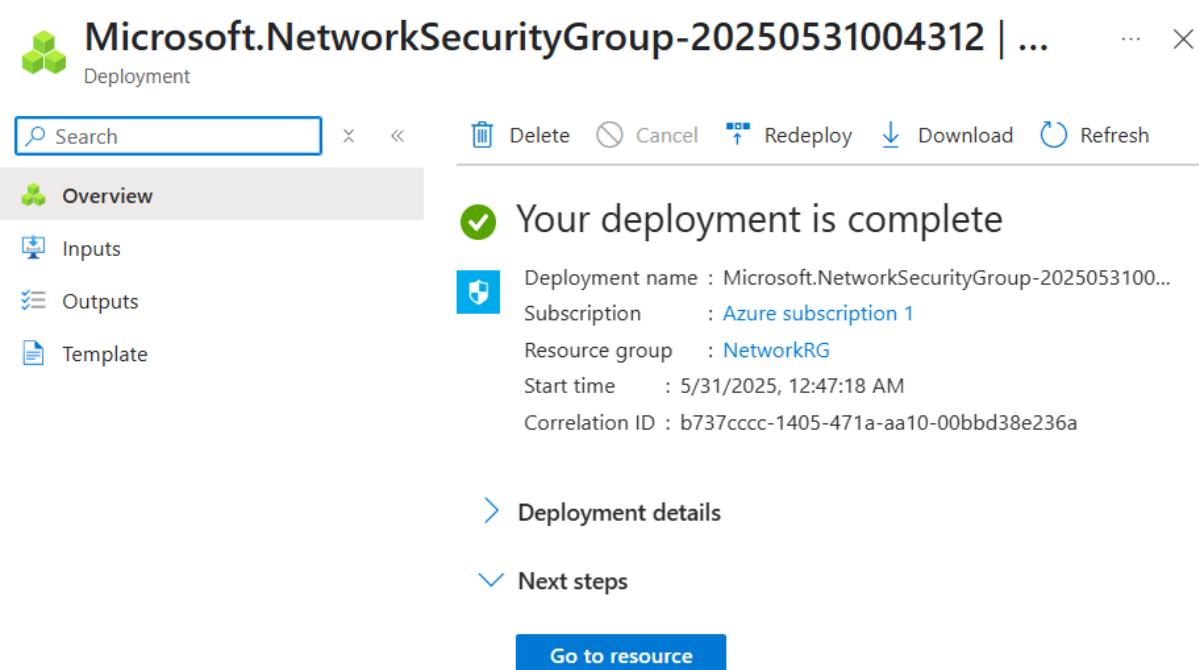
Start time : 5/31/2025, 12:47:18 AM

Correlation ID : b737cccc-1405-471a-aa10-00bbd38e236a

Deployment details

Next steps

Go to resource



Home > Microsoft.Network

Testing-NS

Network security group

- Search
- Overview
- Activity log
- Access control (IAM)
- Tags
- Diagnose and solve problems
- Resource visualizer
- Settings
 - Inbound security rules
 - Outbound security
 - Network interfaces
- Subnets**
- Properties
- Locks
- Monitoring
- Automation
- Help

Associate subnet

Testing-NSG

... Saving subnet

X

Saving network security group for subnet
'TestingSubnet'.

Virtual network ⓘ

Spoke-Testing-VNet (NetworkRG)

Subnet * ⓘ

TestingSubnet

OK

Home > Microsoft.Network

Testing-NS

Network security group

- Search
- Overview
- Activity log
- Access control (IAM)
- Tags
- Diagnose and solve problems
- Resource visualizer
- Settings
 - Inbound security rules**
 - Outbound security
 - Network interfaces
- Subnets
- Properties
- Locks
- Monitoring
- Automation
- Help

Add inbound security rule

Testing-NSG

... Creating security rule

X

Creating security rule 'AllowCidrBlockSSHInbound'.

Source ⓘ

IP Addresses

Source IP addresses/CIDR ranges * ⓘ

10.10.0.0/16

Source port ranges * ⓘ

*

Destination ⓘ

Any

Service ⓘ

SSH

Destination port ranges ⓘ

22

Protocol

Any

TCP

UDP

ICMPv4

ICMPv6

Add

Cancel

Give feedback

 Microsoft.NetworkSecurityGroup-20250531005212 | ...

Deployment

Search Delete Cancel Redeploy Download Refresh

Overview Inputs Outputs Template

Your deployment is complete

Deployment name : Microsoft.NetworkSecurityGroup-2025053100...
Subscription : Azure subscription 1
Resource group : NetworkRG
Start time : 5/31/2025, 12:52:33 AM
Correlation ID : a90ca1f9-3298-48fe-8653-a9a213c04aa1

Deployment details

Next steps

Go to resource

Home > Microsoft.NetworkSecurityGroups

 **Development-NSG**
Network security group

Search Overview Activity log Access control (IAM) Tags

Associate subnet

Development-NSG

Virtual network : Spoke-Development-VNet (NetworkRG)

Subnet * : DevelopmentSubnet

... Saving subnet
Saving network security group for subnet 'DevelopmentSubnet'.

Development-NSG | Inbound security rules

Network security group security rules are evaluated by priority using the combination of source, source port, destination, destination port, and protocol to allow or deny the traffic. A security rule can't have the same priority and direction as an existing rule. You can't delete default security rules, but you can override them with rules that have a higher priority. [Learn more](#)

Created security rule
Successfully created security rule 'AllowCidrBlockCustomAnyInbound'.

Search Add Hide default rules Refresh Delete ...

Filter by name

Port == all Protocol == all Source == all

Destination == all Action == all

Priority ↑↓	Name ↑↓	Port ↑↓
1000	AllowCidrBlockSSHInb...	22
1010	AllowCidrBlockCusto...	Any

Create a virtual machine ...

X

✓ Validation passed



Help me create a low cost VM

Help me create a VM optimized for high availability

Help me choose the right VM size for my workload

Basics

Subscription	Azure subscription 1
Resource group	NetworkRG
Virtual machine name	ManagementVM
Region	West US
Availability options	No infrastructure redundancy required
Zone options	Self-selected zone
Security type	Standard
Image	Ubuntu Server 24.04 LTS - Gen2
VM architecture	x64
Size	Standard B1s (1 vcpu, 1 GiB memory)
Enable Hibernation	No
Authentication type	SSH public key
Username	azureuser
SSH Key format	RSA

< Previous

Next >

Create

Download a template for automation

Give feedback

Create a virtual machine ...

X

✓ Validation passed



Help me create a low cost VM

Help me create a VM optimized for high availability

Help me choose the right VM size for my workload

Basics

Subscription	Azure subscription 1
Resource group	NetworkRG
Virtual machine name	ProductionVM
Region	East US
Availability options	No infrastructure redundancy required
Zone options	Self-selected zone
Security type	Standard
Image	Ubuntu Server 24.04 LTS - Gen2
VM architecture	x64
Size	Standard B1s (1 vcpu, 1 GiB memory)
Enable Hibernation	No
Authentication type	SSH public key
Username	azureuser
SSH Key format	RSA
Key pair name	ProductionVM_key

< Previous

Next >

Create

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Create a virtual machine ...

