

VPC Workshop

The screenshot shows the AWS VPC dashboard. On the left is a navigation sidebar with categories like 'Virtual private cloud', 'Security', 'DNS Firewall', and 'Network Firewall'. The main area is titled 'Resources by Region' and shows a grid of resource types with their counts for the 'US East 1' region. Resources include VPCs (1), NAT Gateways (0), Subnets (6), VPC Peering Connections (0), Route Tables (1), Network ACLs (1), Internet Gateways (1), Security Groups (6), Egress-only Internet Gateways (0), Customer Gateways (0), DHCP option sets (1), Virtual Private Gateways (0), Endpoints (0), Site-to-Site VPN Connections (0), Instance Connect Endpoints (0), and Running Instances (4). On the right, there are sections for 'Service Health', 'Settings', 'Additional Information', 'AWS Network Manager', and 'Site-to-Site VPN Connections'.

Resource Type	US East 1 Count
VPCs	1
NAT Gateways	0
Subnets	6
VPC Peering Connections	0
Route Tables	1
Network ACLs	1
Internet Gateways	1
Security Groups	6
Egress-only Internet Gateways	0
Customer Gateways	0
DHCP option sets	1
Virtual Private Gateways	0
Endpoints	0
Site-to-Site VPN Connections	0
Instance Connect Endpoints	0
Running Instances	4

The screenshot shows the 'Create VPC' wizard. It starts with a breadcrumb 'VPC > Your VPCs > Create VPC'. The main heading is 'Create VPC' with an 'Info' link. Below this is a descriptive sentence: 'A VPC is an isolated portion of the AWS Cloud populated by AWS objects, such as Amazon EC2 instances.' The 'VPC settings' section contains the following options:

- Resources to create:** A note says 'Create only the VPC resource or the VPC and other networking resources.' There are two radio buttons: 'VPC only' (selected) and 'VPC and more'.
- Name tag - optional:** A note says 'Creates a tag with a key of 'Name' and a value that you specify.' Below this is a text input field containing 'myVPS'.
- IPv4 CIDR block:** There are two radio buttons: 'IPv4 CIDR manual input' (selected) and 'IPAM-allocated IPv4 CIDR block'.

IPv4 CIDR

10.0.0.0/16

CIDR block size must be between /16 and /28.

IPv6 CIDR block [Info](#)

☒ No IPv6 CIDR block

☐ IPAM-allocated IPv6 CIDR block

☐ Amazon-provided IPv6 CIDR block

☐ IPv6 CIDR owned by me

Tenancy [Info](#)

Default

Tags

A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your AWS costs.

Key

Value - optional

Q Name

X

Q myVPS

X

Remove tag

Add tag

You can add 49 more tags

Cancel>Create VPC

VPC dashboard

EC2 Global View

Filter by VPC

Select a VPC

Virtual private cloud

Your VPCs

Subnets

Route tables

Internet gateways

Egress-only Internet gateways

Carrier gateways

DHCP option sets

Elastic IPs

Managed prefix lists

Endpoints

Endpoint services

NAT gateways

Peering connections

Security

Network ACLs

Security groups

DNS firewall

You successfully created vpc-044e5c7751950bd6f / myVPS

VPC

Your VPCs

vpc-044e5c7751950bd6f

vpc-044e5c7751950bd6f / myVPS

Actions

Details

info

VPC ID

vpc-044e5c7751950bd6f

State

Available

DHCP option set

default-0459198dc72347fed8

IPv4 CIDR

10.0.0.0/16

Route 53 Resolver DNS Firewall rule groups

Route 53 Resolver DNS Firewall rule groups

DNS hostnames

Disabled

Main route table

rtb-075e84c3b9fb329f4

IPv6 pool

-

Owner ID

695125708392

DNS resolution

Enabled

Main network ACL

acl-02857ab6d877c5dd

IPv6 CIDR (Network border group)

-

Resource map

CIDRs

Flow logs

Tags

Integrations

Resource map

info

VPC [Show details](#)

Your AWS virtual network

myVPS

Subnets (0)

Subnets within this VPC

Route tables (1)

Route network traffic to resources

rtb-075e84c3b9fb329f4

Network connections (0)

Connections to other networks

▼ **Virtual private cloud**

Your VPCs

Subnets

Route tables

Internet gateways

Egress-only internet
gateways

Carrier gateways

DHCP option sets

Elastic IPs

Managed prefix lists

Endpoints

Endpoint services

NAT gateways

Peering connections

Your VPCs (2) info

Q Search

Actions

Create VPC

Name

VPC ID

State

IPv4 CIDR

IPv6 CIDR

DHCP option set

Main route table

Main network ACL

Tenancy

De

-

vpc-0699b7ab8798d5c2e

Available

172.31.0.0/16

-

dgpt-0d3918de7234f7e...

rtb-05f8965cad044af2f

acl-0232275f047838306

Default

Yes

myVPS

vpc-044e5c7751950bd6f

Available

10.0.0.0/16

-

dgpt-0d3918de7234f7e...

-

-

Default

No

[VPC](#) > [Subnets](#) > Create subnet

Create subnet info

VPC

VPC ID

Create subnets in this VPC.

vpc-044e5c7751950bd6f (myVPS)

Associated VPC CIDRs

IPv4 CIDRs

10.0.0.0/16

Subnet settings

Specify the CIDR blocks and Availability Zone for the subnet.

Subnet 1 of 1

Subnet name

Create a tag with a key of 'Name' and a value that you specify.

The name can be up to 256 characters long.

Availability Zone [Info](#)

Choose the zone in which your subnet will reside, or let Amazon choose one for you.

IPv4 VPC CIDR block [Info](#)

Choose the VPC's IPv4 CIDR block for the subnet. The subnet's IPv4 CIDR must lie within this block.

IPv4 subnet CIDR block

256 IPs

< > ^ v

▼ Tags - optional

Key

Value - optional



Remove

Add new tag

You can add 49 more tags.

Remove

Add new subnet

Cancel

Create subnet

Subnet 2 of 2

Subnet name

Create a tag with a key of 'Name' and a value that you specify.

myPrivateSubnet

The name can be up to 256 characters long.

Availability Zone [Info](#)

Choose the zone in which your subnet will reside, or let Amazon choose one for you.

US East (N. Virginia) / us-east-1a

IPv4 VPC CIDR block [Info](#)

Choose the VPC's IPv4 CIDR block for the subnet. The subnet's IPv4 CIDR must lie within this block.

10.0.0.0/16

IPv4 subnet CIDR block

10.0.0.0/24

256 IPs

Tags - optional

Key

Value - optional

Q Name X

Q myPrivateSubnet X

Remove

Add new tag

You can add 49 more tags.

Remove

Add new subnet

Cancel

Create subnet

VPC > Subnets > Create subnet

Creating subnets...

We are currently creating subnets.

Creating subnet 1

1%

Details

Creating subnet 1

Creating subnet 2

You have successfully created 2 subnets: subnet-0ee4c36caf5acd7bc, subnet-0d38bb45c2bef0525

Subnets (2) [Info](#)

Find resources by attribute or tag

Subnet ID : subnet-0ee4c36caf5acd7bc X Subnet ID : subnet-0d38bb45c2bef0525 X

Clear filters

<input type="checkbox"/>	Name	Subnet ID	State	VPC	IPv4 CIDR	IPv6 CIDR	Available IPv4 addresses	Availability Zone
<input type="checkbox"/>	myPrivateSubnet	subnet-0d38bb45c2bef0525	Available	vpc-044e5c7751950bd6f myVPS	10.0.0.0/24	-	251	us-east-1a
<input type="checkbox"/>	myPublicSubnet	subnet-0ee4c36caf5acd7bc	Available	vpc-044e5c7751950bd6f myVPS	10.0.1.0/24	-	251	us-east-1a

▼ virtual private cloud

Your VPCs

Subnets

Route tables

Internet gateways

Egress-only internet
gateways

Carrier gateways

DHCP option sets

Elastic IPs

Managed prefix lists

Endpoints

Endpoint services

NAT gateways

Peering connections

Internet gateways (1) [Info](#)

Name

Internet gateway ID

State

VPC ID

Owner

-

[igwc-0b7b5e9872a3d93bb](#)

Attached

[vpc-0699b7ab8798d3d2e](#)

695125708392

[VPC](#) > [Internet gateways](#) > Create internet gateway

Create internet gateway [Info](#)

An internet gateway is a virtual router that connects a VPC to the internet. To create a new internet gateway specify the name for the gateway below.

