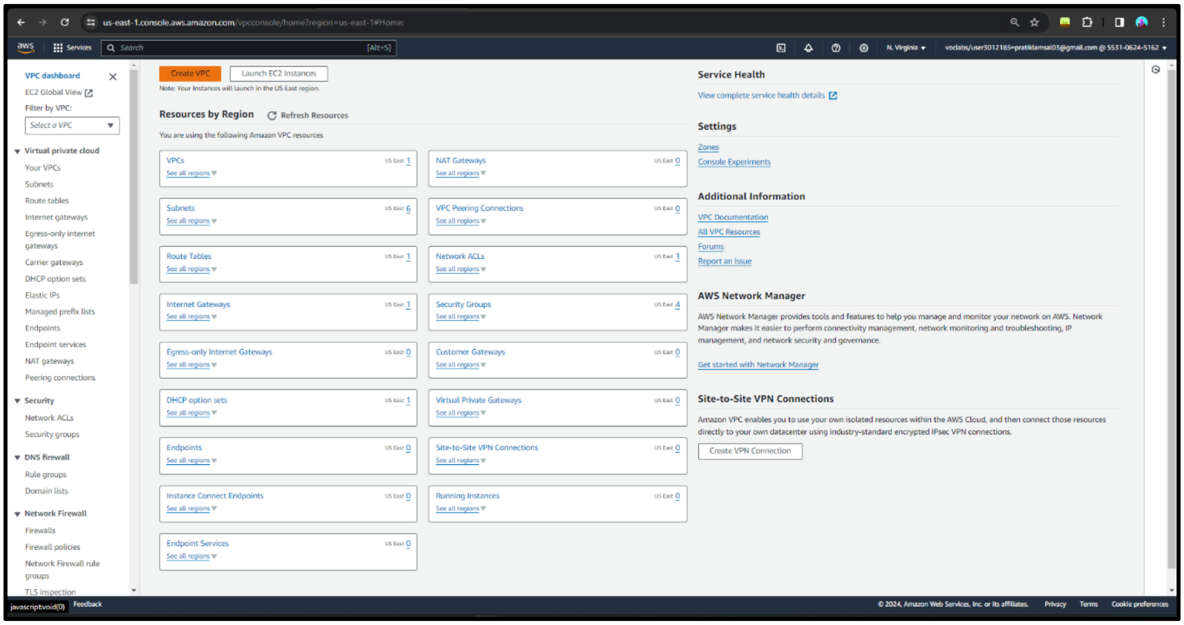
1. VPC Dashboard

When landing page is reached, VPC can be searched and clicked. VPC dashboard appears with option to created VPC and displays VPC resources by region.



us-east-1.console.aws.amazon.com/vpcconsole/home?region=us-east-1#Home:

aws Services Search [Alt+S] N. Virginia ▾ voclabs/user3012185=pratiklamsal03@gmail.com @ 5531-0624-5162 ▾

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

Rule groups

Domain lists

▾ Network Firewall

Firewalls

Firewall policies

Network Firewall rule groups

TLS inspection

Create VPC | Launch EC2 Instances

Note: Your Instances will launch in the US East region.

Resources by Region Refresh Resources

You are using the following Amazon VPC resources

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

Service Health

View complete service health details

Settings

Zones

Console Experiments

Additional Information

VPC Documentation

All VPC Resources

Forums

Report an Issue

AWS Network Manager

AWS Network Manager provides tools and features to help you manage and monitor your network on AWS. Network Manager makes it easier to perform connectivity management, network monitoring and troubleshooting, IP management, and network security and governance.

Get started with Network Manager

Site-to-Site VPN Connections

Amazon VPC enables you to use your own isolated resources within the AWS Cloud, and then connect those resources directly to your own datacenter using industry-standard encrypted IPsec VPN connections.

Create VPN Connection

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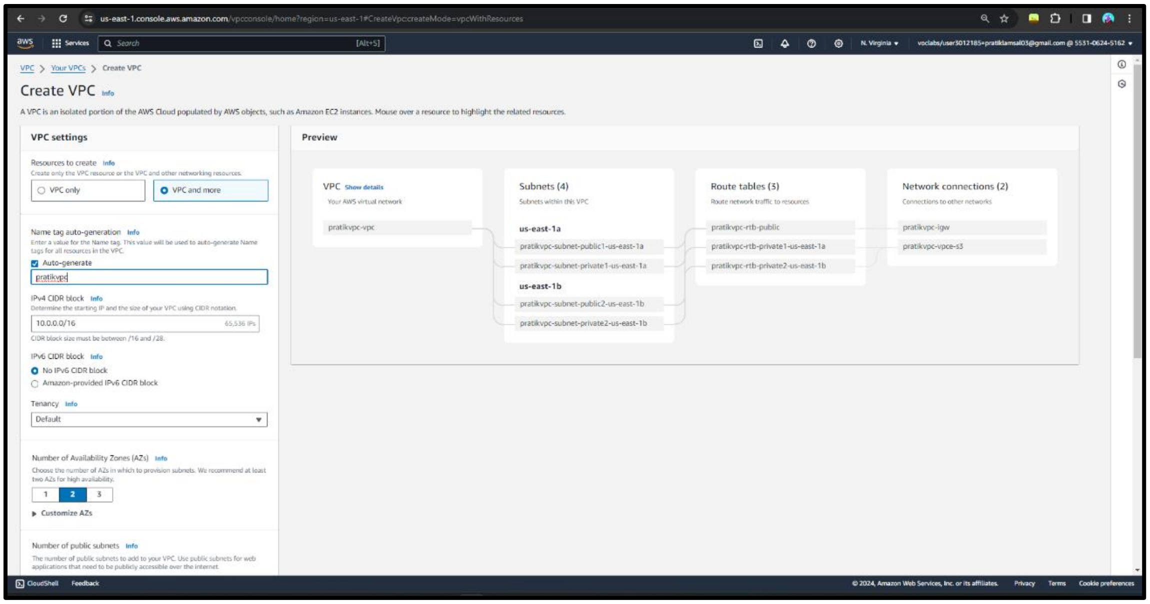
2. Creating VPC

VPC can be created using a wizard. A name is provided and required configurations can be done. A preview with the selected configurations can be seen on the right-side.



us-east-1.console.aws.amazon.com/vpcconsole/home?region=us-east-1#CreateVpc:createMode=vpcWithResources

aws Services Search [Alt+S] N. Virginia ▾ voclabs/user3012185=pratiklamsal03@gmail.com @ 5531-0624-5162 ▾

VPC > Your VPCs > Create VPC

Create VPC Info

A VPC is an isolated portion of the AWS Cloud populated by AWS objects, such as Amazon EC2 instances. Mouse over a resource to highlight the related resources.

VPC settings

Resources to create Info

Create only the VPC resource or the VPC and other networking resources.

○ VPC only ● VPC and more

Name tag auto-generation Info

Enter a value for the Name tag. This value will be used to auto-generate Name tags for all resources in the VPC.

☑ Auto-generate

pratikvpc

IPv4 CIDR block Info

Determine the starting IP and the size of your VPC using CIDR notation.

10.0.0.0/16 65,536 IPs

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

IPv6 CIDR block Info

● No IPv6 CIDR block

○ Amazon-provided IPv6 CIDR block

Tenancy Info

Default ▾

Number of Availability Zones (AZs) Info

Choose the number of AZs in which to provision subnets. We recommend at least two AZs for high availability.

1 [✓ 2] 3

▸ Customize AZs

Number of public subnets Info

The number of public subnets to add to your VPC. Use public subnets for web applications that need to be publicly accessible over the internet.

Preview

VPC Show details

Your AWS virtual network

pratikvpc-vpc

Subnets (4)

Subnets within this VPC

us-east-1a

pratikvpc-subnet-public1-us-east-1a

pratikvpc-subnet-private1-us-east-1a

us-east-1b

pratikvpc-subnet-public2-us-east-1b

pratikvpc-subnet-private2-us-east-1b

Route tables (3)

Route network traffic to resources

pratikvpc-rtb-public

pratikvpc-rtb-private1-us-east-1a

pratikvpc-rtb-private2-us-east-1b

Network connections (2)

Connections to other networks

pratikvpc-igw

pratikvpc-vpce-s3

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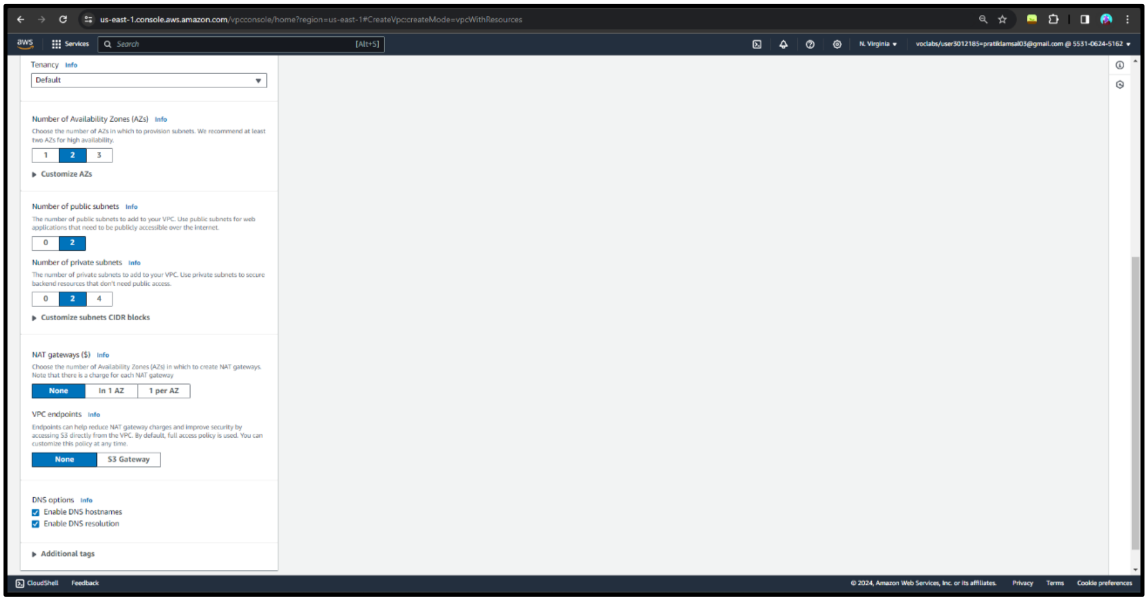
3. VPC Configuration Wizard



us-east-1.console.aws.amazon.com/vpcconsole/home?region=us-east-1#CreateVpc:createMode=vpcWithResources

Tenancy Info

Default

Number of Availability Zones (AZs) Info

Choose the number of AZs in which to provision subnets. We recommend at least two AZs for high availability.

1 [✓ 2] 3

▸ Customize AZs

Number of public subnets Info

The number of public subnets to add to your VPC. Use public subnets for web applications that need to be publicly accessible over the internet.

0 [✓ 2]

Number of private subnets Info

The number of private subnets to add to your VPC. Use private subnets to secure backend resources that don't need public access.

0 [✓ 2] 4

▸ Customize subnets CIDR blocks

NAT gateways ($) Info

Choose the number of Availability Zones (AZs) in which to create NAT gateways. Note that there is a charge for each NAT gateway

[✓ None] In 1 AZ 1 per AZ

VPC endpoints Info

Endpoints can help reduce NAT gateway charges and improve security by accessing S3 directly from the VPC. By default, full access policy is used. You can customize this policy at any time.