Validation passed

Help me create a low cost VM Help me create a VM optimized for high availability Help me choose the right VM size for my workload

Basics

Subscription	Azure subscription 1
Resource group	NetworkRG
Virtual machine name	ManagementVM
Region	East US
Availability options	No infrastructure redundancy required
Zone options	Self-selected zone
Security type	Standard
Image	Ubuntu Server 24.04 LTS - Gen2
VM architecture	x64
Size	Standard B1s (1 vcpu, 1 GiB memory)
Enable Hibernation	No
Authentication type	SSH public key
Username	azureuser
SSH Key format	RSA
Key pair name	ManagementVM_key_0531
Azure Spot	No

< Previous Next > **Create**

Create a virtual machine ...

X

Validation passed

Help me create a low cost VM Help me create a VM optimized for high availability
Help me choose the right VM size for my workload

Basics

Subscription	Azure subscription 1
Resource group	NetworkRG
Virtual machine name	TestingVM
Region	East US
Availability options	No infrastructure redundancy required
Zone options	Self-selected zone
Security type	Standard
Image	Ubuntu Server 24.04 LTS - Gen2
VM architecture	x64
Size	Standard B1s (1 vcpu, 1 GiB memory)
Enable Hibernation	No
Authentication type	SSH public key
Username	azureuser
SSH Key format	RSA

< Previous Next > **Create**

Download a template for automation

Give feedback

Create a virtual machine

Validation passed

Help me create a low cost VM Help me create a VM optimized for high availability
Help me choose the right VM size for my workload

Basics

Subscription	Azure subscription 1
Resource group	NetworkRG
Virtual machine name	DevelopmentVM
Region	East US
Availability options	No infrastructure redundancy required
Zone options	Self-selected zone
Security type	Standard
Image	Ubuntu Server 24.04 LTS - Gen2
VM architecture	x64
Size	Standard B1s (1 vcpu, 1 GiB memory)
Enable Hibernation	No
Authentication type	SSH public key
Username	azureuser
SSH Key format	RSA
Key pair name	DevelopmentVM_key

< Previous Next > **Create** Download a template for automation

 CreateVm-canonical.ubuntu-24_04-lts-server-2025... Deployment

Search X << Delete Cancel Redeploy Download Refresh

Overview

 Your deployment is complete

Deployment name: CreateVm-canonical.ubuntu-24_04-lts-server-2...
Subscription: Azure subscription 1
Resource group: NetworkRG
Start time: 5/31/2025, 1:28:28 AM
Correlation ID: 8b71fd04-461f-43d0-aeb1-9d00bc921c5e

Deployment details

Next steps

- Setup auto-shutdown Recommended
- Monitor VM health, performance and network dependencies Recommended
- Run a script inside the virtual machine Recommended

Go to resource **Create another VM**

The screenshot shows the Azure Deployment blade for a completed deployment named "CreateVm-canonical.ubuntu-24_04-lts-server-2025...". The main message is "Your deployment is complete". Key details listed include:

- Deployment name: CreateVm-canonical.ubuntu-24_04-lts-server-2...
- Subscription: Azure subscription 1
- Resource group: NetworkRG
- Start time: 5/31/2025, 1:29:48 AM
- Correlation ID: e3898a06-5a6c-4ca9-b05c-6f6c96f218a4

Below the details are sections for "Deployment details" and "Next steps". Under "Next steps", three items are listed as recommended:

- Setup auto-shutdown
- Monitor VM health, performance and network dependencies
- Run a script inside the virtual machine

At the bottom are two buttons: "Go to resource" (blue) and "Create another VM" (white).

6. Create a Internal and External Load Balancer

The screenshot shows the Azure Cloud Shell terminal window. The command history includes:

```

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

Your Cloud Shell session will be ephemeral so no files or system changes will persist beyond your current session.
ayush [ ~ ]$ group=azure-load-balancer-introduction
az group create -g $group -l northeurope
username=adminuser
password='SecretPassword123!@#'

az network vnet create \
    -n vm-vnet \
    -g $group \
    -l northeurope \
    --address-prefixes '192.168.0.0/16' \
    --subnet-name subnet \
    --subnet-prefixes '192.168.1.0/24'

az vm availability-set create \
    -n vm-as \
    -l northeurope \
    -g $group

for NUM in 1 2 3
done--settings '{
    "commandToExecute": "powershell Add-WindowsFeature Web-Server; powershell Add-Content -Path \"C:\\inetpub\\wwwroot\\Default.htm\" -Value $($env:computername)"'
{
    "id": "/subscriptions/4af928af-144b-44ea-a5ad-9fe8d622bd21/resourceGroups/azure-load-balancer-introduction",
    "location": "northeurope",
    "managedBy": null,
    "name": "azure-load-balancer-introduction",
}

```

Create load balancer ...

Validation passed

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

Basics

Subscription	Azure subscription 1
Resource group	azure-load-balancer-introduction
Name	demo-load
Region	North Europe
SKU	Standard
Tier	Regional
Type	Public

Frontend IP configuration

Frontend IP configuration name	demo-load-ip
Frontend IP configuration IP address	To be created

Backend pools

None

[Create](#) < Previous Next > Download a template for automation [Give feedback](#)

NoMarketplace-20250531034215 | Overview ...

Deployment

Search X < < Delete Cancel Redeploy Download Refresh

Overview

✓ Your deployment is complete

Deployment name : NoMarketplace-20250531034215
Subscription : Azure subscription 1
Resource group : azure-load-balancer-introduction

Start time : 5/31/2025, 3:45:13 AM
Correlation ID : e75520fd-f641-438a-8319-5952d64d36d8

> Deployment details
< Next steps

[Go to resource](#)

Add backend pool ...

demo-load

Name * demo-pool
Virtual network (O) vm-vnet (azure-load-balancer-introduction)

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
vm-eu-01	azure-load-balancer-introduction	Virtual machine	ipconfigvm-eu-01	192.168.1.4	VM-AS
vm-eu-02	azure-load-balancer-introduction	Virtual machine	ipconfigvm-eu-02	192.168.1.5	VM-AS
vm-eu-03	azure-load-balancer-introduction	Virtual machine	ipconfigvm-eu-03	192.168.1.6	VM-AS

[Save](#) [Cancel](#) [Give feedback](#)

Add health probe

demo-load

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 *

Protocol *

Port * i

Interval (seconds) * i

Used by * i

Not used

[Save](#)

[Cancel](#)

Add load balancing rule

demo-load

Name *

IP version *

 IPv4 IPv6

Frontend IP address * i

Backend pool * i

Protocol

 TCP UDP

Port *

Backend port * i

Health probe * i

[Create new](#)

Session persistence

[Save](#)

[Cancel](#)



vm-eu-01

The screenshot shows the Azure portal interface with two separate windows for virtual machines:

- vm-eu-01**: Status: Running, IP: 135.236.181.241.
- vm-eu-01**: Status: Stopped (deallocated), IP: 135.236.181.241.

Below these windows is a browser window displaying the IP address 135.236.181.241, which shows a blank page.