Internet gateway settings

Name tag

Creates a tag with a key of 'Name' and a value that you specify.

Tags - optional

A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your AWS costs.

Key

X

Value - optional

X

Remove

Add new tag

You can add 49 more tags.

Cancel

Create internet gateway

igw-0f8bb142e94f372d8 / myinternetsub

Actions

Details

Internet gateway ID	State	VPC ID	Owner
igw-0f8bb142e94f372d8	Detached	-	695125708392

Tags

Search tags

Manage tags

< 1 >

Key	Value
Name	myinternetsub

Virtual private cloud

Your VPCs

Subnets

Route tables

Internet gateways

Egress-only internet gateways

Carrier gateways

DHCP option sets

Elastic IPs

Managed prefix lists

Endpoints

Endpoint services

NAT gateways

Peering connections

Route tables (1)

Find resources by attribute or tag



Actions

Create route table

< 1 >

Name	Route table ID	Explicit subnet associ...	Edge associations	Main	VPC	Owner ID
------	----------------	---------------------------	-------------------	------	-----	----------

Create route table [Info](#)

A route table specifies how packets are forwarded between the subnets within your VPC, the internet, and your VPN connection.

Route table settings

Name - optional

Create a tag with a key of 'Name' and a value that you specify.

VPC

The VPC to use for this route table.

Tags

A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your AWS costs.

Key



Value - optional



You can add 49 more tags.

Route table rtb-01c983c4054b5330b | myvpc-route-table was created successfully.

rtb-01c983c4054b5330b / myvpc-route-table

Details [Info](#)

Route table ID
 rtb-01c983c4054b5330b

VPC
vpc-044e5c7751950bd6f | myVPS

Main
 No

Owner ID
 695125708392

Explicit subnet associations

-

Edge associations

-

[Routes](#) | [Subnet associations](#) | [Edge associations](#) | [Route propagation](#) | [Tags](#)

Routes (1)

< 1 >

Destination	Target	Status	Propagated
10.0.0.0/16	local	Active	No

VPC > Route tables > rtb-01c983c4054b5330b

rtb-01c983c4054b5330b / myvpc-route-table

Actions

Details info

Route table ID
rtb-01c983c4054b5330b

VPC
vpc-044e5c7751950bd6f | myVPS

Main
No

Owner ID
695125708392

Explicit subnet associations
-

Edge associations
-

Routes

Subnet associations

Edge associations

Route propagation

Tags

Explicit subnet associations (0)

Edit subnet associations

Find subnet association

Name

Subnet ID

IPv4 CIDR

IPv6 CIDR

No subnet associations
You do not have any subnet associations.

Subnets without explicit associations (2)

Edit subnet associations

The following subnets have not been explicitly associated with any route tables and are therefore associated with the main route table:

Find subnet association

Name

Subnet ID

IPv4 CIDR

IPv6 CIDR

myPrivateSubnet

subnet-Od38bb45c2bef0525

10.0.0.0/24

-

myPublicSubnet

subnet-0ee4c36caf5acd7bc

10.0.1.0/24

-

Add which route you want to explore to the internet

VPC > Route tables > rtb-01c983c4054b5330b > Edit subnet associations

Edit subnet associations

Change which subnets are associated with this route table.

Available subnets (1/2)

Filter subnet associations

☒

Name

Subnet ID

IPv4 CIDR

IPv6 CIDR

Route table ID

☐

myPrivateSubnet

subnet-Od38bb45c2bef0525

10.0.0.0/24

-

Main (rtb-075e84cb89fb329f4)

☒

myPublicSubnet

subnet-0ee4c36caf5acd7bc

10.0.1.0/24

-

Main (rtb-075e84cb89fb329f4)

Selected subnets

subnet-0ee4c36caf5acd7bc / myPublicSubnet X

Cancel

Save associations

VPC > Route tables > rtb-01c983c4054b5330b

rtb-01c983c4054b5330b / myvpc-route-table

Actions

Details info

Route table ID
rtb-01c983c4054b5330b

VPC
vpc-044e5c7751950bd6f | myVPS

Main
No

Owner ID
695125708392

Explicit subnet associations
subnet-0ee4c36caf5acd7bc / myPublicSubnet

Edge associations
-

Routes

Subnet associations

Edge associations

Route propagation

Tags

Explicit subnet associations (1)

Edit subnet associations

Find subnet association

Name

Subnet ID

IPv4 CIDR

IPv6 CIDR

myPublicSubnet

subnet-0ee4c36caf5acd7bc

10.0.1.0/24

-

Subnets without explicit associations (1)

Edit subnet associations

The following subnets have not been explicitly associated with any route tables and are therefore associated with the main route table:

Find subnet association

Name

Subnet ID

IPv4 CIDR

IPv6 CIDR

myPrivateSubnet

subnet-Od38bb45c2bef0525

10.0.0.0/24

-

VPC > Route tables > rtb-01c983c4054b5330b

rtb-01c983c4054b5330b / myvpc-route-table

Actions ▾

Details info

Route table ID rtb-01c983c4054b5330b	Main No	Explicit subnet associations subnet-0ee4c36caf5acd7bc / myPublicSubnet	Edge associations -
VPC vpc-044e5c7751950bd6f myVPS	Owner ID 695125708392		

Routes Subnet associations Edge associations Route propagation Tags

Routes (1) Both ▾ Edit routes

Filter routes

Destination	Target	Status	Propagated
10.0.0.0/16	local	Active	No

VPC > Route tables > [rtb-01c983c4054b5330b](#) > Edit routes

Edit routes

Destination	Target	Status	Propagated
10.0.0.0/16	local	Active	No
<input type="text" value="0.0.0.0/0"/>	<input type="text" value="local"/>	-	No

Add route

Cancel Preview **Save changes**

VPC > Route tables > [rtb-01c983c4054b5330b](#) > Edit routes

Edit routes

Destination	Target	Status	Propagated
10.0.0.0/16	local	Active	No
<input type="text" value="0.0.0.0/0"/>	<input type="text" value="local"/>	-	No