[✓ None] S3 Gateway

DNS options Info

☑ Enable DNS hostnames

☑ Enable DNS resolution

▸ Additional tags

Services
Search
[Alt+S]
N. Virginia
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CloudShell
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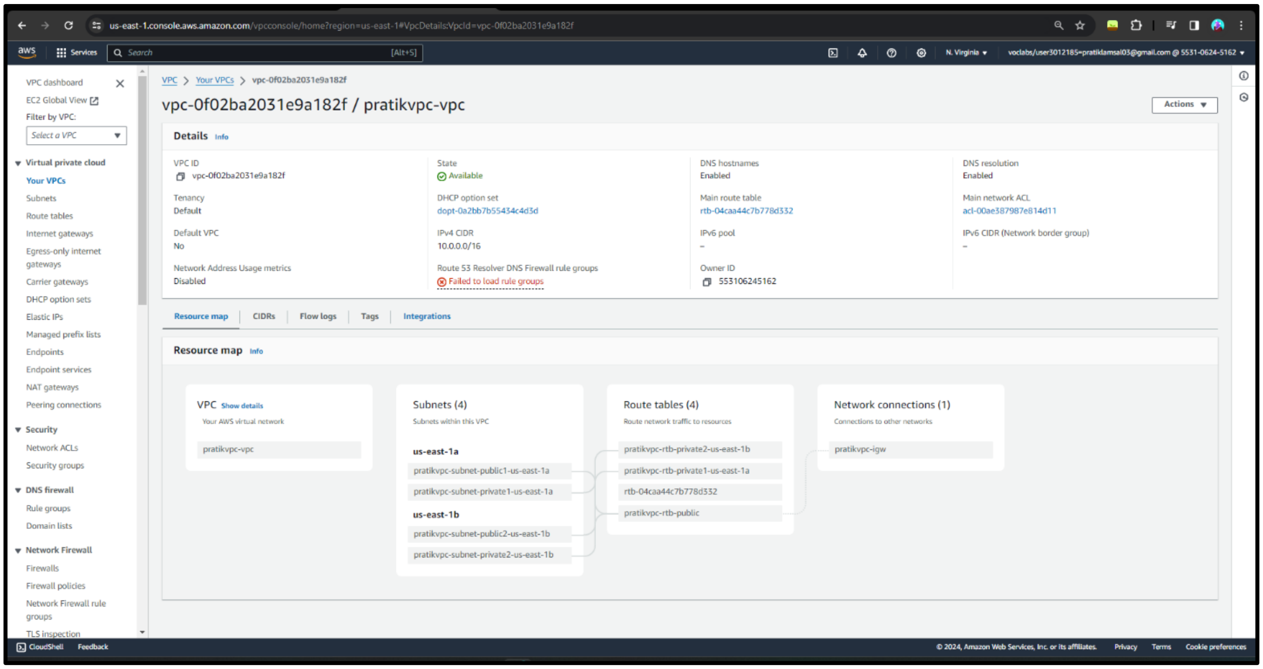
Privacy
Terms
Cookie preferences

4. Successful VPC Configuration



us-east-1.console.aws.amazon.com/vpcconsole/home?region=us-east-1#VpcDetails:VpcId=vpc-0f02ba2031e9a182f

VPC > Your VPCs > vpc-0f02ba2031e9a182f

vpc-0f02ba2031e9a182f / pratikvpc-vpc

Details Info

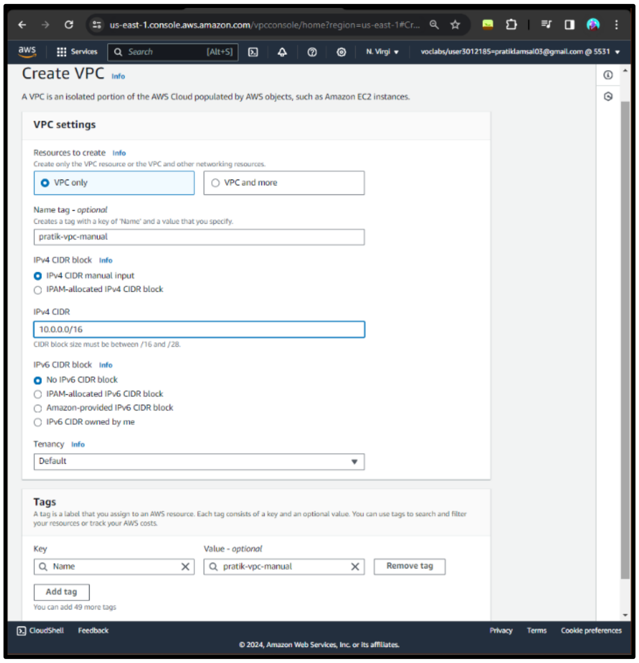
VPC ID vpc-0f02ba2031e9a182f	State Available	DNS hostnames Enabled	DNS resolution Enabled
Tenancy Default	DHCP option set dopt-0a2bb7b55434c4d3d	Main route table rtb-04caa44c7b778d332	Main network ACL acl-00ae387987e814d11
Default VPC No	IPv4 CIDR 10.0.0.0/16	IPv6 pool –	IPv6 CIDR (Network border group) –
Network Address Usage metrics Disabled	Route 53 Resolver DNS Firewall rule groups Failed to load rule groups	Owner ID 553106245162	

Resource map Info

VPC	Subnets (4)	Route tables (4)	Network connections (1)
Your AWS virtual network	Subnets within this VPC	Route network traffic to resources	Connections to other networks
pratikvpc-vpc	us-east-1a pratikvpc-subnet-public1-us-east-1a pratikvpc-subnet-private1-us-east-1a us-east-1b pratikvpc-subnet-public2-us-east-1b pratikvpc-subnet-private2-us-east-1b	pratikvpc-rtb-private2-us-east-1b pratikvpc-rtb-private1-us-east-1a rtb-04caa44c7b778d332 pratikvpc-rtb-public	pratikvpc-igw

5. Manual VPC Configuration

On creating VPC only, rest of the settings need to be configured separately.


us-east-1.console.aws.amazon.com/vpcconsole/home?region=us-east-1#Cr...
aws
Services
Search
[Alt+S]
N. Virgi
voclabs/user3012185=pratiklamsal03@gmail.com @ 5531
CloudShell
Feedback
Privacy
Terms
Cookie preferences

Create VPC Info

A VPC is an isolated portion of the AWS Cloud populated by AWS objects, such as Amazon EC2 instances.

VPC settings

Resources to create Info
Create only the VPC resource or the VPC and other networking resources.
● VPC only ○ VPC and more

Name tag - *optional*
Creates a tag with a key of 'Name' and a value that you specify.
pratik-vpc-manual

IPv4 CIDR block Info
● IPv4 CIDR manual input
○ 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*	
Name	pratik-vpc-manual	Remove tag

Add tag
You can add 49 more tags

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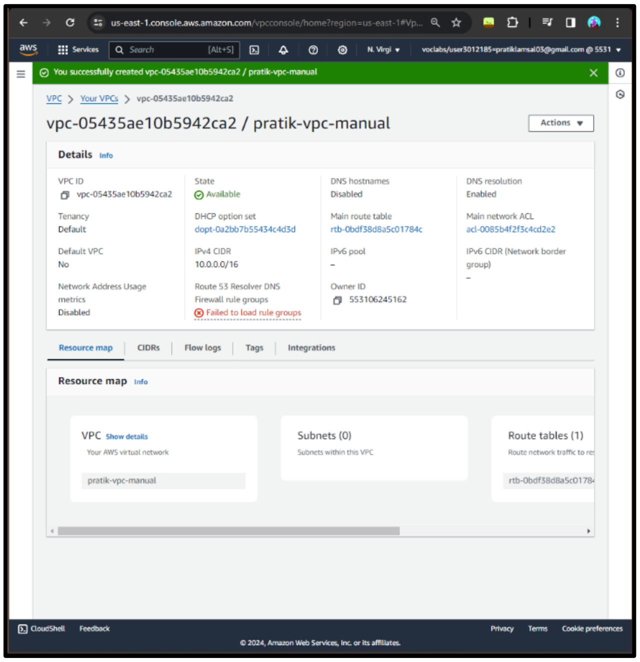
6. Successful VPC Creation


us-east-1.console.aws.amazon.com/vpcconsole/home?region=us-east-1#Vp...
aws
Services
Search
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N. Virgi
voclabs/user3012185=pratiklamsal03@gmail.com @ 5531
Actions
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You successfully created vpc-05435ae10b5942ca2 / pratik-vpc-manual

VPC > Your VPCs > vpc-05435ae10b5942ca2

vpc-05435ae10b5942ca2 / pratik-vpc-manual

Details Info

VPC ID vpc-05435ae10b5942ca2	State Available	DNS hostnames Disabled	DNS resolution Enabled
Tenancy Default	DHCP option set dopt-0a2bb7b55434c4d3d	Main route table rtb-0bdf38d8a5c01784c	Main network ACL acl-0085b4f2f3c4cd2e2
Default VPC No	IPv4 CIDR 10.0.0.0/16	IPv6 pool –	IPv6 CIDR (Network border group) –
Network Address Usage metrics Disabled	Route 53 Resolver DNS Firewall rule groups Failed to load rule groups	Owner ID 553106245162	

Resource map | CIDRs | Flow logs | Tags | Integrations

Resource map Info

VPC Show details
Your AWS virtual network
pratik-vpc-manual

Subnets (0)
Subnets within this VPC

Route tables (1)
Route network traffic to res
rtb-0bdf38d8a5c0178

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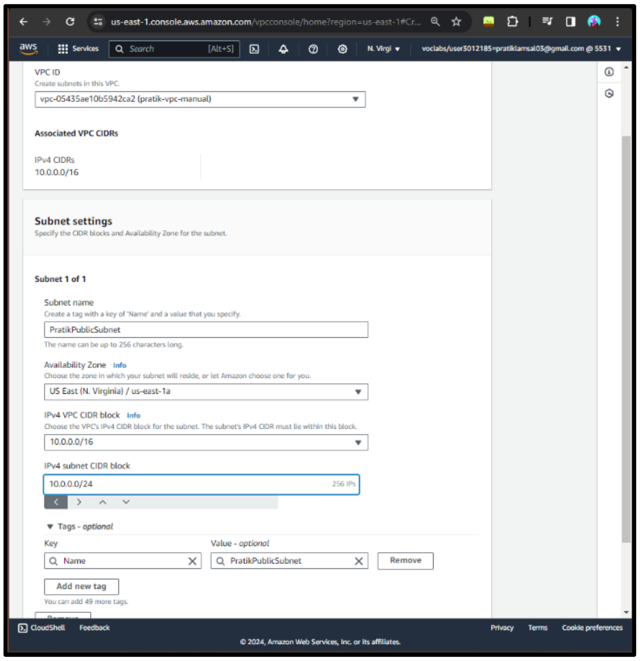
7. VPC Subnet settings

Two subnets are created and configured as per requirements. One each for public and private usage.



us-east-1.console.aws.amazon.com/vpcconsole/home?region=us-east-1#Cr...

voclabs/user3012185=pratiklamsal03@gmail.com @ 5531

VPC ID
Create subnets in this VPC.
vpc-05435ae10b5942ca2 (pratik-vpc-manual)

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.
PratikPublicSubnet
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

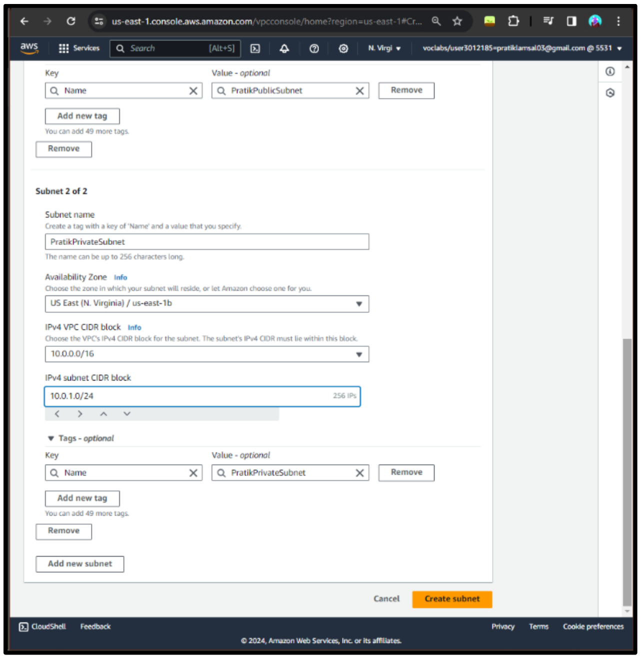
IPv4 VPC CIDR block Info
Choose the VPC's IPv4 CIDR block for the subnet. The subnet's IPv4 CIDR must lie within this block.
10.0.0.0/16

IPv4 subnet CIDR block
10.0.0.0/24 256 IPs

Tags - *optional*

Key	Value - *optional*
Name	PratikPublicSubnet

You can add 49 more tags.



us-east-1.console.aws.amazon.com/vpcconsole/home?region=us-east-1#Cr...

voclabs/user3012185=pratiklamsal03@gmail.com @ 5531

Key	Value - *optional*
Name	PratikPublicSubnet

You can add 49 more tags.