7. Create and test Azure Application gateway

```

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

Your Cloud Shell session will be ephemeral so no files or system changes will persist beyond your current session.
ayush [ ~ ]$ az group create --name appgateway-resource --location eastus
{
  "id": "/subscriptions/4af928af-144b-44ea-a5ad-9fe8d622bd21/resourceGroups/appgateway-resource",
  "location": "eastus",
  "managedBy": null,
  "name": "appgateway-resource",
  "properties": {
    "provisioningState": "Succeeded"
  },
  "tags": null,
  "type": "Microsoft.Resources/resourceGroups"
}
ayush [ ~ ]$ az network vnet create --resource-group appgateway-resource --name appgateway-vnet --address-prefix 10.0.0.0/16 --subnet-name appgateway-subnet --subnet-prefix 10.0.1.0/24
{
  "newVNet": {
    "addressSpace": {
      "addressPrefixes": [
        "10.0.0.0/16"
      ]
    },
    "enableDdosProtection": false,
    "etag": "W/\"5e1bb621-6c2b-42ea-a1b4-c395414b95f2\"",
    "id": "/subscriptions/4af928af-144b-44ea-a5ad-9fe8d622bd21/resourceGroups/appgateway-resource/providers/Microsoft.Network/virtualNetworks/appgateway-vnet",
    "location": "eastus",
    "name": "appgateway-vnet",
    "tags": null
  }
}

```

```

    "name": "appgateway-vnet",
    "privateEndpointVNetPolicies": "Disabled",
    "provisioningState": "Succeeded",
    "resourceGroup": "appgateway-resource",
    "resourceGuid": "a3137e1d-279b-4711-9137-4d87117137b5",
    "subnets": [
      {
        "addressPrefix": "10.0.1.0/24",
        "delegations": [],
        "etag": "W/\"5e1bbb621-6c2b-42ea-a1b4-c395414b95f2\"",
        "id": "/subscriptions/4af928af-144b-44ea-a5ad-9fe8d622bd21/resourceGroups/appgateway-resource/providers/Microsoft.Network/virtualNetworks/appgateway-vnet/subnets/appgateway-subnet"
      },
      {
        "name": "appgateway-subnet",
        "privateEndpointNetworkPolicies": "Disabled",
        "privateLinkServiceNetworkPolicies": "Enabled",
        "provisioningState": "Succeeded",
        "resourceGroup": "appgateway-resource",
        "type": "Microsoft.Network/virtualNetworks/subnets"
      }
    ],
    "type": "Microsoft.Network/virtualNetworks",
    "virtualNetworkPeerings": []
  }
}
ayush [ ~ ]$ az network vnet subnet create --resource-group appgateway-resource --vnet-name appgateway-vnet --name backend-subnet --address-prefix 10.0.2.0/24
{
  "addressPrefix": "10.0.2.0/24",
  "delegations": [],
  "etag": "W/\"2dc7250-6577-4819-8729-098e4fbcc1116\"",
  "id": "/subscriptions/4af928af-144b-44ea-a5ad-9fe8d622bd21/resourceGroups/appgateway-resource/providers/Microsoft.Network/virtualNetworks/appgateway-vnet/subnets/backend-subnet",
  "name": "backend-subnet",
  "privateEndpointNetworkPolicies": "Disabled",
  "privateLinkServiceNetworkPolicies": "Enabled",
  "provisioningState": "Succeeded",
}

```

```

ayush [ ~ ]$ az network public-ip create --resource-group appgateway-resource --name appgateway-pip --allocation-method Static --sku Standard
[Coming breaking change] In the coming release, the default behavior will be changed as follows when sku is Standard and zone is not provided: For zonal regions, you will get a zone-redundant IP indicated by zones:[1",2",3"]; For non-zonal regions, you will get a non zone-redundant IP indicated by zones:null.
{
  "publicIp": {
    "ddosSettings": {
      "protectionMode": "VirtualNetworkInherited"
    },
    "etag": "W/\"4a4dd6a55-2a53-4ba9-9c5e-7bc129e3319b\"",
    "id": "/subscriptions/4af928af-144b-44ea-a5ad-9fe8d622bd21/resourceGroups/appgateway-resource/providers/Microsoft.Network/publicIPAddresses/appgateway-pip",
    "idleTimeoutInMinutes": 4,
    "ipAddress": "172.172.172.159",
    "ipTags": [],
    "location": "eastus",
    "name": "appgateway-pip",
    "provisioningState": "Succeeded",
    "publicIPAddressVersion": "IPv4",
    "publicIPAllocationMethod": "Static",
    "resourceGroup": "appgateway-resource",
    "resourceGuid": "cdce3c7-d822-41fb-bd9d-e4613549e5c5",
    "sku": {
      "name": "Standard",
      "tier": "Regional"
    },
    "type": "Microsoft.Network/publicIPAddresses"
  }
}

```

```

ayush [ ~ ]$ az vm create --resource-group appgateway-resource --name backend-vm1 --image Ubuntu2204 --subnet backend-subnet --vnet-name appgateway-vnet --admin-user azureuser --generate-ssh-keys --custom-data cloud-init.txt --size Standard_Bis --public-ip-address ""
{
  "fqdns": "",
  "id": "/subscriptions/4af928af-144b-44ea-a5ad-9fe8d622bd21/resourceGroups/appgateway-resource/providers/Microsoft.Compute/virtualMachines/backend-vm1",
  "location": "eastus",
  "macAddress": "00-22-48-32-7C-52",
  "powerState": "VM running",
  "privateIpAddress": "10.0.2.4",
  "publicIpAddress": "",
  "resourceGroup": "appgateway-resource",
  "zones": ""
}
ayush [ ~ ]$ ls
ayush [ ~ ]$ ls
ayush [ ~ ]$ touch cloud-config.txt
ayush [ ~ ]$ ls
cloud-config.txt
ayush [ ~ ]$ rm cloud-config.txt
ayush [ ~ ]$ ls
ayush [ ~ ]$ vi cloud-init.txt
ayush [ ~ ]$ cat cloud-init.txt
#cloud-config
package_upgrade: true
packages:
- nginx
write_files:
- path: /var/www/html/index.html
  content: |
<html><body><h1>Backend Server</h1><p>Hostname: $(hostname)</p></body></html>
runcmd:
- systemctl start nginx
- systemctl enable nginx