Add route

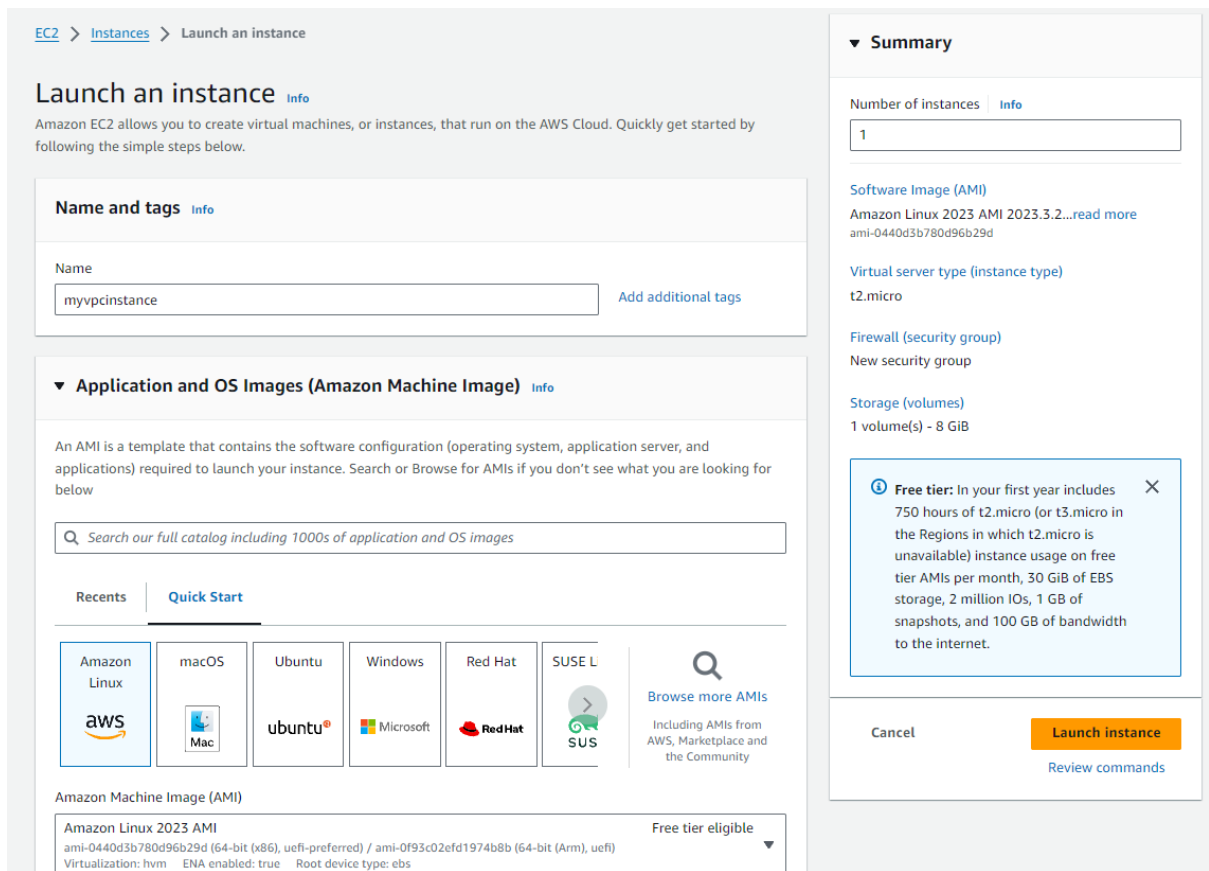
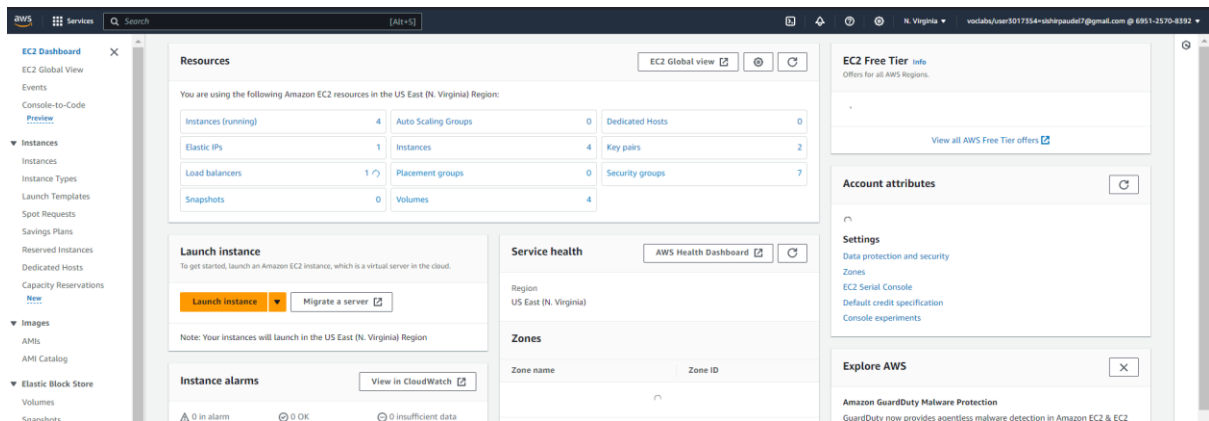
Cancel Preview **Save changes**

Routes (2) Both ▾ Edit routes

Filter routes

Destination	Target	Status	Propagated
0.0.0.0/0	igw-0f8bb142e94f372d8	Active	No
10.0.0.0/16	local	Active	No

Now create a ec2 instance



▼ Instance type [Info](#) | [Get advice](#)

Instance type

t2.micro

Free tier eligible

Family: t2 1 vCPU 1 GiB Memory Current generation: true
On-Demand Windows base pricing: 0.0162 USD per Hour
On-Demand SUSE base pricing: 0.0116 USD per Hour
On-Demand RHEL base pricing: 0.0716 USD per Hour
On-Demand Linux base pricing: 0.0116 USD per Hour

☒ All generations

[Compare instance types](#)

[Additional costs apply for AMIs with pre-installed software](#)

▼ Key pair (login) [Info](#)

You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.

Key pair name - *required*

Test

 [Create new key pair](#)

▼ Network settings [Info](#)

VPC - *required* | [Info](#)

vpc-044e5c7751950bd6f (myVPS)
10.0.0.0/16



vpc-0699b7ab8798d3d2e
172.31.0.0/16

(default)



[Create new subnet](#) 

vpc-044e5c7751950bd6f (myVPS)
10.0.0.0/16



Disable

CHOOSE OUR VPC

▼ Network settings Info

VPC - required Info

vpc-044e5c7751950bd6f (myVPS)
10.0.0.0/16

Subnet Info

subnet-0ee4c36caf5acd7bcmyPublicSubnet
VPC: vpc-044e5c7751950bd6f Owner: 695125708392
Availability Zone: us-east-1a IP addresses available: 251 CIDR: 10.0.1.0/24

Create new subnet

Auto-assign public IP Info

Enable

Choose the public subnet to access, then enable the auto assign public IP

Now create a new security group / firewalls

Firewall (security groups) Info

A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

Create security group

Select existing security group

Security group name - required

sg-web-service

This security group will be added to all network interfaces. The name can't be edited after the security group is created. Max length is 255 characters. Valid characters: a-z, A-Z, 0-9, spaces, and . _ - / () # , @ [] + = & ; { } ! \$ *

Description - required Info

launch-wizard-6 created 2024-02-26T06:10:36.886Z

Inbound Security Group Rules

Now add rules for security groups

▼ Security group rule 2 (TCP, 80, 0.0.0.0/0)

Remove

Type	Info	Protocol	Info	Port range	Info
HTTP	▼	TCP		80	
Source type	Info	Source	Info	Description - optional	Info
Anywhere	▼	<div>Q Add CIDR, prefix list or security</div> <div>0.0.0.0/0 X</div>		e.g. SSH for admin desktop	

⚠ Rules with source of 0.0.0.0/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only.

X

Add security group rule

► Advanced network configuration

Now launch the instance

EC2 > Instances > Launch an instance

⌵ Launching instance

Creating security groups

14%

► Details

Please wait while we launch your instance.
Do not close your browser while this is loading.

EC2 > Instances > Launch an instance

⊕ Success

Successfully initiated launch of instance (i-0cf80abc596a20628)

▼ Launch log

Initializing requests ⊕ Succeeded

Creating security groups ⊕ Succeeded

Creating security group rules ⊕ Succeeded

Launch initiation ⊕ Succeeded

Next Steps

Q What would you like to do next with this instance, for example "create alarm" or "create backup"

< 1 2 3 4 >

EC2 > Instances > i-0cf80abc596a20628

Instance summary for i-0cf80abc596a20628 (myWebserver) [Info](#)

Updated less than a minute ago

[Refresh](#) [Connect](#) [Instance state](#) [Actions](#)

Instance ID i-0cf80abc596a20628 (myWebserver) IPv6 address - Hostname type IP name: ip-10-0-1-158.ec2.internal Answer private resource DNS name - Auto-assigned IP address 35.175.118.1 [Public IP] IAM Role - IMDSv2 Required	Public IPv4 address 35.175.118.1 Open address Instance state Running Private IP DNS name (IPv4 only) ip-10-0-1-158.ec2.internal Instance type t2.micro VPC ID vpc-044e5c7751950bd6f (myVPS) Subnet ID subnet-0ee4c36caf5acd7bc (myPublicSubnet)	Private IPv4 addresses 10.0.1.158 Public IPv4 DNS - Elastic IP addresses - AWS Compute Optimizer finding Opt-in to AWS Compute Optimizer for recommendations. Learn more Auto Scaling Group name -
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[Details](#) [Status and alarms](#) [Monitoring](#) [Security](#) [Networking](#) [Storage](#) [Tags](#)