Subnet 2 of 2

Subnet name
Create a tag with a key of 'Name' and a value that you specify.
PratikPrivateSubnet
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-1b

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
10.0.1.0/24 256 IPs

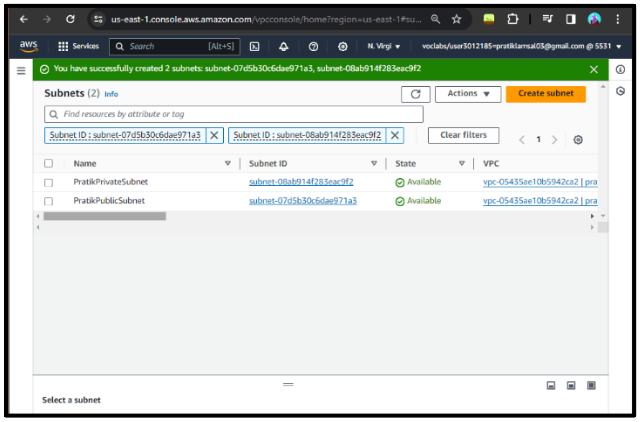
Tags - *optional*

Key	Value - *optional*
Name	PratikPrivateSubnet

You can add 49 more tags.

8. Subnets Created Successfully

The subnets are created successfully.



us-east-1.console.aws.amazon.com/vpcconsole/home?region=us-east-1#su...

voclabs/user3012185=pratiklamsal03@gmail.com @ 5531

You have successfully created 2 subnets: subnet-07d5b30c6dae971a3, subnet-08ab914f283eac9f2

Subnets (2) Info

Subnet ID : subnet-07d5b30c6dae971a3

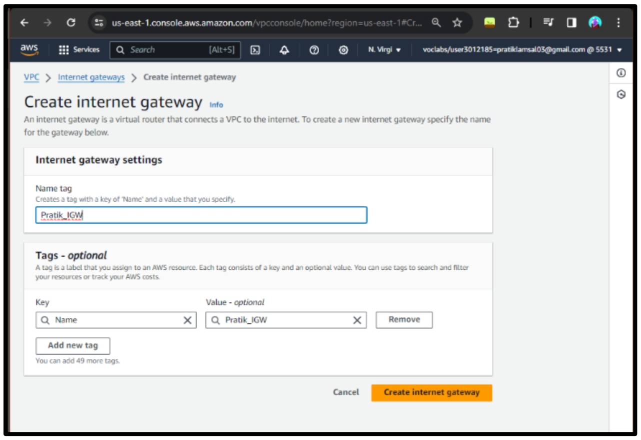
Subnet ID : subnet-08ab914f283eac9f2

Name	Subnet ID	State	VPC
PratikPrivateSubnet	subnet-08ab914f283eac9f2	Available	vpc-05435ae10b5942ca2 | pra
PratikPublicSubnet	subnet-07d5b30c6dae971a3	Available	vpc-05435ae10b5942ca2 | pra

Select a subnet

9. Creating Internet Gateway

An internet gateway is created successfully.



us-east-1.console.aws.amazon.com/vpcconsole/home?region=us-east-1#Cr...

voclabs/user3012185=pratiklamsal03@gmail.com @ 5531

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.

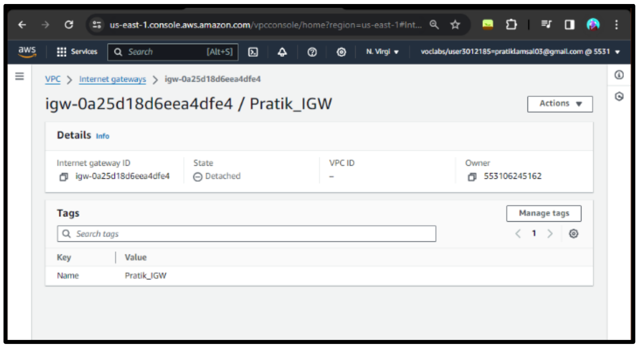
Internet gateway settings

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

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: Name
Value - *optional*: Pratik_IGW

You can add 49 more tags.



us-east-1.console.aws.amazon.com/vpcconsole/home?region=us-east-1#Int...

voclabs/user3012185=pratiklamsal03@gmail.com @ 5531

VPC > Internet gateways > igw-0a25d18d6eea4dfe4

igw-0a25d18d6eea4dfe4 / Pratik_IGW

Details Info

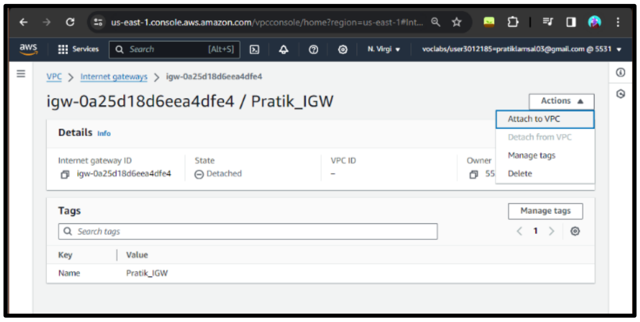
Internet gateway ID	State	VPC ID	Owner
igw-0a25d18d6eea4dfe4	Detached	–	553106245162

Tags

Key	Value
Name	Pratik_IGW

10. Attaching Internet Gateway to VPC

The gateway is attached to the previously created VPC.



us-east-1.console.aws.amazon.com/vpcconsole/home?region=us-east-1#Int...

voclabs/user3012185=pratiklamsal03@gmail.com @ 5531

VPC > Internet gateways > igw-0a25d18d6eea4dfe4

igw-0a25d18d6eea4dfe4 / Pratik_IGW

Details Info

Internet gateway ID: igw-0a25d18d6eea4dfe4

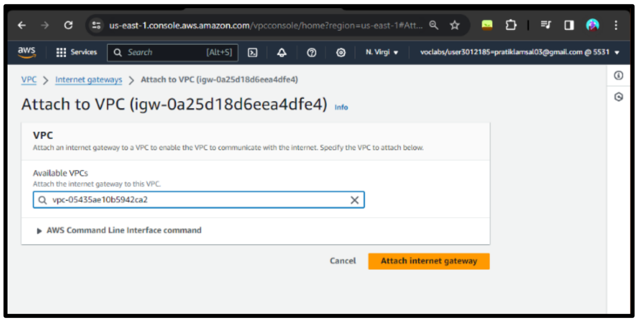
State: Detached

VPC ID: –

Owner: 55

Tags

Key	Value
Name	Pratik_IGW



us-east-1.console.aws.amazon.com/vpcconsole/home?region=us-east-1#Att...

voclabs/user3012185=pratiklamsal03@gmail.com @ 5531

VPC > Internet gateways > Attach to VPC (igw-0a25d18d6eea4dfe4)

Attach to VPC (igw-0a25d18d6eea4dfe4) Info

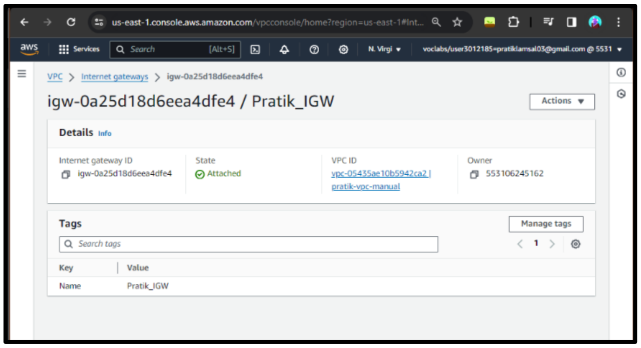
VPC

Attach an internet gateway to a VPC to enable the VPC to communicate with the internet. Specify the VPC to attach below.

Available VPCs

Attach the internet gateway to this VPC.

vpc-05435ae10b5942ca2



us-east-1.console.aws.amazon.com/vpcconsole/home?region=us-east-1#Int...

voclabs/user3012185=pratiklamsal03@gmail.com @ 5531

VPC > Internet gateways > igw-0a25d18d6eea4dfe4

igw-0a25d18d6eea4dfe4 / Pratik_IGW

Details Info

Internet gateway ID: igw-0a25d18d6eea4dfe4

State: Attached

VPC ID: vpc-05435ae10b5942ca2 | pratik-vpc-manual

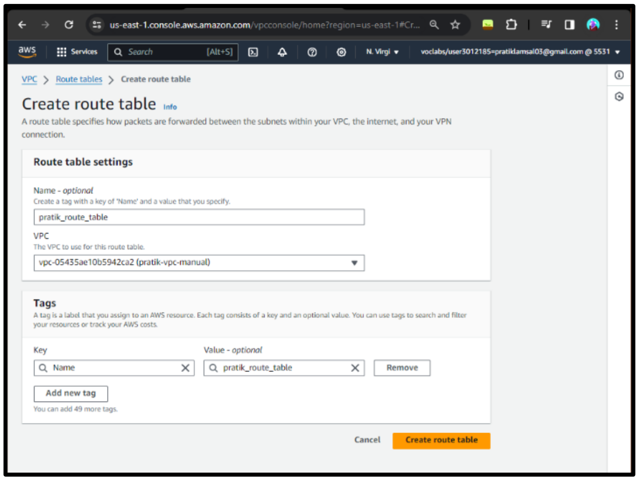
Owner: 553106245162

Tags

Key	Value
Name	Pratik_IGW

11. Creating Route Table

Now, route table is created and the VPC made above is selected.



us-east-1.console.aws.amazon.com/vpcconsole/home?region=us-east-1#Cr...

VPC > Route tables > Create route table

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.
pratik_route_table

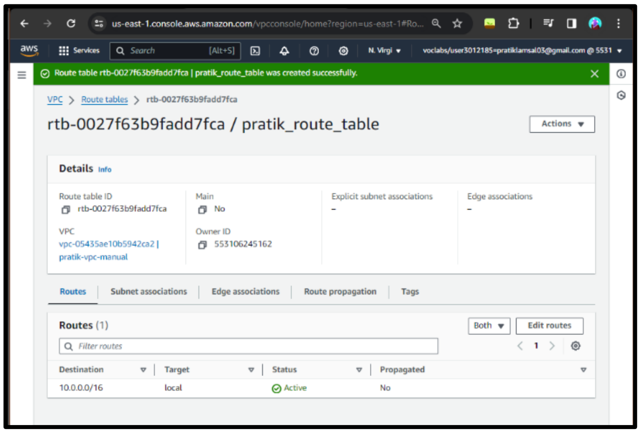
VPC
The VPC to use for this route table.
vpc-05435ae10b5942ca2 (pratik-vpc-manual)

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*	
Name	pratik_route_table	Remove

Add new tag
You can add 49 more tags.



us-east-1.console.aws.amazon.com/vpcconsole/home?region=us-east-1#Ro...

Route table rtb-0027f63b9fadd7fca | pratik_route_table was created successfully.

VPC > Route tables > rtb-0027f63b9fadd7fca

rtb-0027f63b9fadd7fca / pratik_route_table

Details Info

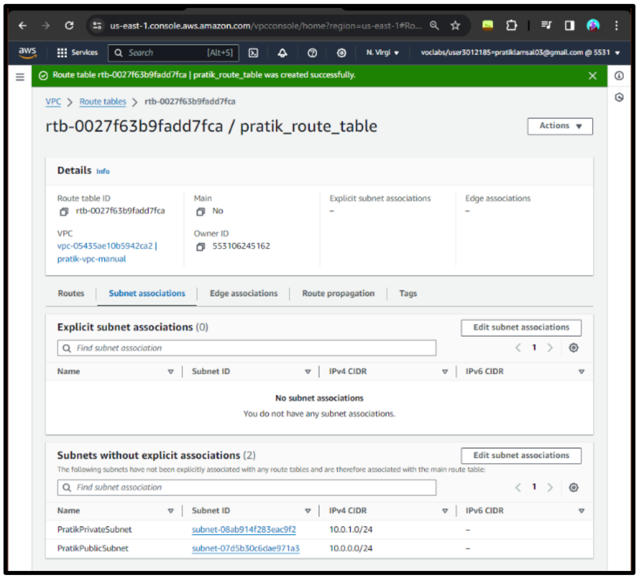
Route table ID: rtb-0027f63b9fadd7fca
Main: No
Explicit subnet associations: –
Edge associations: –
VPC: vpc-05435ae10b5942ca2 | pratik-vpc-manual
Owner ID: 553106245162

Routes (1)

Destination	Target	Status	Propagated
10.0.0.0/16	local	Active	No

12. Route Table Explicit Subnet Association

Explicit Subnet Association is done so that it is accessible by the internet.



Route table rtb-0027f63b9fadd7fca | pratik_route_table was created successfully.