```

```

ayush [ ~ ]$ az network application-gateway create --resource-group appgateway-resource --name main-appgateway --location eastus --capacity 2 --sku Standard_V2 --public-ip-address appgat
ay-pip --vnet-name appgateway-vnet --subnet appgateway-subnet --servers 10.0.2.4 10.0.2.5 --http-settings-cookie-based-affinity Enabled --http-settings-port 80 --http-settings-protocol Htt
p --frontend-port 80 --priority 100
{
  "applicationGateway": {
    "backendAddressPools": [
      {
        "etag": "W/\"36e0b146-510e-4ee9-85f7-38d3c06ceca9\"",
        "id": "/subscriptions/4af928af-144b-44ea-a5ad-9fe8d622bd21/resourceGroups/appgateway-resource/providers/Microsoft.Network/applicationGateways/main-appgateway/backendAddressPools/ap
pGatewayBackendPool",
        "name": "appGatewayBackendPool",
        "properties": {
          "backendAddresses": [
            {
              "ipAddress": "10.0.2.4"
            },
            {
              "ipAddress": "10.0.2.5"
            }
          ],
          "provisioningState": "Succeeded",
          "requestRoutingRules": [
            {
              "id": "/subscriptions/4af928af-144b-44ea-a5ad-9fe8d622bd21/resourceGroups/appgateway-resource/providers/Microsoft.Network/applicationGateways/main-appgateway/requestRoutingRu
les/rule1",
              "resourceGroup": "appgateway-resource"
            }
          ],
          "resourceGroup": "appgateway-resource",
          "type": "Microsoft.Network/applicationGateways/backendAddressPools"
        }
      ],
      "backendHttpSettingsCollection": [
        "backendHttpSettingsCollection": [
          {
            "etag": "W/\"36e0b146-510e-4ee9-85f7-38d3c06ceca9\"",
            "id": "/subscriptions/4af928af-144b-44ea-a5ad-9fe8d622bd21/resourceGroups/appgateway-resource/providers/Microsoft.Network/applicationGateways/main-appgateway/backendHttpSettingsCol
lection/appGatewayBackendHttpSettings",
            "name": "appGatewayBackendHttpSettings",
            "properties": {
              "connectionDraining": {
                "drainTimeoutInSec": 1,
                "enabled": false
              },
              "cookieBasedAffinity": "Enabled",
              "pickHostNameFromBackendAddress": false,
              "port": 80,
              "protocol": "Http",
              "provisioningState": "Succeeded",
              "requestRoutingRules": [
                {
                  "id": "/subscriptions/4af928af-144b-44ea-a5ad-9fe8d622bd21/resourceGroups/appgateway-resource/providers/Microsoft.Network/applicationGateways/main-appgateway/requestRoutingRu
les/rule1",
                  "resourceGroup": "appgateway-resource"
                }
              ],
              "requestTimeout": 30
            },
            "resourceGroup": "appgateway-resource",
            "type": "Microsoft.Network/applicationGateways/backendHttpSettingsCollection"
          }
        ],
        "backendSettingsCollection": [],
        "frontendIPConfigurations": [
          {
            "etag": "W/\"36e0b146-510e-4ee9-85f7-38d3c06ceca9\"",
            "id": "/subscriptions/4af928af-144b-44ea-a5ad-9fe8d622bd21/resourceGroups/appgateway-resource/providers/Microsoft.Network/applicationGateways/main-appgateway/frontendIPConfiguratio
n"
          }
        ]
      ]
    ]
  }
}

ayush [ ~ ]$ az network application-gateway probe create --resource-group appgateway-resource --gateway-name main-appgateway --name healthprobe --protocol Http --host-name-from-http-se
ttings true --path / --interval 30 --timeout 30 --threshold 3
{
  "etag": "W/\"484cf00f-9d5c-473c-88f2-36a2512362ae\"",
  "id": "/subscriptions/4af928af-144b-44ea-a5ad-9fe8d622bd21/resourceGroups/appgateway-resource/providers/Microsoft.Network/applicationGateways/main-appgateway/probes/healthprobe",
  "interval": 30,
  "match": {
    "statusCodes": [
      "200-399"
    ]
  },
  "minServers": 0,
  "name": "healthprobe",
  "path": "/",
  "pickHostNameFromBackendHttpSettings": true,
  "protocol": "Http",
  "provisioningState": "Succeeded",
  "resourceGroup": "appgateway-resource",
  "timeout": 30,
  "type": "Microsoft.Network/applicationGateways/probes",
  "unhealthyThreshold": 3
}
ayush [ ~ ]$ PUBLIC_IP=$(az network public-ip show --resource-group appgateway-resource --name appgateway-pip --query ipAddress --output tsv)
ayush [ ~ ]$ echo "Application Gateway Public IP: $PUBLIC_IP"
Application Gateway Public IP: 172.172.172.159

```



```

ayush [ ~ ]$ az network application-gateway show-backend-health --resource-group appgateway-resource --name main-appgateway
{
  "backendAddressPools": [
    {
      "backendAddressPool": {
        "id": "/subscriptions/4af928af-144b-44ea-a5ad-9fe8d622bd21/resourceGroups/appgateway-resource/providers/Microsoft.Network/applicationGateways/main-appgateway/backendAddressPools/appGatewayBackendPool",
        "resourceGroup": "appgateway-resource"
      },
      "backendHttpSettingsCollection": [
        {
          "backendHttpSettings": {
            "id": "/subscriptions/4af928af-144b-44ea-a5ad-9fe8d622bd21/resourceGroups/appgateway-resource/providers/Microsoft.Network/applicationGateways/main-appgateway/backendHttpSettingsCollection/appGatewayBackendHttpSettings",
            "resourceGroup": "appgateway-resource"
          },
          "servers": [
            {
              "address": "10.0.2.4",
              "health": "Healthy",
              "healthProbeLog": "Success. Received 200 status code"
            }
          ]
        }
      ]
    }
  ]
}
ayush [ ~ ]$
```