Instance details [Info](#)

Platform Amazon Linux (Inferred) Platform details -	AMI ID ami-0440d3b780d96b29d AMI name -	Monitoring disabled Termination protection -
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Go to connect

EC2 > Instances > i-0cf80abc596a20628 > Connect to instance

Connect to instance [Info](#)

Connect to your instance i-0cf80abc596a20628 (myWebserver) using any of these options

[EC2 Instance Connect](#) | [Session Manager](#) | [SSH client](#) | [EC2 serial console](#)

Instance ID
 i-0cf80abc596a20628 (myWebserver)

1. Open an SSH client.
2. Locate your private key file. The key used to launch this instance is Test.pem
3. Run this command, if necessary, to ensure your key is not publicly viewable.
 chmod 400 "Test.pem"
4. Connect to your instance using its Public IP:
 35.175.118.1

Example:
 ssh -i "Test.pem" ec2-user@35.175.118.1

Note: In most cases, the guessed username is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI username.

[Cancel](#)

Now connect it

Connect to instance [Info](#)

Connect to your instance i-0cf80abc596a20628 (myWebserver) using any of these options

EC2 Instance Connect

Session Manager

SSH client

EC2 serial console

Instance ID

i-0cf80abc596a20628 (myWebserver)

Connection Type

☒ Connect using EC2 Instance Connect

Connect using the EC2 Instance Connect browser-based client, with a public IPv4 address.

☐ Connect using EC2 Instance Connect Endpoint

Connect using the EC2 Instance Connect browser-based client, with a private IPv4 address and a VPC endpoint.

Public IP address

35.175.118.1

Username

Enter the username defined in the AMI used to launch the instance. If you didn't define a custom username, use the default username, ec2-user.

ec2-user

Note:

In most cases, the default username, ec2-user, is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI username.

Cancel

Connect

this page is redirected

```
[ec2-user@ip-10-0-1-159 ~]$ sudo yum install httpd
Last metadata expiration check: 0:03:34 ago on Mon Feb 26 06:20:31 2024.
Dependencies resolved.

```

Package	Architecture	Version	Repository	Size
Installing:	x86_64	2.4.58-1.amzn2023	amazonlinux	47
Installing dependencies:	x86_64	1.7.2-2.amzn2023.0.2	amazonlinux	129
apr	x86_64	1.6.3-1.amzn2023.0.1	amazonlinux	96
apr-util	x86_64	1.6.3-1.amzn2023.0.1	amazonlinux	96
generic-logos-httpd	noarch	18.0.0-12.amzn2023.0.3	amazonlinux	19
httpd-core	x86_64	2.4.58-1.amzn2023	amazonlinux	1.4
httpdfilesystem	noarch	2.4.58-1.amzn2023	amazonlinux	34
httpd-tools	x86_64	2.4.58-1.amzn2023	amazonlinux	81
libbrotli	x86_64	1.0.9-4.amzn2023.0.2	amazonlinux	315
mailcap	noarch	2.1.49-3.amzn2023.0.3	amazonlinux	33
Installing weak dependencies:	x86_64	1.6.3-1.amzn2023.0.1	amazonlinux	37
apr-util-openssl	x86_64	2.0.11-2.amzn2023	amazonlinux	150
mod_http2	x86_64	2.4.58-1.amzn2023	amazonlinux	61
mod_lua	x86_64	2.4.58-1.amzn2023	amazonlinux	61

```
Transaction Summary
Install 12 Packages
Total download size: 2.3 M
Installed size: 6.9 M
Is this ok [y/n]: sudo yum update httpd
Is this ok [y/N]: y
Downloading Packages:
(3/12): mod_lua-2.4.58-1.amzn2023.x86_64.rpm           901 kB/s | 61 kB  00:00
(2/12): apr-util-1.6.3-1.amzn2023.0.1.x86_64.rpm      1.2 MB/s | 96 kB  00:00
(3/12): apr-1.7.2-2.amzn2023.0.2.x86_64.rpm           6.1 MB/s | 129 kB  00:00
(4/12): httpd-tools-2.4.58-1.amzn2023.x86_64.rpm       4.8 MB/s | 81 kB  00:00
(5/12): httpd-core-2.4.58-1.amzn2023.x86_64.rpm        31 MB/s | 1.4 MB  00:00
(6/12): libbrotli-1.0.9-4.amzn2023.0.2.x86_64.rpm      9.1 MB/s | 315 kB  00:00
(7/12): mod_http2-2.0.11-2.amzn2023.x86_64.rpm        4.4 MB/s | 150 kB  00:00
(8/12): apr-util-openssl-2.0.11-2.amzn2023.0.1.x86_64 1.2 MB/s | 17 kB  00:00
(9/12): httpd-2.4.58-1.amzn2023.x86_64.rpm            2.8 MB/s | 47 kB  00:00
(10/12): mailcap-2.1.49-3.amzn2023.0.3.noarch.rpm     2.3 MB/s | 33 kB  00:00
(11/12): httpd-2.4.58-1.amzn2023.x86_64.rpm           2.8 MB/s | 47 kB  00:00
(12/12): httpd-2.4.58-1.amzn2023.x86_64.rpm           2.8 MB/s | 47 kB  00:00
```

```
[ec2-user@ip-10-0-1-158 ~]$ sudo yum update httpd
Last metadata expiration check: 0:04:14 ago on Mon Feb 26 06:20:31 2024.
Dependencies resolved.
Nothing to do.
Complete!
[ec2-user@ip-10-0-1-158 ~]$
```

Code :

Sudo yum update

Sudo yum install httpd

Sudo yum update httpd

Sudo service httpd start

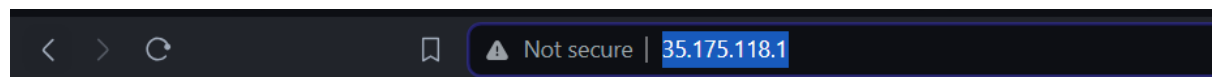
Sudo service httpd status

```
[ec2-user@ip-10-0-1-158 ~]$ sudo service httpd status
Redirecting to /bin/systemctl status httpd.service
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; disabled; preset: disabled)
   Active: active (running) since Mon 2024-02-26 06:25:53 UTC; 5min ago
     Docs: man:httpd.service(8)
  Main PID: 25942 (httpd)
    Status: "Total requests: 0; Idle/Busy workers 100/0;Requests/sec: 0; Bytes served/sec: 0 B/sec"
    Tasks: 177 (limit: 1114)
  Memory: 13.4M
    CPU: 258ms
  CGroup: /system.slice/httpd.service
          └─25942 /usr/sbin/httpd -DFOREGROUND
            └─25964 /usr/sbin/httpd -DFOREGROUND
              └─25965 /usr/sbin/httpd -DFOREGROUND
                └─25966 /usr/sbin/httpd -DFOREGROUND
                  └─25967 /usr/sbin/httpd -DFOREGROUND

Feb 26 06:25:53 ip-10-0-1-158.ec2.internal systemd[1]: Starting httpd.service - The Apache HTTP Server...
Feb 26 06:25:53 ip-10-0-1-158.ec2.internal systemd[1]: Started httpd.service - The Apache HTTP Server.
Feb 26 06:25:53 ip-10-0-1-158.ec2.internal httpd[25942]: Server configured, listening on: port 80
[ec2-user@ip-10-0-1-158 ~]$
```

i-0cf80abc596a20628 (myWebserver)

PublicIPs: 35.175.118.1 PrivateIPs: 10.0.1.158



It works!