VPC > Route tables > rtb-0027f63b9fadd7fca

rtb-0027f63b9fadd7fca / pratik_route_table

Details Info

Route table ID rtb-0027f63b9fadd7fca	Main No	Explicit subnet associations –	Edge associations –
VPC vpc-05435ae10b5942ca2 | pratik-vpc-manual	Owner ID 553106245162		

Explicit subnet associations (0)

Name	Subnet ID	IPv4 CIDR	IPv6 CIDR

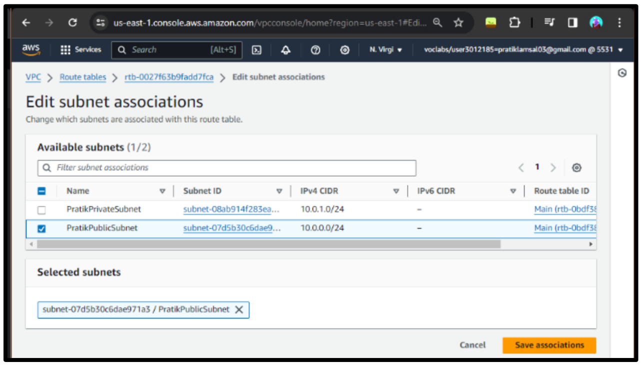
No subnet associations

You do not have any subnet associations.

Subnets without explicit associations (2)

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

Name	Subnet ID	IPv4 CIDR	IPv6 CIDR
PratikPrivateSubnet	subnet-08ab914f283eac9f2	10.0.1.0/24	–
PratikPublicSubnet	subnet-07d5b30c6dae971a3	10.0.0.0/24	–


us-east-1.console.aws.amazon.com/vpcconsole/home?region=us-east-1#Edi...
aws
Services
Search [Alt+S]
N. Virgi
voclabs/user3012185=pratiklamsal03@gmail.com @ 5531
Filter subnet associations
Cancel
Save associations

VPC > Route tables > rtb-0027f63b9fadd7fca > Edit subnet associations

Edit subnet associations

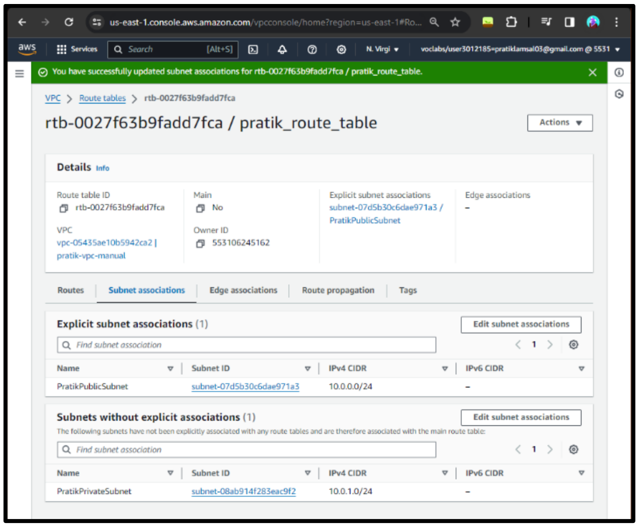
Change which subnets are associated with this route table.

Available subnets (1/2)

	Name	Subnet ID	IPv4 CIDR	IPv6 CIDR	Route table ID
□	PratikPrivateSubnet	subnet-08ab914f283ea...	10.0.1.0/24	–	Main (rtb-0bdf3
☑	PratikPublicSubnet	subnet-07d5b30c6dae9...	10.0.0.0/24	–	Main (rtb-0bdf3

Selected subnets

subnet-07d5b30c6dae971a3 / PratikPublicSubnet



You have successfully updated subnet associations for rtb-0027f63b9fadd7fca / pratik_route_table.

VPC > Route tables > rtb-0027f63b9fadd7fca

rtb-0027f63b9fadd7fca / pratik_route_table

Details Info

Route table ID rtb-0027f63b9fadd7fca	Main No	Explicit subnet associations subnet-07d5b30c6dae971a3 / PratikPublicSubnet	Edge associations –
VPC vpc-05435ae10b5942ca2 | pratik-vpc-manual	Owner ID 553106245162		

Explicit subnet associations (1)

Name	Subnet ID	IPv4 CIDR	IPv6 CIDR
PratikPublicSubnet	subnet-07d5b30c6dae971a3	10.0.0.0/24	–

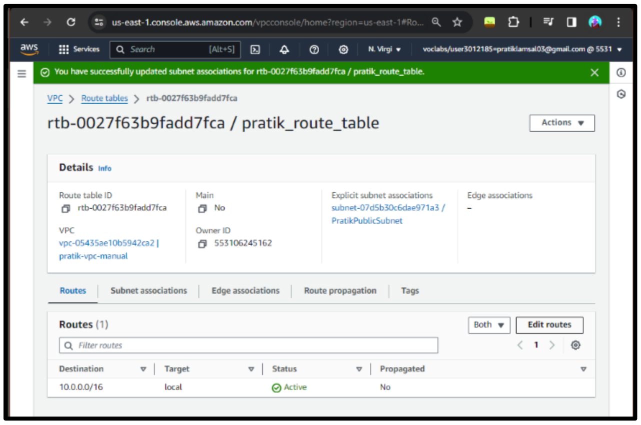
Subnets without explicit associations (1)

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

Name	Subnet ID	IPv4 CIDR	IPv6 CIDR
PratikPrivateSubnet	subnet-08ab914f283eac9f2	10.0.1.0/24	–

13. Editing Route in Route Table

Route is edited to associate Internet Gateway.


us-east-1.console.aws.amazon.com/vpcconsole/home?region=us-east-1#Ro...
aws
Services
Search [Alt+S]
N. Virgi
voclabs/user3012185=pratiklamsal03@gmail.com @ 5531
Actions
Both
Edit routes
Filter routes

You have successfully updated subnet associations for rtb-0027f63b9fadd7fca / pratik_route_table.

VPC > Route tables > rtb-0027f63b9fadd7fca

rtb-0027f63b9fadd7fca / pratik_route_table

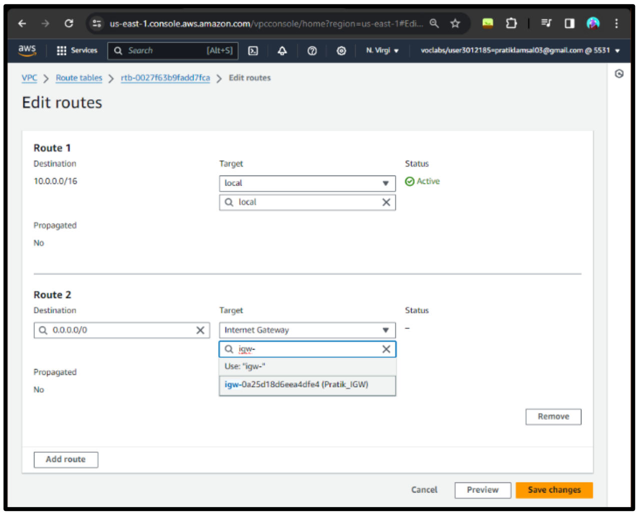
Details Info

Route table ID: rtb-0027f63b9fadd7fca
Main: No
Explicit subnet associations: subnet-07d5b30c6dae971a3 / PratikPublicSubnet
Edge associations: –
VPC: vpc-05435ae10b5942ca2 | pratik-vpc-manual
Owner ID: 553106245162

Routes | Subnet associations | Edge associations | Route propagation | Tags

Routes (1)

Destination	Target	Status	Propagated
10.0.0.0/16	local	Active	No

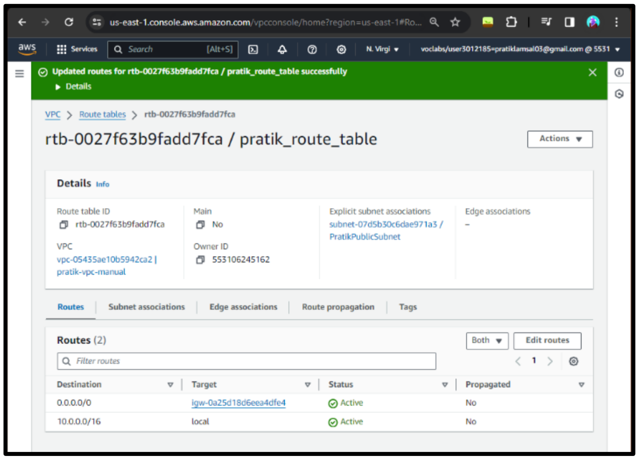

us-east-1.console.aws.amazon.com/vpcconsole/home?region=us-east-1#Edi...
aws
Services
Search [Alt+S]
N. Virgi
voclabs/user3012185=pratiklamsal03@gmail.com @ 5531
Remove
Add route
Cancel
Preview
Save changes

VPC > Route tables > rtb-0027f63b9fadd7fca > Edit routes

Edit routes

Route 1
Destination: 10.0.0.0/16
Target: local
Status: Active
Propagated: No

Route 2
Destination: 0.0.0.0/0
Target: Internet Gateway
igw-
Use: "igw-"
igw-0a25d18d6eea4dfe4 (Pratik_IGW)
Status: -
Propagated: No


us-east-1.console.aws.amazon.com/vpcconsole/home?region=us-east-1#Ro...
aws
Services
Search [Alt+S]
N. Virgi
voclabs/user3012185=pratiklamsal03@gmail.com @ 5531
Actions
Both
Edit routes
Filter routes

Updated routes for rtb-0027f63b9fadd7fca / pratik_route_table successfully
▶ Details

VPC > Route tables > rtb-0027f63b9fadd7fca

rtb-0027f63b9fadd7fca / pratik_route_table

Details Info

Route table ID: rtb-0027f63b9fadd7fca
Main: No
Explicit subnet associations: subnet-07d5b30c6dae971a3 / PratikPublicSubnet
Edge associations: –
VPC: vpc-05435ae10b5942ca2 | pratik-vpc-manual
Owner ID: 553106245162

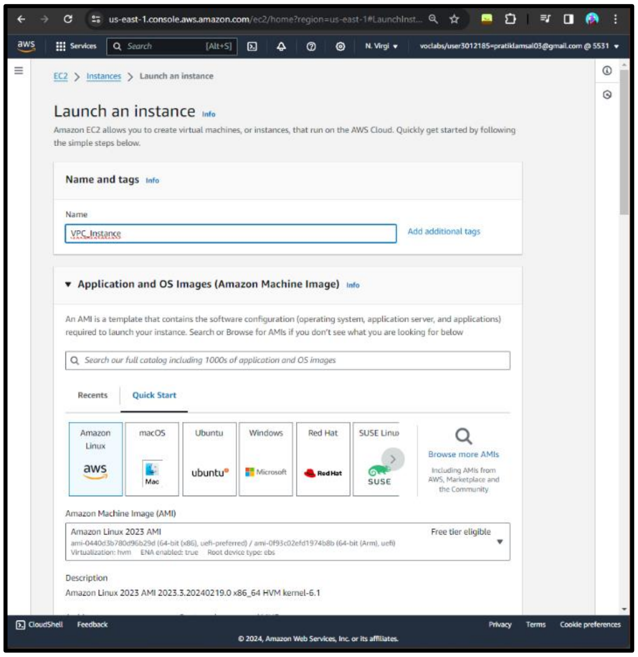
Routes | Subnet associations | Edge associations | Route propagation | Tags

Routes (2)

Destination	Target	Status	Propagated
0.0.0.0/0	igw-0a25d18d6eea4dfe4	Active	No
10.0.0.0/16	local	Active	No

14. Launching an Instance

An instance is launched to host a static website and configure so that it is accessible by local machine. Here, Name is given, and AMI is selected.


us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#LaunchInst...
aws
Services
Search [Alt+S]
N. Virgi
voclabs/user3012185=pratiklamsal03@gmail.com @ 5531
EC2 > Instances > Launch an instance

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: VPC_Instance

▾ 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

Search our full catalog including 1000s of application and OS images
Recents
Quick Start
Amazon Linux
macOS
Ubuntu
Windows
Red Hat
SUSE Linu
Browse more AMIs
Including AMIs from AWS, Marketplace and the Community

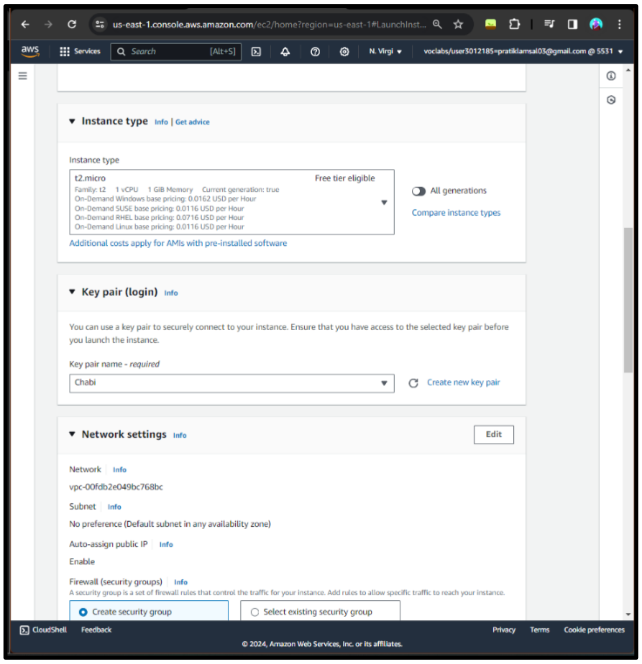
Amazon Machine Image (AMI)