8. Set up a domain, setup a server on a VM and use the DNS server for traffic

```

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

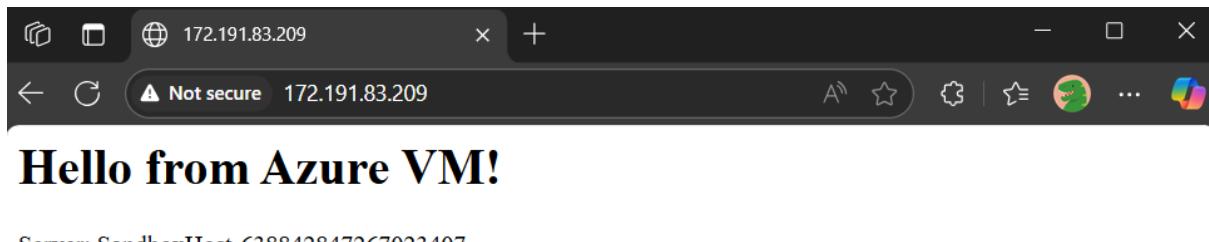
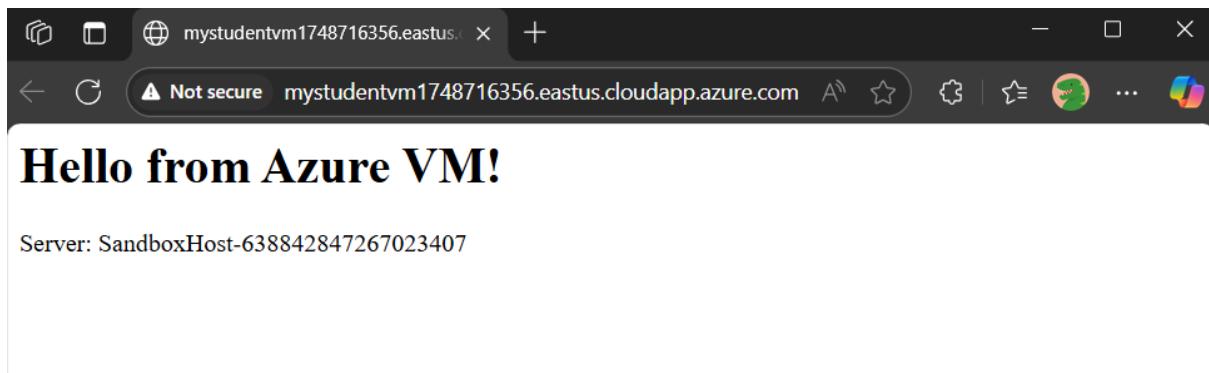
Your Cloud Shell session will be ephemeral so no files or system changes will persist beyond your current session.
ayush [ ~ ]$ az group create --name student-rg --location eastus
{
  "id": "/subscriptions/4af928af-144b-44ea-a5ad-9fe8d622bd21/resourceGroups/student-rg",
  "location": "eastus",
  "managedBy": null,
  "name": "student-rg",
  "properties": {
    "provisioningState": "Succeeded"
  },
  "tags": null,
  "type": "Microsoft.Resources/resourceGroups"
}

ayush [ ~ ]$ az vm create --resource-group student-rg --name student-vm --image Ubuntu2204 --size Standard_B1s --admin-username azureuser --generate-ssh-keys --public-ip-sku Standard --public-ip-address-dns-name mystudentvm$(date +%s)
{
  "fqdns": "mystudentvm1748776356.eastus.cloudapp.azure.com",
  "id": "/subscriptions/4af928af-144b-44ea-a5ad-9fe8d622bd21/resourceGroups/student-rg/providers/Microsoft.Compute/virtualMachines/student-vm",
  "location": "eastus",
  "macAddress": "00-22-48-32-15-38",
  "powerState": "VM running",
  "privateIpAddress": "10.0.0.4",
  "publicIpAddress": "172.191.83.209",
  "resourceGroup": "student-rg",
  "zones": ""
}

ayush [ ~ ]$ az vm open-port --resource-group student-rg --name student-vm --port 80
{
  "defaultSecurityRules": [
    {
      "access": "Allow",
      "description": "Allow inbound traffic from all VMs in VNET",
      "destinationAddressPrefix": "VirtualNetwork",
      "destinationAddressPrefixes": [],
      "destinationPortRange": "*",
      "destinationPortRanges": [],
      "direction": "Inbound",
      "etag": "W/\\"41ea4fe3-7db5-4dd3-bcc9-e7c511045ea5\\\"",
      "id": "/subscriptions/4af928af-144b-44ea-a5ad-9fe8d622bd21/resourceGroups/student-rg/providers/Microsoft.Network/networkSecurityGroups/student-vmNSG/defaultSecurityRules/AllowVnetInbound",
      "name": "AllowVnetInbound",
      "priority": 65000,
      "protocol": "*",
      "provisioningState": "Succeeded",
      "resourceGroup": "student-rg",
      "sourceAddressPrefix": "VirtualNetwork",
      "sourceAddressPrefixes": [],
      "sourcePortRange": "*",
      "sourcePortRanges": [],
      "type": "Microsoft.Network/networkSecurityGroups/defaultSecurityRules"
    },
    {
      "access": "Allow",
      "description": "Allow inbound traffic from azure load balancer",
      "destinationAddressPrefix": "*",
      "destinationAddressPrefixes": [],
      "destinationPortRange": "*",
      "destinationPortRanges": [],
      "direction": "Inbound",
      "etag": "W/\\"41ea4fe3-7db5-4dd3-bcc9-e7c511045ea5\\\"",
      "id": "/subscriptions/4af928af-144b-44ea-a5ad-9fe8d622bd21/resourceGroups/student-rg/providers/Microsoft.Network/networkSecurityGroups/student-vmNSG/defaultSecurityRules/AllowLoadBalancer"
    }
  ]
}
```

```
ayush [ ~ ]$ az vm open-port --resource-group student-rg --name student-vm --port 22 --priority 1002
{
  "defaultSecurityRules": [
    {
      "access": "Allow",
      "description": "Allow inbound traffic from all VMs in VNET",
      "destinationAddressPrefix": "VirtualNetwork",
      "destinationAddressPrefixes": [],
      "destinationPortRange": "*",
      "destinationPortRanges": [],
      "direction": "Inbound",
      "etag": "W/\"67235fab-7979-4d11-85f4-ba1708f440af\"",
      "id": "subscriptions/4af928af-144b-44ea-a5ad-9fe8d622bd21/resourceGroups/student-rg/providers/Microsoft.Network/networkSecurityGroups/student-vmNSG/defaultSecurityRules/AllowWnetInbound",
      "name": "AllowWnetInbound",
      "priority": 65000,
      "protocol": "*",
      "provisioningState": "Succeeded",
      "resourceGroup": "student-rg",
      "sourceAddressPrefix": "VirtualNetwork",
      "sourceAddressPrefixes": [],
      "sourcePortRange": "*",
      "sourcePortRanges": [],
      "type": "Microsoft.Network/networkSecurityGroups/defaultSecurityRules"
    },
    {
      "access": "Allow",
      "description": "Allow inbound traffic from azure load balancer",
      "destinationAddressPrefix": "*",
      "destinationAddressPrefixes": [],
      "destinationPortRange": "*",
      "destinationPortRanges": [],
      "direction": "Inbound",
      "etag": "W/\"67235fab-7979-4d11-85f4-ba1708f440af\""
    }
  ]
}
```

```
ayush [ ~ ]$ az vm run-command invoke \
--resource-group student-rg \
--name student-vm \
--command-id RunShellScript \
--scripts "
apt-get update -y
apt-get install apache2 -y
systemctl start apache2
systemctl enable apache2
echo '<h1>Hello from Azure VM!</h1><p>Server: $(hostname)</p>' > /var/www/html/index.html
"
{
  "value": [
    {
      "code": "ProvisioningState/succeeded",
      "displayStatus": "Provisioning succeeded",
      "level": "Info",
      "message": "Enable succeeded: \n[stdout]\nHit:1 http://azure.archive.ubuntu.com/ubuntu jammy InRelease\nGet:2 http://azure.archive.ubuntu.com/ubuntu jammy-updates InRelease [128 kB]\nHit:3 http://azure.archive.ubuntu.com/ubuntu jammy-backports InRelease\nGet:4 http://azure.archive.ubuntu.com/ubuntu jammy-security InRelease [129 kB]\nFetched 257 kB in 1s (371 kB)\nReading package lists...\nReading package lists...\nBuilding dependency tree...\nReading state information...\napache2 is already the newest version (2.4.52-1ubuntu4.14).\n0 upgraded, 0 newly installed, 0 to remove and 24 not upgraded.\n[stderr]\nSynchronizing state of apache2.service with SysV service script with /lib/systemd/systemd-sysv-install.\nExecuting: /lib/systemd/systemd-sysv-install enable apache2\n",
      "time": null
    }
  ]
}
ayush [ ~ ]$ az vm show --resource-group student-rg --name student-vm --show-details --query publicIps --output tsv
172.191.83.209
ayush [ ~ ]$ az network public-ip show --resource-group student-rg --name student-vmPublicIP --query dnsSettings.fqdn --output tsv
mystudentvm1748716356.eastus.cloudapp.azure.com
ayush [ ~ ]$
```



9. Create a Storage account and explore all the option while creating Upload and access the blob Go through different Auth. Tech and test the same Try Azure storage explorer Provision Access keys and use them for connection with storage account Create a Shared access signature and check access scope Create a stored access policy over shared access signature and check access scope Learn about different access tiers and their use cases Apply lifecycle policy over objects and test the same test object replication in blob Create a file share and test functionality Create a Azure File sync

Create a storage account

Basics Advanced Networking Data protection Encryption **Review + create** ...