Hosting Portfolio Using linux server

```

~\      #####          Amazon Linux 2023
~~\     #####\
~~\    \###|
~~   \|/
~~   V~' '-> https://aws.amazon.com/linux/amazon-linux-2023
~~~~
~~.-. /
~~// -/
~/m/'

Last login: Tue Mar  5 06:39:21 2024 from 103.10.29.89
[ec2-user@ip-10-0-1-158 ~]$ ls
[ec2-user@ip-10-0-1-158 ~]$ start service httpd
-bash: start: command not found
[ec2-user@ip-10-0-1-158 ~]$
[ec2-user@ip-10-0-1-158 ~]$ sudo yum -i httpd
No such command: httpd. Please use /usr/bin/yum --help
It could be a YUM plugin command, try: "yum install 'dnf-command(httpd)'"
[ec2-user@ip-10-0-1-158 ~]$ sudo yum install httpd
Last metadata expiration check: 1:04:23 ago on Tue Mar  5 05:42:32 2024.
Package httpd-2.4.58-1.amzn2023.x86_64 is already installed.
Dependencies resolved.
Nothing to do.
Complete!

Mar 05 06:47:49 ip-10-0-1-158.ec2.internal systemd[1]: Starting httpd.service - The Apache HTTP Server...
Mar 05 06:47:49 ip-10-0-1-158.ec2.internal systemd[1]: Started httpd.service - The Apache HTTP Server.
Mar 05 06:47:49 ip-10-0-1-158.ec2.internal httpd[5008]: Server configured, listening on: port 80

[ec2-user@ip-10-0-1-158 ~]$ ls
[ec2-user@ip-10-0-1-158 ~]$ mkdir temp
[ec2-user@ip-10-0-1-158 ~]$ cd temp
[ec2-user@ip-10-0-1-158 temp]$ pwd
/home/ec2-user/temp
[ec2-user@ip-10-0-1-158 temp]$ ls
'Blog Reference.JPG' Blog.jpg Blog2.jpg Blog4.jpg Contact.HTML Home.jpg IconRef.JPG Research.HTML VC.jpg contactt.jpg javascript.js
Blog.HTML Blog1.jpg Blog3.jpg CVimg.jpg Contact.jpg 'Homepage reference.jpg' MyCV.html Styling.css contactneref.png homepage.html navigationReference.jpg
[ec2-user@ip-10-0-1-158 temp]$

[ec2-user@ip-10-0-1-158 temp]$
[ec2-user@ip-10-0-1-158 temp]$ sudo mv * /var/www/html/
[ec2-user@ip-10-0-1-158 temp]$ cd /var/www/html/
[ec2-user@ip-10-0-1-158 html]$ ls
'Blog Reference.JPG' Blog.jpg Blog2.jpg Blog4.jpg Contact.HTML Home.jpg IconRef.JPG Research.HTML VC.jpg contactt.jpg javascript.js
Blog.HTML Blog1.jpg Blog3.jpg CVimg.jpg Contact.jpg 'Homepage reference.jpg' MyCV.html Styling.css contactneref.png homepage.html navigationReference.jpg

```

Giving permission to access test.pem key

```
C:\Users\User\Desktop\awskeys>icacls Test.pem /inheritance:r /grant:r "%USERNAME%:R"
processed file: Test.pem
Successfully processed 1 files; Failed processing 0 files
```

Loading a folder from local machine to that ec2 instance

```

C:\Users\User\Desktop\awskeys>scp -i "Test.pem" C:\Users\User\Desktop\portfolio/* ec2-user@3.239.192.80:temp
Blog Reference.JPG 100% 114KB 101.4KB/s 00:01
Blog.HTML 100% 7909 27.1KB/s 00:00
Blog.jpg 100% 2574KB 1.5MB/s 00:01
Blog1.jpg 100% 686KB 1.6MB/s 00:00
Blog2.jpg 100% 2608KB 1.4MB/s 00:01
Blog3.jpg 100% 39KB 131.6KB/s 00:00
Blog4.jpg 100% 1017KB 1.5MB/s 00:00
CVimg.jpg 100% 206KB 599.7KB/s 00:00
Contact.HTML 100% 4768 15.3KB/s 00:00
Contact.jpg 100% 88KB 262.6KB/s 00:00
Home.jpg 100% 575KB 1.4MB/s 00:00
Homepage reference.jpg 100% 106KB 359.4KB/s 00:00
IconRef.JPG 100% 79KB 259.3KB/s 00:00
MyCV.html 100% 4174 14.7KB/s 00:00
Research.HTML 100% 3626 12.8KB/s 00:00
Styling.css 100% 6223 21.7KB/s 00:00
VC.jpg 100% 650KB 1.6MB/s 00:00
contactmeref.png 100% 53KB 181.3KB/s 00:00
contactt.jpg 100% 136KB 445.4KB/s 00:00
homepage.html 100% 2674 9.5KB/s 00:00
javascript.js 100% 296 1.1KB/s 00:00
navigationReference.jpg 100% 26KB 93.0KB/s 00:00