Amazon Linux 2023 AMI — Free tier eligible
ami-0440d3b780d96b29d (64-bit (x86), uefi-preferred) / ami-0f93c02efd1974b8b (64-bit (Arm), uefi)
Virtualization: hvm ENA enabled: true Root device type: ebs

Description

Amazon Linux 2023 AMI 2023.3.20240219.0 x86_64 HVM kernel-6.1

Instance type (t2.micro) is selected and previously created Key Pair (Chabi.pem) is selected.


us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#LaunchInst...
aws
Services
Search [Alt+S]
N. Virgi
voclabs/user3012185=pratiklamsal03@gmail.com @ 5531

▾ 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*: Chabi

▾ Network settings Info

Network: vpc-00fdb2e049bc768bc

Subnet: No preference (Default subnet in any availability zone)

Auto-assign public IP: Enable

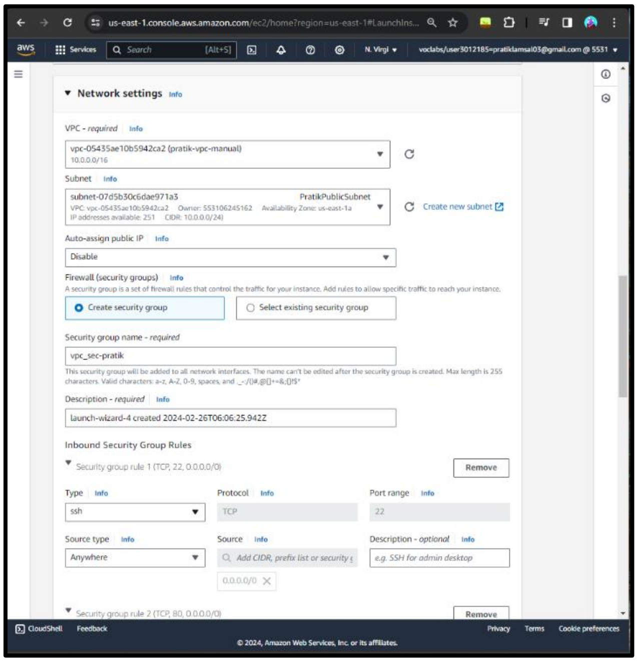
Firewall (security groups) Info

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

15. Instance Network Settings

The instance network settings are to be edited to the VPC configured above. VPC is selected along with the public subnet created. Auto assign IP address need to be enabled. I have edited it later. Also, security group is created allowing SSH connection.


us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#LaunchIns...
aws
Services
Search [Alt+S]
N. Virgi
voclabs/user3012185=pratiklamsal03@gmail.com @ 5531
Info
Create new subnet
Remove
CloudShell
Feedback
Privacy
Terms
Cookie preferences
© 2024, Amazon Web Services, Inc. or its affiliates.

Network settings

VPC - *required*
vpc-05435ae10b5942ca2 (pratik-vpc-manual)
10.0.0.0/16

Subnet
subnet-07d5b30c6dae971a3 PratikPublicSubnet
VPC: vpc-05435ae10b5942ca2 Owner: 553106245162 Availability Zone: us-east-1a
IP addresses available: 251 CIDR: 10.0.0.0/24)

Auto-assign public IP
Disable

Firewall (security groups)
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*
vpc_sec-pratik
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*
launch-wizard-4 created 2024-02-26T06:06:25.942Z

Inbound Security Group Rules

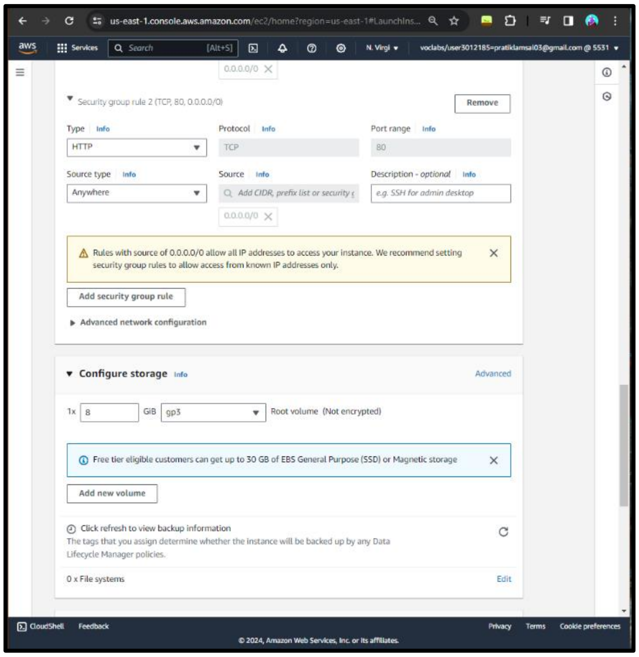
Security group rule 1 (TCP, 22, 0.0.0.0/0)

Type	Protocol	Port range
ssh	TCP	22

Source type	Source	Description - *optional*
Anywhere	*Add CIDR, prefix list or security g* 0.0.0.0/0	*e.g. SSH for admin desktop*

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

Also, HTTP connection is allowed in the security group from anywhere.


us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#LaunchIns...
aws
Services
Search [Alt+S]
N. Virgi
voclabs/user3012185=pratiklamsal03@gmail.com @ 5531
Info
Remove
Add security group rule
Advanced
Add new volume
Edit
CloudShell
Feedback
Privacy
Terms
Cookie preferences
© 2024, Amazon Web Services, Inc. or its affiliates.

0.0.0.0/0

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

Type	Protocol	Port range
HTTP	TCP	80

Source type	Source	Description - *optional*
Anywhere	*Add CIDR, prefix list or security g* 0.0.0.0/0	*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.

Advanced network configuration

Configure storage

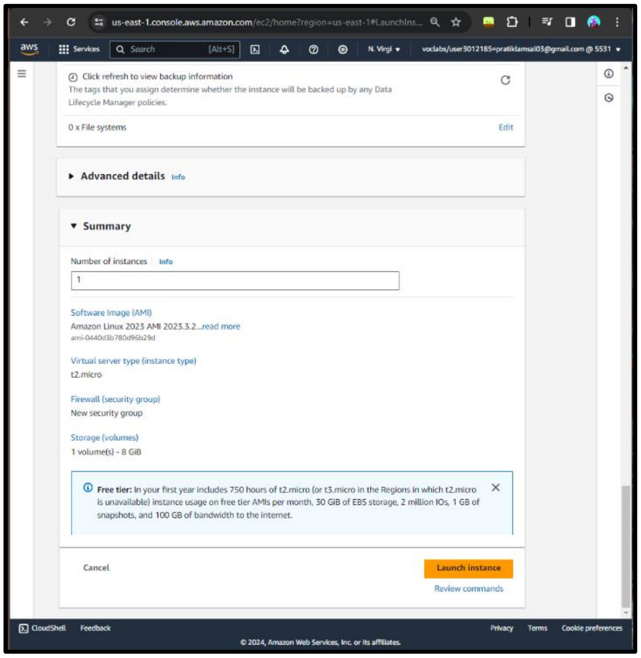
1x 8 GiB gp3 Root volume (Not encrypted)

Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage

Click refresh to view backup information
The tags that you assign determine whether the instance will be backed up by any Data Lifecycle Manager policies.

0 x File systems

16. Instance Creation Summary



Click refresh to view backup information

The tags that you assign determine whether the instance will be backed up by any Data Lifecycle Manager policies.

0 x File systems Edit

Advanced details Info

Summary

Number of instances: 1

Software Image (AMI)
Amazon Linux 2023 AMI 2023.3.2...read more
ami-0440d3b780d96b29d

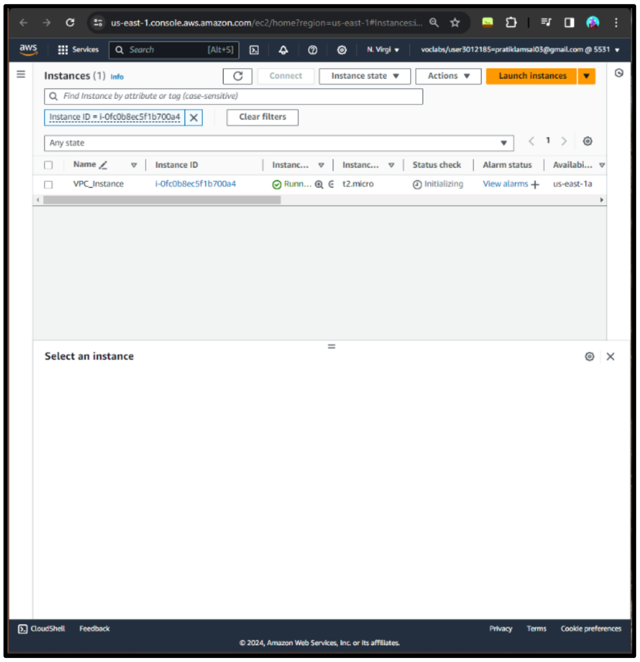
Virtual server type (instance type)
t2.micro

Firewall (security group)
New security group

Storage (volumes)
1 volume(s) - 8 GiB

Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 30 GiB of EBS storage, 2 million IOs, 1 GB of snapshots, and 100 GB of bandwidth to the internet.

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#LaunchIns...
Services
Search [Alt+S]
N. Virgi
voclabs/user3012185=pratiklamsal03@gmail.com @ 5531
Cancel
Launch instance
Review commands
CloudShell
Feedback
Privacy
Terms
Cookie preferences
© 2024, Amazon Web Services, Inc. or its affiliates.



Instances (1) Info

Find Instance by attribute or tag (case-sensitive)

Instance ID = i-0fc0b8ec5f1b700a4

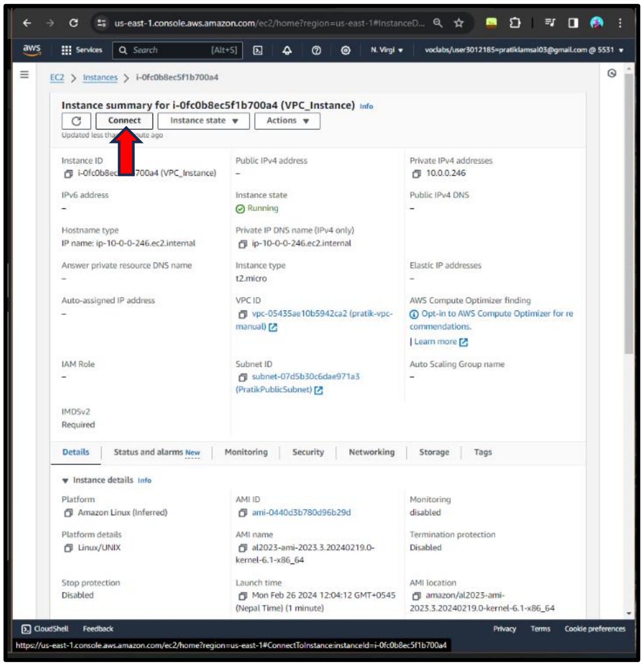
Any state

Name	Instance ID	Instanc...	Instanc...	Status check	Alarm status	Availabi...
VPC_Instance	i-0fc0b8ec5f1b700a4	Runn...	t2.micro	Initializing	View alarms +	us-east-1a

Select an instance

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#Instances:i...
Services
Search [Alt+S]
N. Virgi
voclabs/user3012185=pratiklamsal03@gmail.com @ 5531
Connect
Instance state
Actions
Launch instances
Clear filters
1
CloudShell
Feedback
Privacy
Terms
Cookie preferences
© 2024, Amazon Web Services, Inc. or its affiliates.