[View automation template](#)

Basics

Subscription	Azure subscription 1
Resource group	StorageResource
Location	East US
Storage account name	storagegp24
Primary service	Azure Blob Storage or Azure Data Lake Storage Gen 2
Performance	Standard
Replication	Locally-redundant storage (LRS)

Advanced

Enable hierarchical namespace	Disabled
Enable SFTP	Disabled
Enable network file system v3	Disabled
Allow cross-tenant replication	Disabled
Access tier	Hot
Enable large file shares	Enabled

[Previous](#) [Next](#) **Create** [Give feedback](#)

storagegp24_1748723728186 | Overview

Deployment

[Search](#) [Delete](#) [Cancel](#) [Redeploy](#) [Download](#) [Refresh](#)

Your deployment is complete

Deployment name: storagegp24_1748723728186 Start time: 6/1/2025, 2:05:55 AM
 Subscription: Azure subscription 1 Correlation ID: 3f15c30f-fde3-40a1-89d9-01d2c5b31c4e

Deployment details

Resource	Type	Status	Operation details
storagegp24/default	Microsoft.Storage/storageAccoun...	OK	Operation details
storagegp24/default	Microsoft.Storage/storageAccoun...	OK	Operation details
storagegp24	Microsoft.Storage/storageAccounts	OK	Operation details

Next steps

[Go to resource](#)

storagegp24 | Containers

Storage account

- Search
- [Tags](#)
- [Diagnose and solve problems](#)
- [Access Control \(IAM\)](#)
- [Data migration](#)
- [Events](#)
- [Storage browser](#)
- [Storage Mover](#)
- [Partner solutions](#)
- [Resource visualizer](#)
- [Data storage](#)
 - [Containers](#)
 - [File shares](#)
 - [Queues](#)
 - [Tables](#)
- [Security + networking](#)
- [Data management](#)
- [Settings](#)

Add or remove favorites by pressing **Ctrl+Shift+F**

New container

[X](#)

Name *

test-container



Anonymous access level

Container (anonymous read access for containers and blobs) [▼](#)

! All container and blob data can be read by anonymous request. Clients can enumerate blobs within the container by anonymous request, but cannot enumerate containers within the storage account.

[Advanced](#)[Create](#)[Give feedback](#)

Upload blob

[X](#)

test-container

Container

- Search
- [Overview](#)
- [Diagnose and solve problems](#)
- [Access Control \(IAM\)](#)
- [Settings](#)



3 file(s) selected: Gmail - Congratulations on Your Selection – Welcome ...

Drag and drop files here or [Browse for files](#) Overwrite if files already exist[Advanced](#)[Upload](#)[Give feedback](#)

test-container ... X

Container

Upload Change access level Refresh Delete ...

Overview

Diagnose and solve problems

Access Control (IAM)

> **Settings**

Authentication method: Access key ([Switch to Microsoft Entra user account](#))
Location: test-container

Show deleted blobs

[Add filter](#)

Name	Modified	Access tier
<input type="checkbox"/> Deploy Linux and ...	6/1/2025, 2:10:10 AM	Hot (Inferred)
<input type="checkbox"/> Gmail - Congratula...	6/1/2025, 2:10:09 AM	Hot (Inferred)
<input type="checkbox"/> Screenshot 2025-0...	6/1/2025, 2:10:09 AM	Hot (Inferred)

storagegp24 | Access keys X

Storage account

X <<

Access Control (IAM)

Security + networking

Access keys

Shared access signature

Encryption

Data management

Lifecycle management

Settings

Configuration

Access keys authenticate your applications' requests to this storage account. Keep your keys in a secure location like Azure Key Vault, and replace them often with new keys. The two keys allow you to replace one while still using the other.

Remember to update the keys with any Azure resources and apps that use this storage account.
[Learn more about managing storage account access keys](#)

Storage account name: **storagegp24**

key1 Rotate key
Last rotated: 1/6/2025 (0 days ago)
Key:
 Show

Connection string:
 Show

key2 Rotate key
Last rotated: 1/6/2025 (0 days ago)
Key:
 Show

Connection string:
 Show

Add or remove favorites by pressing Ctrl + Shift + F

```
ayush [ ~ ]$ az storage blob list --account-name storagegp24 --container-name test-container
--account-key "5mekcSmj2FTh30V2A2ZZ8g0sdmyWv508dnFtb5g6dafw+doyp9XJHTFxQP0Iz0mpsLxyJZqaccg+AStX2Vahw=="
[{"id": "https://storagegp24.blob.core.windows.net/test-container/Deploy%20Linux%20and%20Windows%20virtual%20machine%20and%20access%20them%20using%20SSH%20and%20RDP.docx", "name": "Deploy Linux and Windows virtual machine and access them using SSH and RDP.docx", "type": "BlockBlob", "size": 6253835, "lastModified": "2024-01-11T10:20:00Z", "contentSettings": {"cacheControl": null, "contentDisposition": null, "contentEncoding": null, "contentLanguage": null}, "blobTier": "Hot", "blobTierInferred": true, "blobType": "BlockBlob", "encryptionScope": null, "hasLegalHold": null, "hasVersionsOnly": null, "immutabilityPolicy": {"expiryTime": null, "policyMode": null}, "isAppendBlobSealed": null, "isCurrentVersion": true, "lastAccessedOn": null, "metadata": {}, "version": "2024-01-11T10:20:00Z"}, {"id": "https://storagegp24.blob.core.windows.net/test-container/Deploy%20Linux%20and%20Windows%20virtual%20machine%20and%20access%20them%20using%20SSH%20and%20RDP.docx", "name": "Deploy Linux and Windows virtual machine and access them using SSH and RDP.docx", "type": "BlockBlob", "size": 6253835, "lastModified": "2024-01-11T10:20:00Z", "contentSettings": {"cacheControl": null, "contentDisposition": null, "contentEncoding": null, "contentLanguage": null}, "blobTier": "Hot", "blobTierInferred": true, "blobType": "BlockBlob", "encryptionScope": null, "hasLegalHold": null, "hasVersionsOnly": null, "immutabilityPolicy": {"expiryTime": null, "policyMode": null}, "isAppendBlobSealed": null, "isCurrentVersion": false, "lastAccessedOn": null, "metadata": {}, "version": "2024-01-11T10:20:00Z"}]
```

Add role assignment

... ×

[Role](#) [Members](#) [Conditions](#) [Review + assign](#)

Role
Storage Blob Data Contributor

Scope
`/subscriptions/4af928af-144b-44ea-a5ad-9fe8d622bd21/resourcegroups/StorageResource/providers/Microsoft.Storage/storageAccounts/storagegp24`

Members

Name	Object ID	Type
Ayush Pandey	f690c25f-0b31-454f-a018-4186adefea67	User

Description
No description

Condition
None

◀ ▶

[Review + assign](#) [Previous](#) [Next](#) [Feedback](#)

storagegp24 | Storage browser

Storage account

blob

Storage browser

- Data storage
- Containers
- Data management
- Blob inventory

Privacy settings Feedback

Storage account metrics

The data provided is regularly updated about 2-4 times a day and published hourly. If your account has extremely large objects, it may be over a day between updates.