C:\Users\User\Desktop\awskeys>ls

```

Connect to instance [Info](#)

Connect to your instance i-0cf80abc596a20628 (myWebserver) using any of these options

EC2 Instance Connect



Session Manager

SSH client


EC2 serial console


Instance ID

 i-0cf80abc596a20628 (myWebserver)

1. Open an SSH client.
2. Locate your private key file. The key used to launch this instance is Test.pem
3. Run this command, if necessary, to ensure your key is not publicly viewable.
 `chmod 400 "Test.pem"`
4. Connect to your instance using its Public IP:
 3.239.192.80

Example:

 `ssh -i "Test.pem" ec2-user@3.239.192.80`

 **Note:** In most cases, the guessed username is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI username.

Check the instance in Public IP

Connect to instance [Info](#)

Connect to your instance i-0cf80abc596a20628 (myWebserver) using any of these options

EC2 Instance Connect



Session Manager

SSH client


EC2 serial console


Instance ID

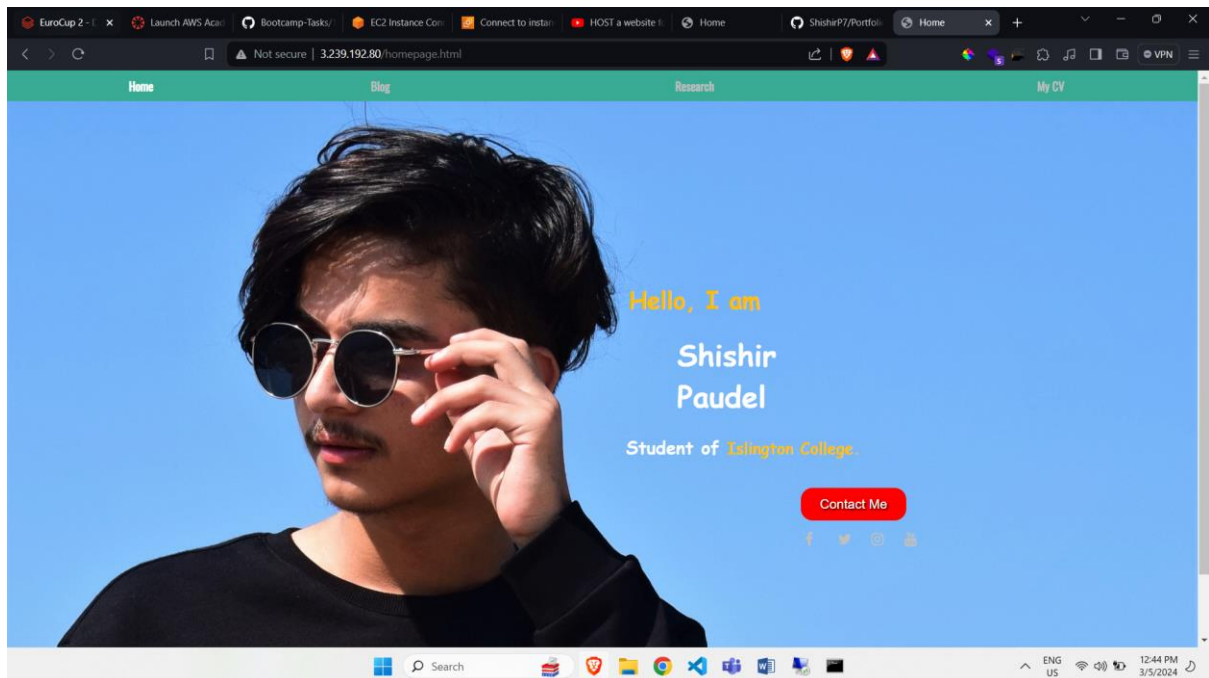
 i-0cf80abc596a20628 (myWebserver)

1. Open an SSH client.
2. Locate your private key file. The key used to launch this instance is Test.pem
3. Run this command, if necessary, to ensure your key is not publicly viewable.
 `chmod 400 "Test.pem"`
4. Connect to your instance using its Public IP:
 3.239.192.80

Example:

 `ssh -i "Test.pem" ec2-user@3.239.192.80`

 **Note:** In most cases, the guessed username is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI username.



Now hosting portfolio using windows server

Create a new instance with Windows OS

Launch an instance [Info](#)

Amazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by following the simple steps below.

Name and tags [Info](#)

Name








[Add additional tags](#)

▼ Application and OS Images (Amazon Machine Image) [Info](#)

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below

Recents

Quick Start

 aws	 Mac	 ubuntu®	 Microsoft	 Red Hat	 SUSE L SUS	 Browse more AMIs Including AMIs from AWS, Marketplace and the Community
--	--	--	--	--	--	--