17. Connecting to Instance



us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#InstanceD...
aws
Services
Search [Alt+S]
N. Virgi ▾
voclabs/user3012185=pratiklamsal03@gmail.com @ 5531 ▾
EC2 > Instances > i-0fc0b8ec5f1b700a4

Instance summary for i-0fc0b8ec5f1b700a4 (VPC_Instance) Info

Connect
Instance state ▾
Actions ▾

Updated less tha ute ago

Instance ID: i-0fc0b8ec 700a4 (VPC_Instance)

Public IPv4 address: –

Private IPv4 addresses: 10.0.0.246

IPv6 address: –

Instance state: Running

Public IPv4 DNS: –

Hostname type: IP name: ip-10-0-0-246.ec2.internal

Private IP DNS name (IPv4 only): ip-10-0-0-246.ec2.internal

Answer private resource DNS name: –

Instance type: t2.micro

Elastic IP addresses: –

Auto-assigned IP address: –

VPC ID: vpc-05435ae10b5942ca2 (pratik-vpc-manual)

AWS Compute Optimizer finding: Opt-in to AWS Compute Optimizer for recommendations. | Learn more

IAM Role: –

Subnet ID: subnet-07d5b30c6dae971a3 (PratikPublicSubnet)

Auto Scaling Group name: –

IMDSv2: Required

Details | Status and alarms New | Monitoring | Security | Networking | Storage | Tags

▼ Instance details Info

Platform: Amazon Linux (Inferred)

AMI ID: ami-0440d3b780d96b29d

Monitoring: disabled

Platform details: Linux/UNIX

AMI name: al2023-ami-2023.3.20240219.0-kernel-6.1-x86_64

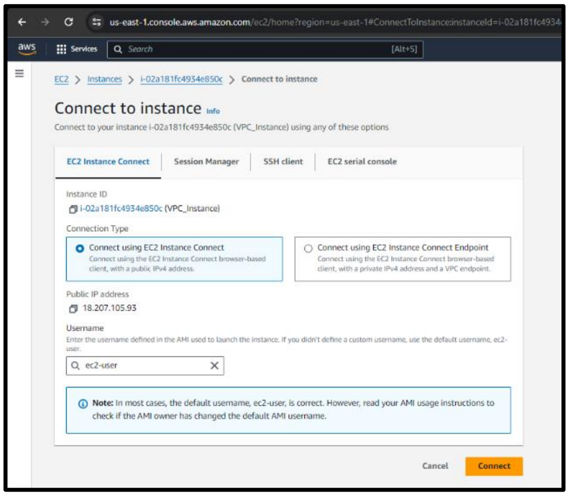
Termination protection: Disabled

Stop protection: Disabled

Launch time: Mon Feb 26 2024 12:04:12 GMT+0545 (Nepal Time) (1 minute)

AMI location: amazon/al2023-ami-2023.3.20240219.0-kernel-6.1-x86_64

https://us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#ConnectToInstance:instanceId=i-0fc0b8ec5f1b700a4



us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#ConnectToInstance:instanceId=i-02a181fc4934
aws
Services
Search [Alt+S]
EC2 > Instances > i-02a181fc4934e850c > Connect to instance

Connect to instance Info

Connect to your instance i-02a181fc4934e850c (VPC_Instance) using any of these options

EC2 Instance Connect | Session Manager | SSH client | EC2 serial console

Instance ID: i-02a181fc4934e850c (VPC_Instance)

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.

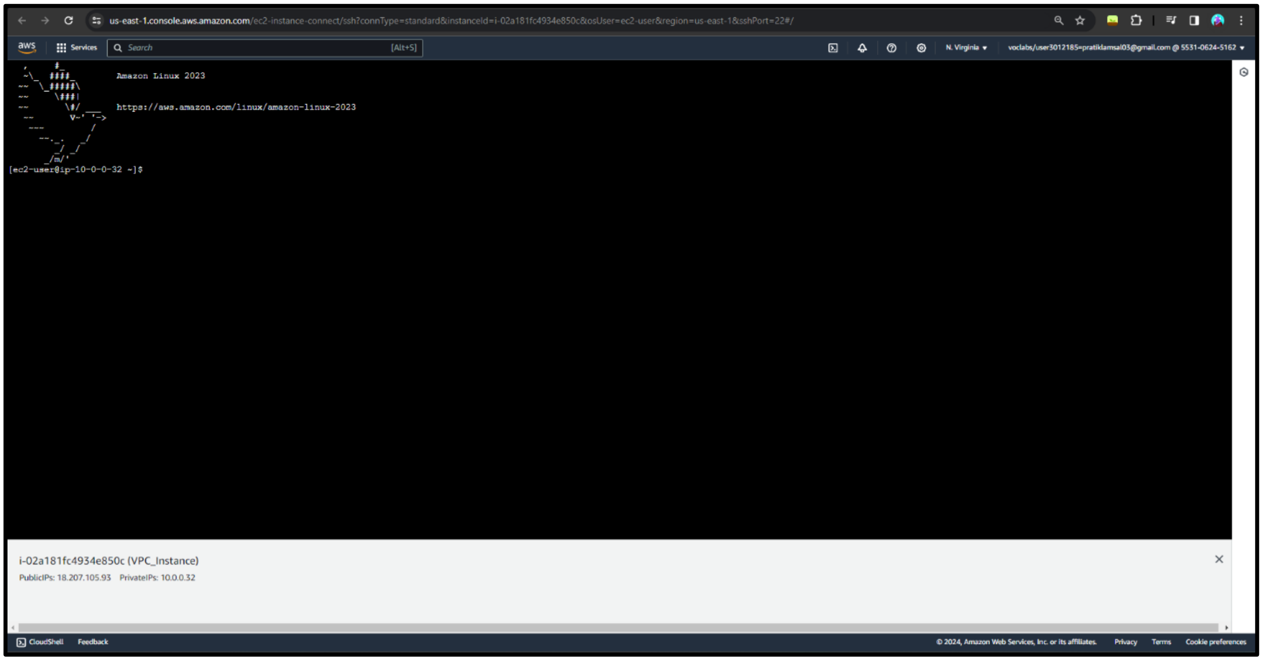
Public IP address: 18.207.105.93

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.

18. Connected to Instance



us-east-1.console.aws.amazon.com/ec2-instance-connect/ssh?connType=standard&instanceId=i-02a181fc4934e850c&osUser=ec2-user&region=us-east-1&sshPort=22#/
aws
Services
Search
[Alt+S]
N. Virginia
voclabs/user3012185=pratiklamsal03@gmail.com @ 5531-0624-5162
CloudShell
Feedback
© 2024, Amazon Web Services, Inc. or its affiliates.
Privacy
Terms
Cookie preferences

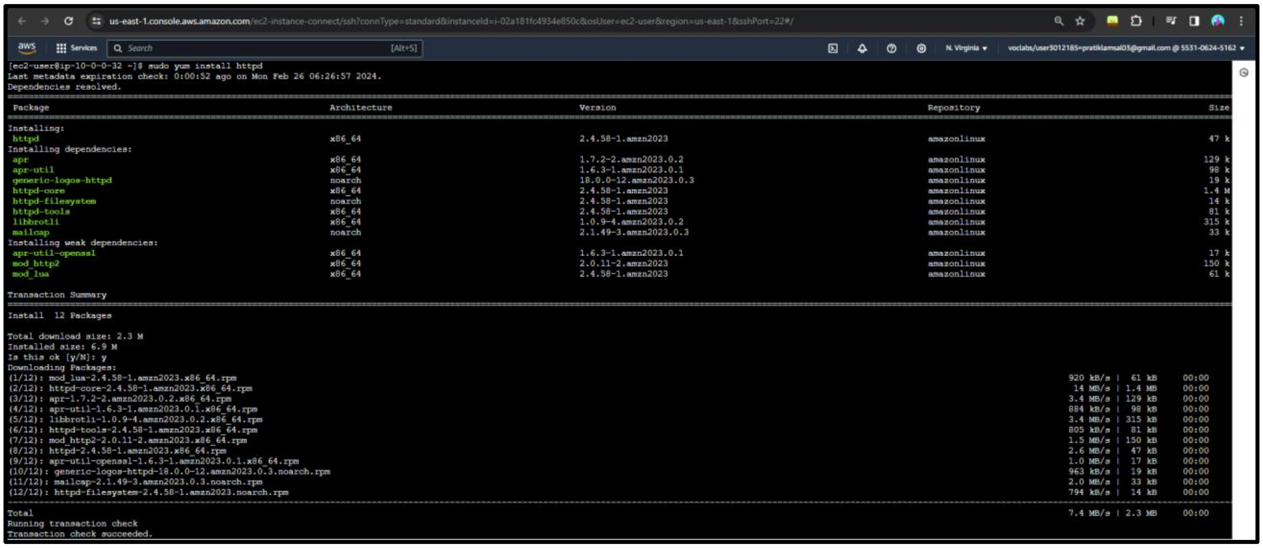
```
   ,     #_
   ~\_  ####_        Amazon Linux 2023
  ~~  \_#####\
  ~~     \###|
  ~~       \#/ ___   https://aws.amazon.com/linux/amazon-linux-2023
   ~~       V~' '->
    ~~~         /
      ~~._.   _/
         _/ _/
       _/m/'
[ec2-user@ip-10-0-0-32 ~]$
```

i-02a181fc4934e850c (VPC_Instance)

PublicIPs: 18.207.105.93 PrivateIPs: 10.0.0.32

19. Installing Apache Server

Apache Server is installed to Linux instance to host the static website.



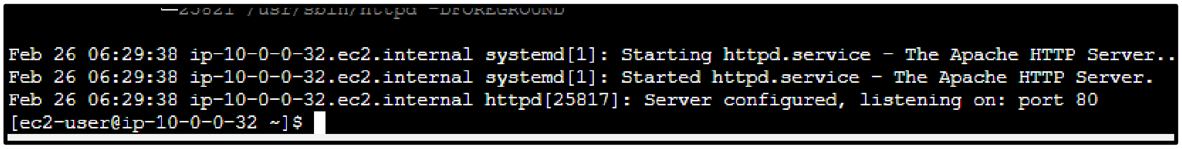
us-east-1.console.aws.amazon.com/ec2-instance-connect/ssh?connType=standard&instanceId=i-02a181fc4934e850c&osUser=ec2-user&region=us-east-1&sshPort=22#/
aws
Services
Search
[Alt+S]
N. Virginia
voclabs/user3012185=pratiklamsal03@gmail.com @ 5531-0624-5162

```
[ec2-user@ip-10-0-0-32 ~]$ sudo yum install httpd
Last metadata expiration check: 0:00:52 ago on Mon Feb 26 06:26:57 2024.
Dependencies resolved.
================================================================================================================
 Package                      Architecture      Version                          Repository              Size
================================================================================================================
Installing:
 httpd                        x86_64            2.4.58-1.amzn2023                amazonlinux             47 k
Installing dependencies:
 apr                          x86_64            1.7.2-2.amzn2023.0.2             amazonlinux            129 k
 apr-util                     x86_64            1.6.3-1.amzn2023.0.1             amazonlinux             98 k
 generic-logos-httpd          noarch            18.0.0-12.amzn2023.0.3           amazonlinux             19 k
 httpd-core                   x86_64            2.4.58-1.amzn2023                amazonlinux            1.4 M
 httpd-filesystem             noarch            2.4.58-1.amzn2023                amazonlinux             14 k
 httpd-tools                  x86_64            2.4.58-1.amzn2023                amazonlinux             81 k
 libbrotli                    x86_64            1.0.9-4.amzn2023.0.2             amazonlinux            315 k
 mailcap                      noarch            2.1.49-3.amzn2023.0.3            amazonlinux             33 k
Installing weak dependencies:
 apr-util-openssl             x86_64            1.6.3-1.amzn2023.0.1             amazonlinux             17 k
 mod_http2                    x86_64            2.0.11-2.amzn2023                amazonlinux            150 k
 mod_lua                      x86_64            2.4.58-1.amzn2023                amazonlinux             61 k

Transaction Summary
================================================================================================================
Install  12 Packages

Total download size: 2.3 M
Installed size: 6.9 M
Is this ok [y/N]: y
Downloading Packages:
(1/12): mod_lua-2.4.58-1.amzn2023.x86_64.rpm                                 920 kB/s |  61 kB     00:00
(2/12): httpd-core-2.4.58-1.amzn2023.x86_64.rpm                               14 MB/s | 1.4 MB     00:00
(3/12): apr-1.7.2-2.amzn2023.0.2.x86_64.rpm                                  3.4 MB/s | 129 kB     00:00
(4/12): apr-util-1.6.3-1.amzn2023.0.1.x86_64.rpm                             884 kB/s |  98 kB     00:00
(5/12): libbrotli-1.0.9-4.amzn2023.0.2.x86_64.rpm                            3.4 MB/s | 315 kB     00:00
(6/12): httpd-tools-2.4.58-1.amzn2023.x86_64.rpm                             805 kB/s |  81 kB     00:00
(7/12): mod_http2-2.0.11-2.amzn2023.x86_64.rpm                               1.5 MB/s | 150 kB     00:00
(8/12): httpd-2.4.58-1.amzn2023.x86_64.rpm                                   2.6 MB/s |  47 kB     00:00
(9/12): apr-util-openssl-1.6.3-1.amzn2023.0.1.x86_64.rpm                     1.0 MB/s |  17 kB     00:00
(10/12): generic-logos-httpd-18.0.0-12.amzn2023.0.3.noarch.rpm               963 kB/s |  19 kB     00:00
(11/12): mailcap-2.1.49-3.amzn2023.0.3.noarch.rpm                            2.0 MB/s |  33 kB     00:00
(12/12): httpd-filesystem-2.4.58-1.amzn2023.noarch.rpm                       794 kB/s |  14 kB     00:00
----------------------------------------------------------------------------------------------------------------
Total                                                                        7.4 MB/s | 2.3 MB     00:00
Running transaction check
Transaction check succeeded.
```