Blob containers

Number of containers	-
Number of blobs	-
Total data stored	-

storagegp24 | Storage browser

Storage account

blob

Storage browser

- Data storage
- Containers
- Data management
- Blob inventory

Add Directory Upload Change access level ...

Blob containers > **test-container**

Authentication method: Access key (Switch to Microsoft Entra user account)

Add filter

Search blobs by prefix (case-sensitive)

Only show active blobs

Showing all 3 items

	Name	Last modified	Access tier
<input type="checkbox"/>	Deploy Linu...	1/6/2025, 2:10:10 am	Hot (Inferred)
<input type="checkbox"/>	Gmail - Con...	1/6/2025, 2:10:09 am	Hot (Inferred)
<input type="checkbox"/>	Screenshot ...	1/6/2025, 2:10:09 am	Hot (Inferred)

Overview

Blob: Deploy Linux and Windows virtual machine and access them using SSH and RDP.docx

Save Discard Download Refresh Delete Change tier Acquire lease ...

Properties

URL	https://storagegp24.blo... 
LAST MODIFIED	6/1/2025, 2:10:10 AM
CREATION TIME	6/1/2025, 2:10:10 AM
VERSION ID	2025-05-31T20:40:10.5240470Z
TYPE	Block blob
SIZE	5.96 MiB
ACCESS TIER	Hot (Inferred)
ACCESS TIER LAST MODIFIED	N/A
ARCHIVE STATUS	-
REHYDRATE PRIORITY	-
SERVER ENCRYPTED	true
ETAG	0x8DDA0835648A796
VERSION-LEVEL IMMUTABILITY POLICY	Disabled
CACHE-CONTROL	
CONTENT-TYPE	application/vnd.openxmlfor...
CONTENT-MD5	T0IMLftaqfYLrXjITswLiQ==
CONTENT-ENCODING	
CONTENT-LANGUAGE	
CONTENT-DISPOSITION	

storagegp24 | Shared access signature ☆ ...

Storage account

shared X Give feedback

Allow services (i)
 Blob File Queue Table

Allow resource types (i)
 Service Container Object

Allow permissions (i)
 Read Write Delete List Add Create
 Update Process Immutable storage
 Permanent delete

Blob versioning permissions (i)
 Enables deletion of versions

Allowed blob index permissions (i)
 Read/Write Filter

Start and expiry date/time (i)
Start: 06/01/2025 2:38:33 AM
End: 06/01/2025 10:38:33 AM
(UTC+05:30) Chennai, Kolkata, Mumbai, New Delhi

Allowed IP addresses (i)
For example, 168.1.5.65 or 168.1.5.65-168.1.5.70

Add or remove favorites by pressing **Ctrl+Shift+F**

```
ayush [ ~ ]$ az storage container list --account-name storagegp24 --sas-token "sv=2024-11-04&ss=b&srt=sco&sp=rwltfx&se=2025-06-01T05:15:38Z&st=2025-05-31T21:15:38Z&spr=https&sig=BSnyZuxqoFV9d20y5d8Kr6oM7CbX7z8cSU1tJC15K1M%3D"
[{"name": "test-container", "properties": {"lastModified": "2025-05-31T20:38:10+00:00", "publicAccess": "container"}, "lease": {"status": "unlocked", "state": "available"}, "version": null}, {"name": "blob-test", "properties": {"lastModified": "2025-05-31T20:38:10+00:00", "publicAccess": "blob"}, "lease": {"status": "unlocked", "state": "available"}, "version": null}]
```

test-container | Access policy ... X

Container

Search Save Give feedback

Overview Diagnose and solve problems Access Control (IAM) Settings Shared access tokens Access policy Properties Metadata

Add policy

Identifier *	Permissions
ReadOnlyPolicy	2 selected
Start time	Expiry time
06/01/2025 12:00:00 AM	06/08/2025 12:00:00 AM
(UTC+05:30) Chennai, Kolkata...	(UTC+05:30) Chennai, Kolkata...

OK **Cancel**

policy at a time. Retention policy changes may require some time to take effect. [Learn more about immutable blob storage](#)

+ Add policy

Identifier	Scope	Retention interval	Status
No results			

test-container | Access policy ... X

Container

Search Save Give feedback

Overview Diagnose and solve problems Access Control (IAM) Settings Shared access tokens Access policy Properties Metadata

Add policy

Identifier *	Permissions
FullAccessPolicy	4 selected
Start time	Expiry time
06/01/2025 12:00:00 AM	06/08/2025 12:00:00 AM
(UTC+05:30) Chennai, Kolkata...	(UTC+05:30) Chennai, Kolkata...

OK **Cancel**

policy at a time. Retention policy changes may require some time to take effect. [Learn more about immutable blob storage](#)

+ Add policy

Identifier	Scope	Retention interval	Status
No results			

test-container | Shared access tokens

Container

Search

Overview

Diagnose and solve problems

Access Control (IAM)

Settings

Shared access tokens

Access policy

Properties

Metadata

Signing method

Account key User delegation key

Signing key

Key 1

Stored access policy

ReadOnlyPolicy

Permissions

2 selected

Start and expiry date/time

Start

06/01/2025 12:00:00 AM

(UTC+05:30) Chennai, Kolkata, Mumbai, New Delhi

Expiry

06/08/2025 12:00:00 AM

(UTC+05:30) Chennai, Kolkata, Mumbai, New Delhi

Allowed IP addresses

for example, 168.1.5.65 or 168.1.5.65-168.1....