Amazon Machine Image (AMI)

Microsoft Windows Server 2022 Base

ami-0f9c44e98edf38a2b (64-bit (x86))

Virtualization: hvm ENA enabled: true Root device type: ebs

Free tier eligible ▼

[EC2](#) > [Instances](#) > Launch an instance

Success

Successfully initiated launch of instance (i-0e7a55bb3ed583cd4)

► Launch log

Next Steps

Connect to instance Info

Connect to your instance i-0e7a53bb3ed583cd4 (newwindowinstance) using any of these options

Session Manager

RDP client

EC2 serial console

⚠ You may not be able to connect to this instance as ports 3389 may need to be open in order to be accessible. The current associated security groups don't have ports 3389 open.

×

Instance ID

i-0e7a53bb3ed583cd4 (newwindowinstance)

Connection Type

● Connect using RDP client

Download a file to use with your RDP client and retrieve your password.

○ Connect using Fleet Manager

To connect to the instance using Fleet Manager, the SSM Agent must be installed on the instance. For more information, see [Using the SSM Agent with SSM Agent](#).

You can connect to your Windows instance using a remote desktop client of your choice, and by doing so, you can run the RDP shortcut file below:

Download remote desktop file

When prompted, connect to your instance using the following username and password:

Public IP

3.216.80.210

Username Info

Administrator

Password

txHqxRNgjNXm0C2P&9;g7670nRCB163h

ⓘ If you've joined your instance to a directory, you can use your directory credentials to connect to your instance.

Cancel

Remote Desktop Connection

×

Connecting to:

3.216.80.210

Initiating remote connection...

Cancel

▼ Network settings Info

VPC - required Info

vpc-044e5c7751950bd6f (myVPS)

10.0.0.0/16

↻

Subnet Info

subnet-0ee4c36caf5acd7bc

myPublicSubnet

VPC: vpc-044e5c7751950bd6f Owner: 695125708392 Availability Zone: us-east-1a IP addresses available: 250 CIDR: 10.0.1.0/24

↻ Create new subnet [↗](#)

Auto-assign public IP Info

Enable

Firewall (security groups) Info