20. Starting the Server

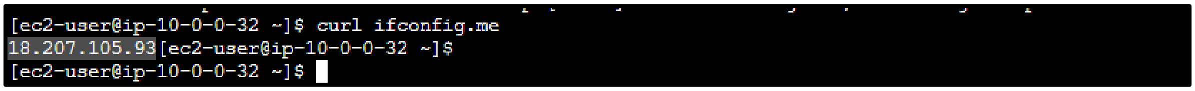


```
└─25821 /usr/sbin/httpd -DFOREGROUND

Feb 26 06:29:38 ip-10-0-0-32.ec2.internal systemd[1]: Starting httpd.service - The Apache HTTP Server..
Feb 26 06:29:38 ip-10-0-0-32.ec2.internal systemd[1]: Started httpd.service - The Apache HTTP Server.
Feb 26 06:29:38 ip-10-0-0-32.ec2.internal httpd[25817]: Server configured, listening on: port 80
[ec2-user@ip-10-0-0-32 ~]$
```

21. Checking IP Address

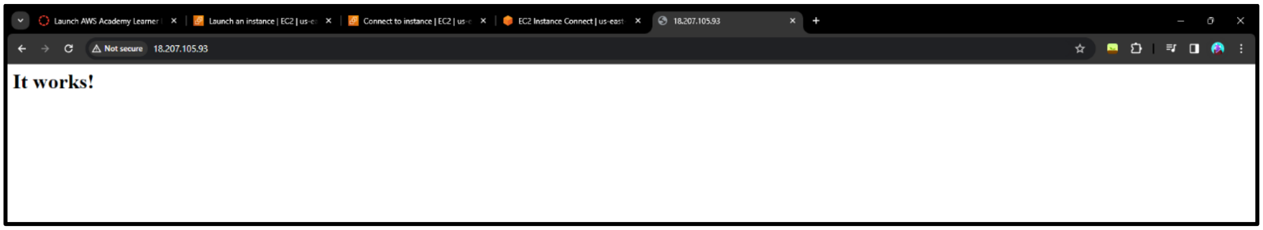
Using curl to check instance IP Address.



```
[ec2-user@ip-10-0-0-32 ~]$ curl ifconfig.me
18.207.105.93[ec2-user@ip-10-0-0-32 ~]$
[ec2-user@ip-10-0-0-32 ~]$
```

22. Checking Server Functioning

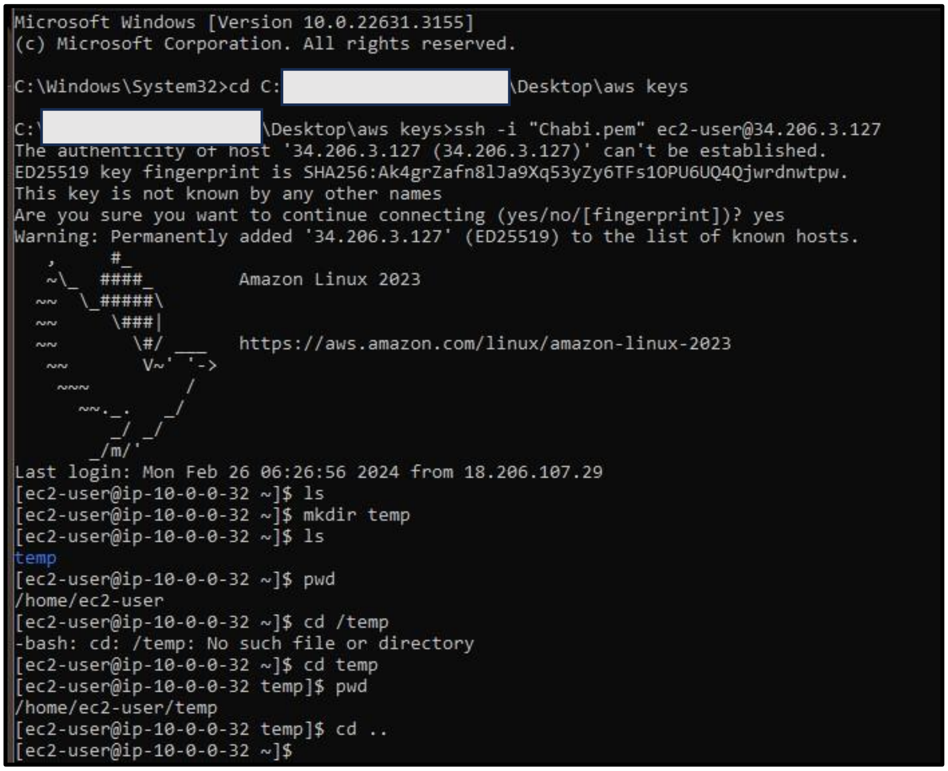
The Apache server is running successfully.


Launch AWS Academy Learner
Launch an instance | EC2 | us-e
Connect to instance | EC2 | us-
EC2 Instance Connect | us-east
18.207.105.93
Not secure
18.207.105.93

It works!

23. SSH connection to Instance

An SSH connection is made to the instance and a directory named temp is created. Also, required pathnames are revealed.



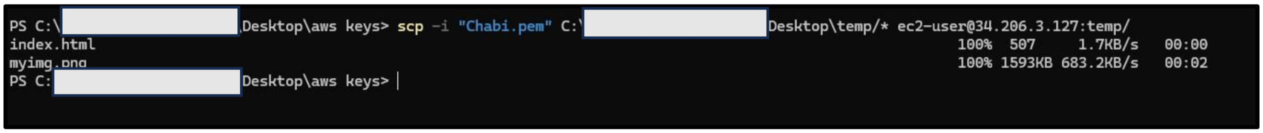
```
Microsoft Windows [Version 10.0.22631.3155]
(c) Microsoft Corporation. All rights reserved.

C:\Windows\System32>cd C:[redacted]\Desktop\aws keys

C:\[redacted]\Desktop\aws keys>ssh -i "Chabi.pem" ec2-user@34.206.3.127
The authenticity of host '34.206.3.127 (34.206.3.127)' can't be established.
ED25519 key fingerprint is SHA256:Ak4grZafn8lJa9Xq53yZy6TFs1OPU6UQ4Qjwrdnwtpw.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '34.206.3.127' (ED25519) to the list of known hosts.
   ,     #_
   ~\_  ####_        Amazon Linux 2023
  ~~  \_#####\
  ~~     \###|
  ~~       \#/ ___   https://aws.amazon.com/linux/amazon-linux-2023
   ~~       V~' '->
    ~~~         /
      ~~._.   _/
         _/ _/
       _/m/'
Last login: Mon Feb 26 06:26:56 2024 from 18.206.107.29
[ec2-user@ip-10-0-0-32 ~]$ ls
[ec2-user@ip-10-0-0-32 ~]$ mkdir temp
[ec2-user@ip-10-0-0-32 ~]$ ls
temp
[ec2-user@ip-10-0-0-32 ~]$ pwd
/home/ec2-user
[ec2-user@ip-10-0-0-32 ~]$ cd /temp
-bash: cd: /temp: No such file or directory
[ec2-user@ip-10-0-0-32 ~]$ cd temp
[ec2-user@ip-10-0-0-32 temp]$ pwd
/home/ec2-user/temp
[ec2-user@ip-10-0-0-32 temp]$ cd ..
[ec2-user@ip-10-0-0-32 ~]$
```

24. Copying files to Instance

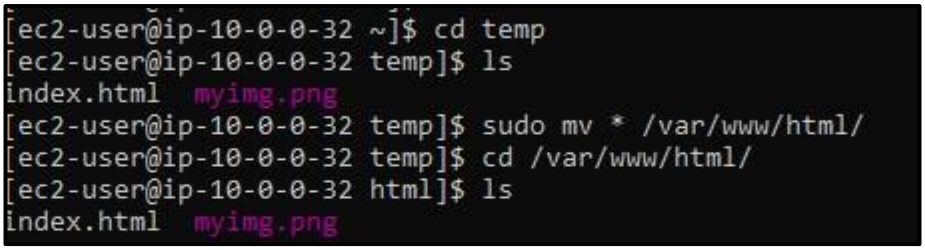
The required files are copied from the local machine to the instance.



```
PS C:\[redacted]Desktop\aws keys> scp -i "Chabi.pem" C:\[redacted]Desktop\temp/* ec2-user@34.206.3.127:temp/
index.html                                                                                      100%  507     1.7KB/s   00:00
myimg.png                                                                                       100% 1593KB 683.2KB/s   00:02
PS C:[redacted]Desktop\aws keys> |
```

25. Moving files to Web Server

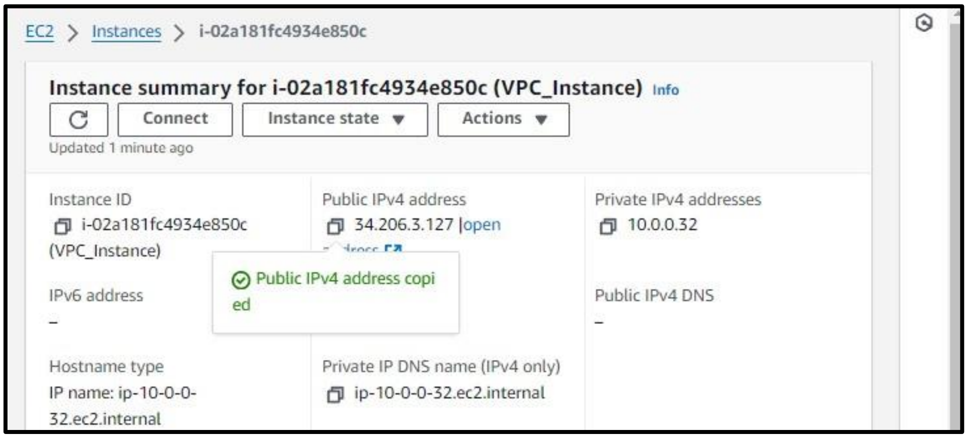
With sysadmin permissions, the files in the temp machine are moved the /var/www/html/ directory. /var/www/html is the base directory for the web server.



```
[ec2-user@ip-10-0-0-32 ~]$ cd temp
[ec2-user@ip-10-0-0-32 temp]$ ls
index.html  myimg.png
[ec2-user@ip-10-0-0-32 temp]$ sudo mv * /var/www/html/
[ec2-user@ip-10-0-0-32 temp]$ cd /var/www/html/
[ec2-user@ip-10-0-0-32 html]$ ls
index.html  myimg.png
```

26. Accessing using the Public IP Address

The static website is then accessible using the instance Public IP Address.