Allowed protocols

HTTPS only HTTPS and HTTP

Generate SAS token and URL

Add or remove favorites by pressing **Ctrl+Shift+F**

```
ayush [ ~ ]$ az storage blob list --account-name storagegp24 --container-name test-container --sas-token "si=ReadOnlyPolicy&spr=https&sv=2024-11-04&sr=c&sig=j2ZzkWxZhy8oumZiG3f%2B1YeDVH07D2gJyRnEIousQr4%3D"
[{"container": "test-container", "content": "", "deleted": null, "encryptedMetadata": null, "encryptionKeySha256": null, "encryptionScope": null, "hasLegalHold": null, "hasVersionsOnly": null, "immutabilityPolicy": {"expiryTime": null, "policyMode": null}, "isAppendBlobSealed": null, "isCurrentVersion": true, "lastAccessedOn": null, "metadata": {}, "name": "Deploy Linux and Windows virtual machine and access them using SSH and RDP.docx", "objectReplicationDestinationPolicy": null, "objectReplicationSourceProperties": [], "properties": {"appendBlobCommittedBlockCount": null, "blobTier": "Hot", "blobTierChangeTime": null, "blobTierInferred": true, "blobType": "BlockBlob", "contentLength": 6253835, "contentRange": null, "contentSettings": {"cacheControl": null, "contentDisposition": null, "contentEncoding": null, "contentLanguage": null, "contentType": null}}, "size": 6253835, "snapshot": null, "url": "https://storagegp24.blob.core.windows.net/test-container/Deploy%20Linux%20and%20Windows%20virtual%20machine%20and%20access%20them%20using%20SSH%20and%20RDP.docx?si=ReadOnlyPolicy&spr=https&sv=2024-11-04&sr=c&sig=j2ZzkWxZhy8oumZiG3f%2B1YeDVH07D2gJyRnEIousQr4%3D"}]
```

```

ayush [ ~ ]$ az storage blob set-tier --account-name storagegp24 --container-name test-container --name VAC_1.pdf --tier Cool --sas-token "sp=rwdl&st=2025-05-31T21:47:42Z&se=2025-06-01T05:47:42Z&spr=https&sv=2024-11-04&sr=c&sig=pugwRkzQrgzLYJK8UKx12CgJ%2Fs18z%2BZy5V10Ke2s3X4%30"
ayush [ ~ ]$ az storage blob set-tier --account-name storagegp24 --container-name test-container --name VAC_2.pdf --tier Archive --sas-token "sp=rwdl&st=2025-05-31T21:47:42Z&se=2025-06-01T05:47:42Z&spr=https&sv=2024-11-04&sr=c&sig=pugwRkzQrgzLYJK8UKx12CgJ%2Fs18z%2BZy5V10Ke2s3X4%30"
ayush [ ~ ]$ 

```

storagegp24 | Lifecycle management

Storage account

lifecyc

Add a rule Enable Disable Refresh

Lifecycle management offers a rich, rule-based policy for general purpose v2 and blob storage accounts. Use the policy to transition your data to the appropriate access tiers or expire at the end of the data's lifecycle. A new or updated rule can take up to 24 hours to go into effect. [Learn more](#)

List View Code View

Enable access tracking

Name	Status	Blob type
BasicLifecycleRule	Enabled	Block

Create a storage account

Basics Advanced Networking Data protection Encryption **Review + create** ...

[View automation template](#)

Basics

Subscription	Azure subscription 1
Resource group	StorageResource
Location	Central US
Storage account name	storagegp42
Primary service	Azure Blob Storage or Azure Data Lake Storage Gen 2
Performance	Standard
Replication	Locally-redundant storage (LRS)

Advanced

Enable hierarchical namespace	Disabled
Enable SFTP	Disabled
Enable network file system v3	Disabled
Allow cross-tenant replication	Disabled
Access tier	Hot
Enable large file shares	Enabled

[Previous](#) [Next](#) **Create** [Give feedback](#)

Home >

storagegp42_1748728698550 | O

Deployment

Deployment succeeded

Deployment 'storagegp42_1748728698550' to resource group 'StorageResource' was successful.

Search X < Delete Call Go to resource Pin to dashboard

Overview Inputs Outputs Template

Your deployment is complete

Deployment name: storagegp42_1748728698550
Subscription: Azure subscription 1
Resource group: StorageResource
Start time: 6/1/2025, 3:29:46 AM
Correlation ID: e7509342-8c10-47d6-89a4-74e34c1aa7a5

Deployment details Next steps

Go to resource

Create replication rules

When you create object replication rules, blob change feed and blob versioning are automatically enabled for the source and destination storage accounts. Enabling these features may increase costs.

Destination details

To begin replicating objects, specify the source storage account and the destination storage account.
[Learn more about copying objects in object replication](#)

Destination subscription * Azure subscription 1

Destination storage account * storagegp42
[Don't see your account?](#)

Container pair details

A container pair consists of a container in the source account and a container in the destination account. Objects in the source container are copied over to the destination container according to the replication rule. You can optionally filter which objects are copied by specifying a prefix match and by copying objects created only after a specified date and time.

Source container	Destination container	Filters	Copy over
test-container	replicated-contain...	0 (add)	Only new objects (change)
Select a source co...	Select a destinatio...		

To configure more than 10 container pairs (up to 1000), see [Configure object replication using a JSON file](#)

Create Cancel

New file share

X

Validation passed

Basics Backup **Review + create**

Basics

File share name	vac1
Access Tier	TransactionOptimized
Protocol	SMB

Backup

Vault name	(new) vault-mbcs81bf
Backup policy	(new) DailyPolicy-mbcs81lm
Policy details	Backup frequency Daily at 7:30 PM UTC Retention of daily backup point Retain backup taken every day at 7:30 PM for 30 Day(s)

Create

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Give feedback

Create a virtual machine

X

Validation passed



Help me create a low cost VM

Help me create a VM optimized for high availability

Help me choose the right VM size for my workload

Basics

Subscription	Azure subscription 1
Resource group	StorageResource
Virtual machine name	win16
Region	East US
Availability options	No infrastructure redundancy required
Zone options	Self-selected zone
Security type	Standard
Image	Windows Server 2019 Datacenter - Gen2
VM architecture	x64
Size	Standard B1s (1 vcpu, 1 GiB memory)
Enable Hibernation	No
Username	azureuser
Public inbound ports	RDP, SSH
Already have a Windows license?	No

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Create

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Give feedback

 CreateVm-MicrosoftWindowsServer.WindowsServ... Deployment

Search X « Delete Cancel Redeploy Download Refresh

 Overview Your deployment is complete

 Inputs Deployment name: CreateVm-MicrosoftWindowsServer.WindowsSe...

 Outputs Subscription: Azure subscription 1

 Template Resource group: StorageResource

Start time: 6/1/2025, 3:43:01 AM Correlation ID: 4cfafa83-0e0b-42a3-aa63-695a6eba799f 

Deployment details Next steps

Setup auto-shutdown Recommended Monitor VM health, performance and network dependencies Recommended Run a script inside the virtual machine Recommended

Go to resource Create another VM

Home > Create a resource > Marketplace > Azure File Sync >

Deploy Azure File Sync

* Basics Networking Tags Review + create



Storage Sync Service
Microsoft

Basics

Subscription	Azure subscription 1
Resource group	StorageResource
Region	East US
Name	lab-filesync-service

Networking

Network connectivity	All networks
----------------------	--------------

Tags

(none)

Create

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Next

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Sync group

X

Start by specifying an Azure file share to sync with - this is the sync group's cloud endpoint.

You can specify a folder on your servers you want to sync later.

[Learn more](#)

Sync group name *

lab-sync-group ✓

Cloud endpoint

Subscription *

Azure subscription 1 ▾

Storage account *

Select storage account

/subscriptions/4af928af-144b-44ea-a5ad-9fe...✓

Azure File Share

vac1 ▾

[Create](#)

[Cancel](#)

 Give feedback

Add cloud endpoint

X

Cloud Endpoints integrate Azure File Shares into a sync group so they can store and sync the same set of files. The following constraints apply:

- Only one Cloud Endpoint is allowed per sync group.
- To set up sync, you must be a member of the "Owner" group of the Storage account that contains the Azure File Share you want to add.
- The Azure File Share cannot already be syncing with a different sync group.

[Learn more](#)

Subscription *

Azure subscription 1 ▾

Storage account *

Select storage account

/subscriptions/4af928af-144b-44ea-a5ad-9fe...✓

Azure File Share

vac1 ▾

[Create](#)

[Cancel](#)

 Give feedback