A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

○ Create security group

● Select existing security group

Common security groups Info

Select security groups

websecuritygroup sg-07dd7c116c08a5e81 ✕

VPC: vpc-044e5c7751950bd6f

↻ Compare security group rules

Security groups that you add or remove here will be added to or removed from all your network interfaces.

▶ Advanced network configuration

securitygroup


ice

Sec

Inb


3 P

Remote Desktop Connection

**The identity of the remote computer cannot be verified. Do you want to connect anyway?**


The remote computer could not be authenticated due to problems with its security certificate. It may be unsafe to proceed.

Certificate name

 Name in the certificate from the remote computer:
EC2AMAZ-A26205C

Certificate errors

The following errors were encountered while validating the remote computer's certificate:

 The certificate is not from a trusted certifying authority.

Do you want to connect despite these certificate errors?

☒ Don't ask me again for connections to this computer

View certificate...


Yes

No

ated 2024-02-26T


IP version	Type	Protocol	Port range
IPv4	SSH	TCP	22
IPv4	RDP	TCP	3389

Remote Desktop Connection

**The identity of the remote computer cannot be verified. Do you want to connect anyway?**


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Certificate name

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EC2AMAZ-A26205C

Certificate errors

The following errors were encountered while validating the remote computer's certificate:

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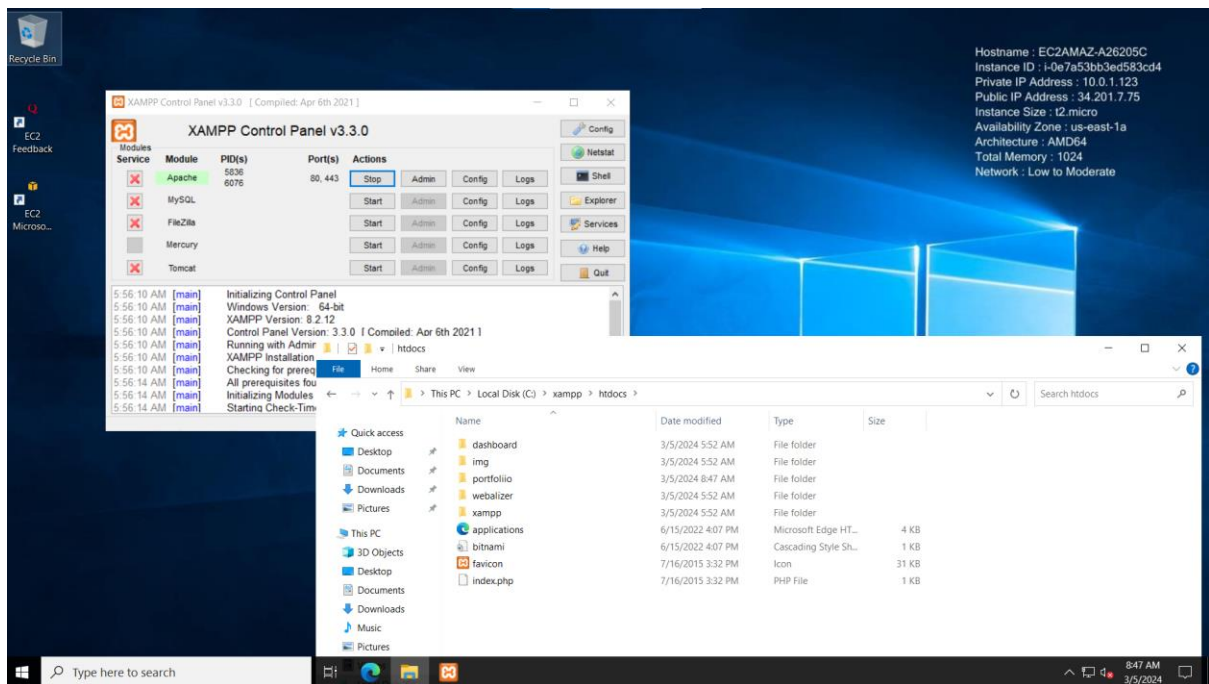
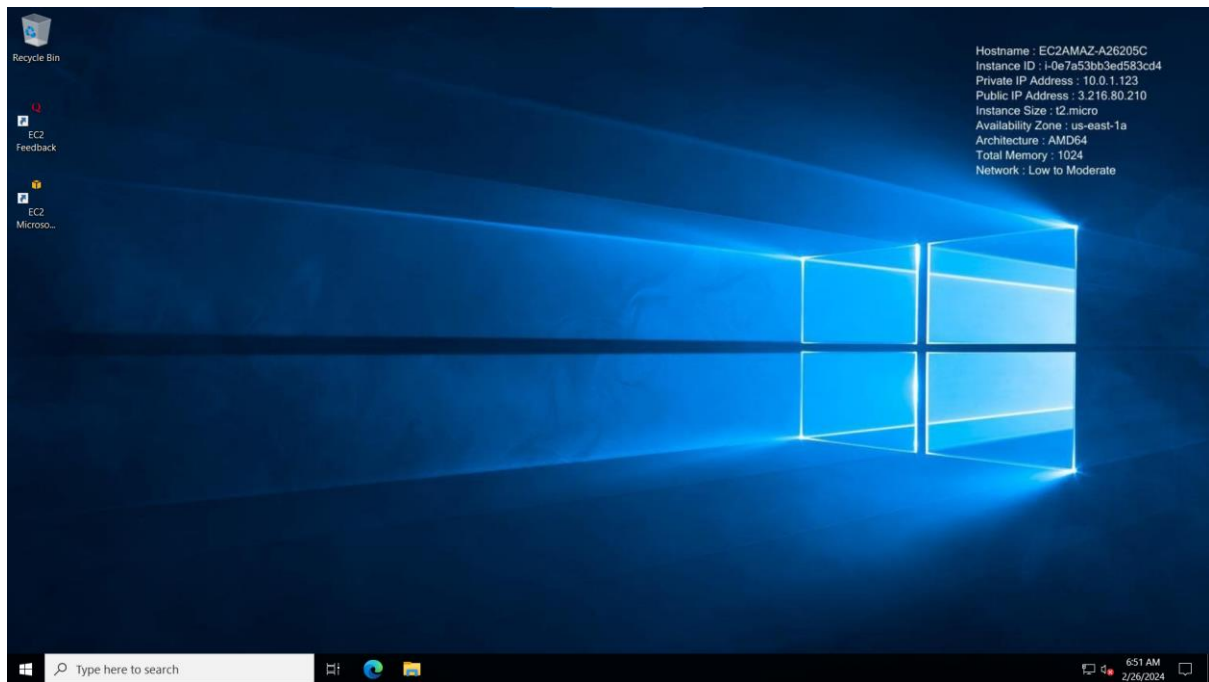
Do you want to connect despite these certificate errors?

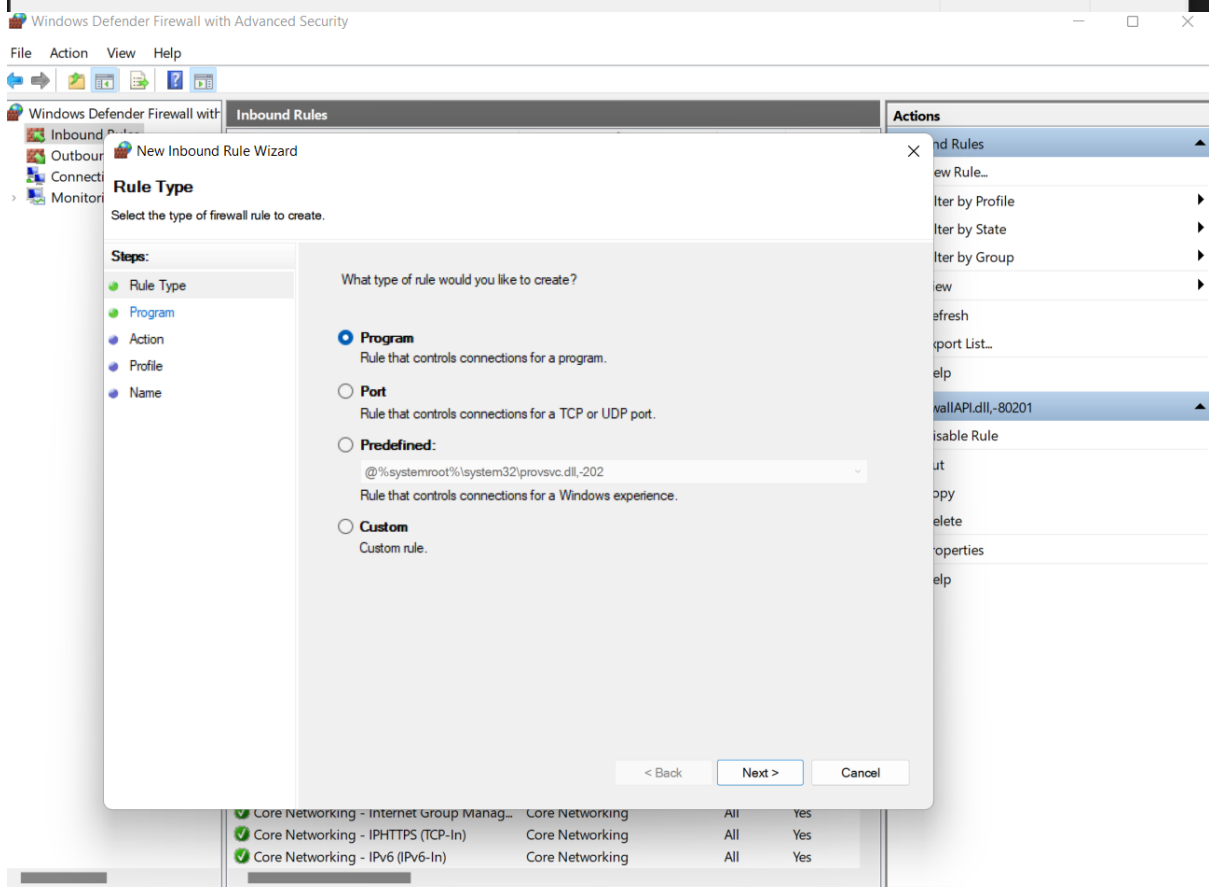
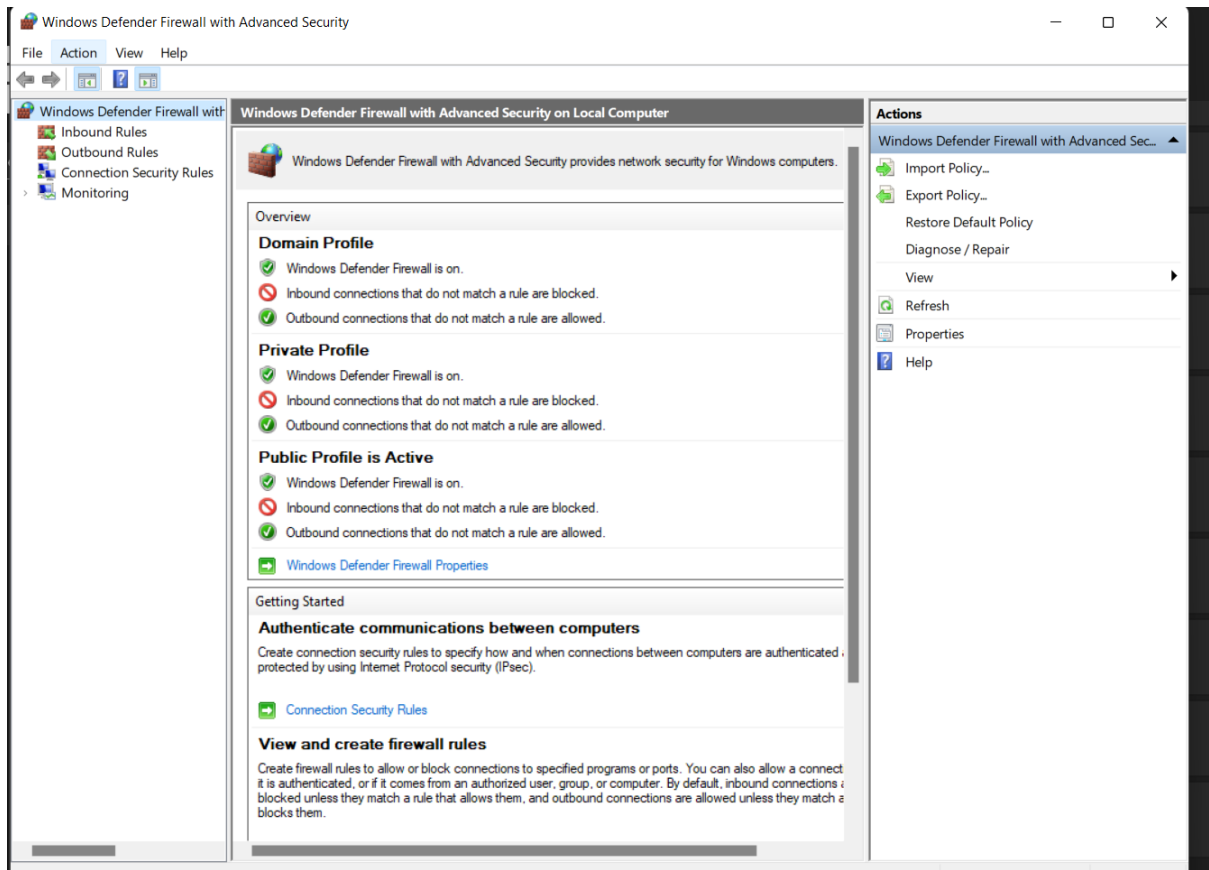
☒ Don't ask me again for connections to this computer

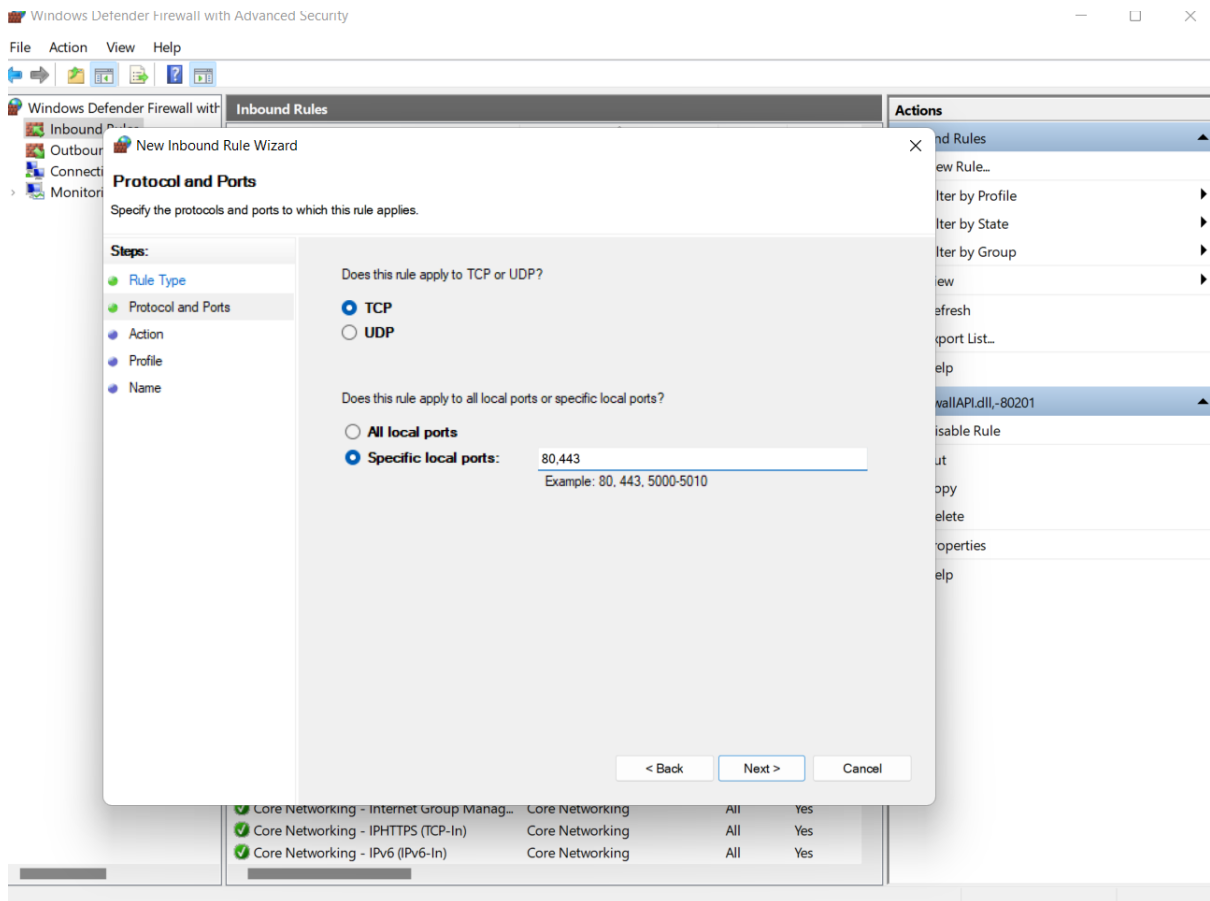
View certificate...

Yes

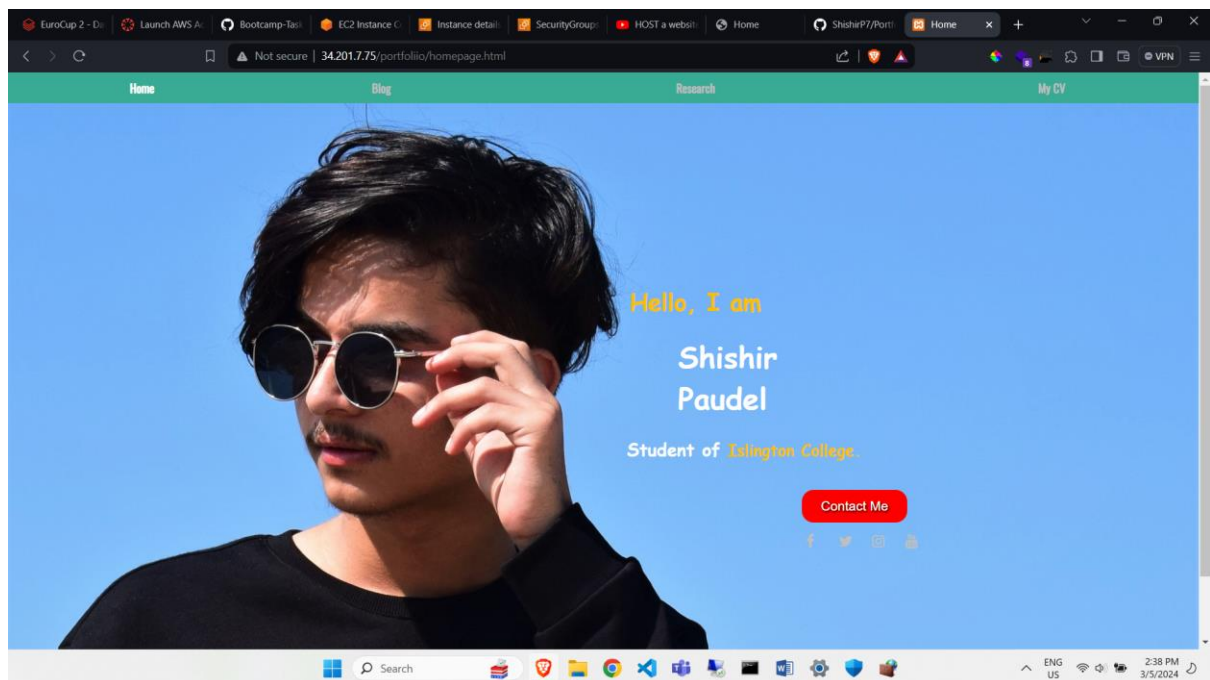
No







Then check the public ip



The website is hosted successfully.