EC2 > Instances > i-02a181fc4934e850c

Instance summary for i-02a181fc4934e850c (VPC_Instance) Info

Updated 1 minute ago

Instance ID: i-02a181fc4934e850c (VPC_Instance)

Public IPv4 address: 34.206.3.127 | open address

Public IPv4 address copied

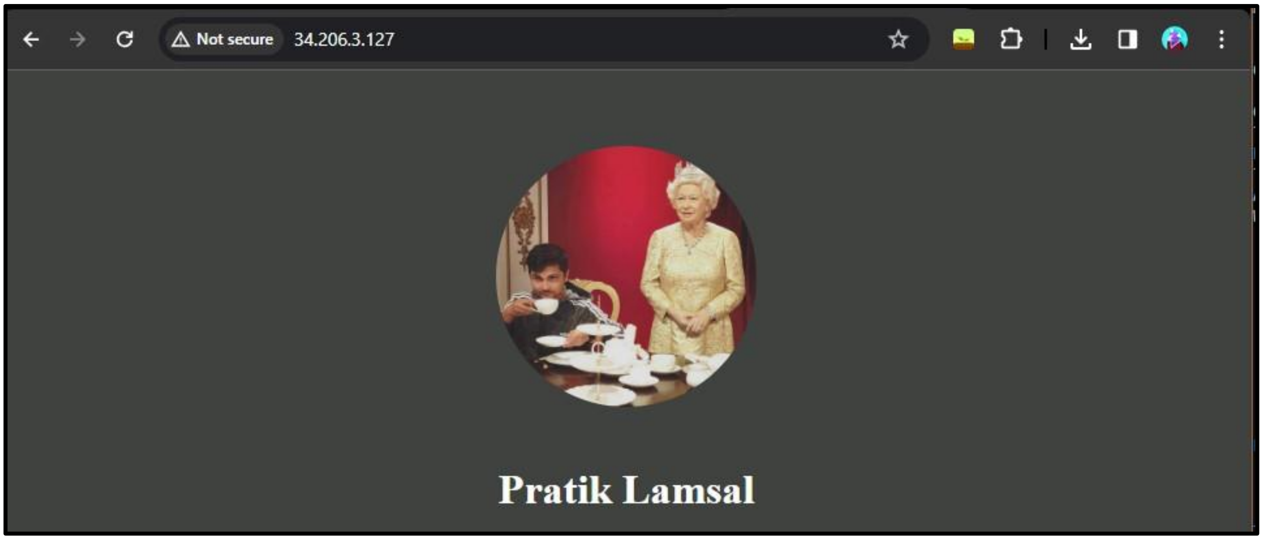
Private IPv4 addresses: 10.0.0.32

IPv6 address: –

Public IPv4 DNS: –

Hostname type: IP name: ip-10-0-0-32.ec2.internal

Private IP DNS name (IPv4 only): ip-10-0-0-32.ec2.internal

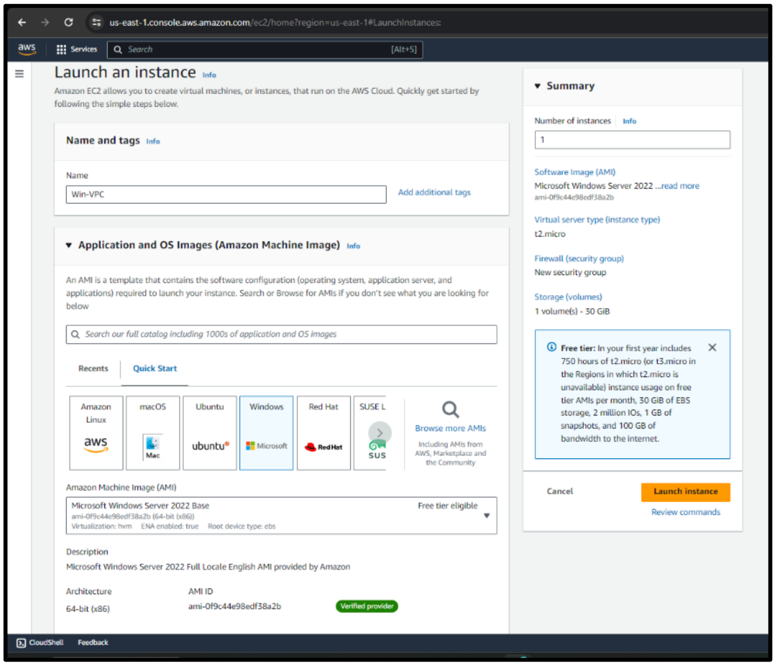


Not secure 34.206.3.127

Pratik Lamsal

27. Windows Instance

Since familiarity with both OS is beneficial, same task is done in a Windows Instance.



us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#LaunchInstances:

Launch an instance

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

Name: Win-VPC

Application and OS Images (Amazon Machine Image)

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

Amazon Machine Image (AMI)
Microsoft Windows Server 2022 Base — Free tier eligible
ami-0f9c44e98edf38a2b (64-bit (x86))
Virtualization: hvm ENA enabled: true Root device type: ebs

Description
Microsoft Windows Server 2022 Full Locale English AMI provided by Amazon

Architecture: 64-bit (x86)
AMI ID: ami-0f9c44e98edf38a2b

Summary

Number of instances: 1

Software Image (AMI)
Microsoft Windows Server 2022 ...read more
ami-0f9c44e98edf38a2b

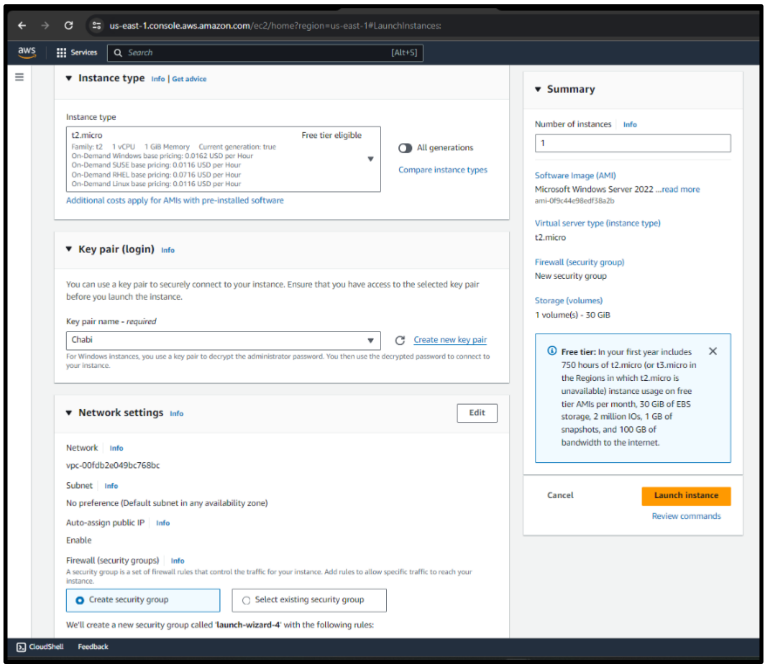
Virtual server type (instance type)
t2.micro

Firewall (security group)
New security group

Storage (volumes)
1 volume(s) - 30 GiB

Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 30 GiB of EBS storage, 2 million IOs, 1 GB of snapshots, and 100 GB of bandwidth to the internet.

Instance type (t2.micro) is selected and Key Pair (Chabi.pem) is selected.



us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#LaunchInstances:

Instance type

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

Additional costs apply for AMIs with pre-installed software

Key pair (login)

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*: Chabi

For Windows instances, you use a key pair to decrypt the administrator password. You then use the decrypted password to connect to your instance.

Network settings

Network: vpc-00fdb2e049bc768bc

Subnet: No preference (Default subnet in any availability zone)

Auto-assign public IP: Enable

Firewall (security groups)
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

We'll create a new security group called '**launch-wizard-4**' with the following rules:

Summary

Number of instances: 1

Software Image (AMI)
Microsoft Windows Server 2022 ...read more
ami-0f9c44e98edf38a2b

Virtual server type (instance type)
t2.micro

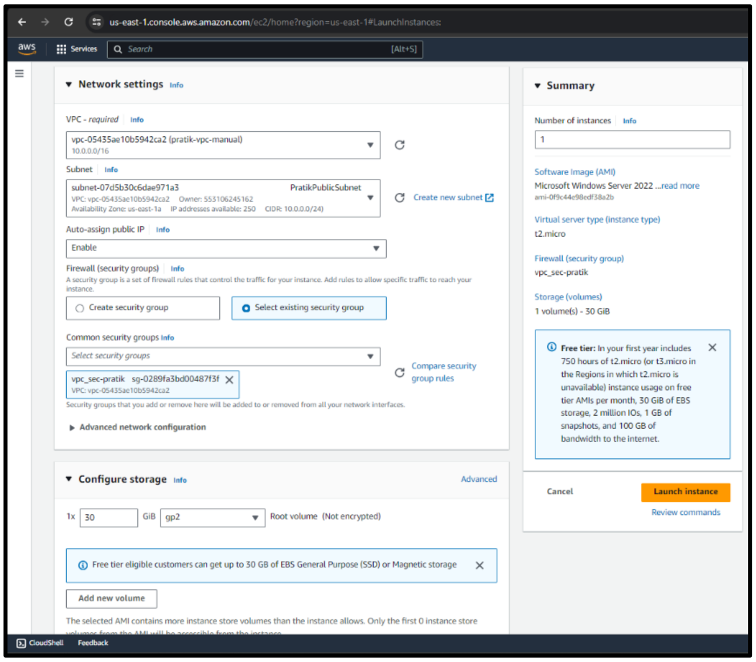
Firewall (security group)
New security group

Storage (volumes)
1 volume(s) - 30 GiB

Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 30 GiB of EBS storage, 2 million IOs, 1 GB of snapshots, and 100 GB of bandwidth to the internet.

28. Instance Network Settings

Instance Network Settings are changed to fall under the VPC configured previously. Public subnet is selected, and Public IP is auto assigned. Also, security group created for the Linux Instance is reused.



us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#LaunchInstances:

Network settings Info

VPC - *required* Info

vpc-05435ae10b5942ca2 (pratik-vpc-manual)
10.0.0.0/16

Subnet Info

subnet-07d5b30c6dae971a3 PratikPublicSubnet
VPC: vpc-05435ae10b5942ca2 Owner: 553106245162
Availability Zone: us-east-1a IP addresses available: 250 CIDR: 10.0.0.0/24)

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

vpc_sec-pratik sg-0289fa3bd00487f3f
VPC: vpc-05435ae10b5942ca2

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

Configure storage Info Advanced

1x 30 GiB gp2 Root volume (Not encrypted)

Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage

Add new volume

The selected AMI contains more instance store volumes than the instance allows. Only the first 0 instance store volumes from the AMI will be accessible from the instance.

Summary

Number of instances Info

1

Software Image (AMI)
Microsoft Windows Server 2022 ...read more
ami-0f9c44e98edf38a2b

Virtual server type (instance type)
t2.micro

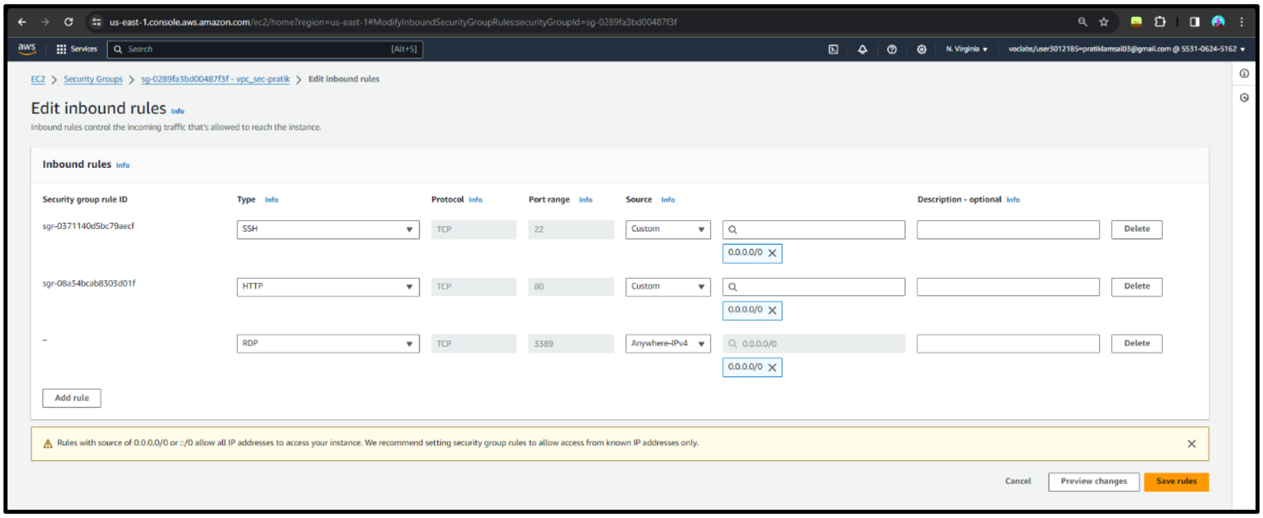
Firewall (security group)
vpc_sec-pratik

Storage (volumes)
1 volume(s) - 30 GiB

Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 30 GiB of EBS storage, 2 million IOs, 1 GB of snapshots, and 100 GB of bandwidth to the internet.

29. Editing Inbound Rules

Since the security group made for Linux Instance is used, inbound rules need to be changed to allow RDP for this instance.



us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#ModifyInboundSecurityGroupRules:securityGroupId=sg-0289fa3bd00487f3f

N. Virginia voclabs/user3012185=pratiklamsal03@gmail.com @ 5531-0624-5162

EC2 > Security Groups > sg-0289fa3bd00487f3f - vpc_sec-pratik > Edit inbound rules

Edit inbound rules

Inbound rules control the incoming traffic that's allowed to reach the instance.

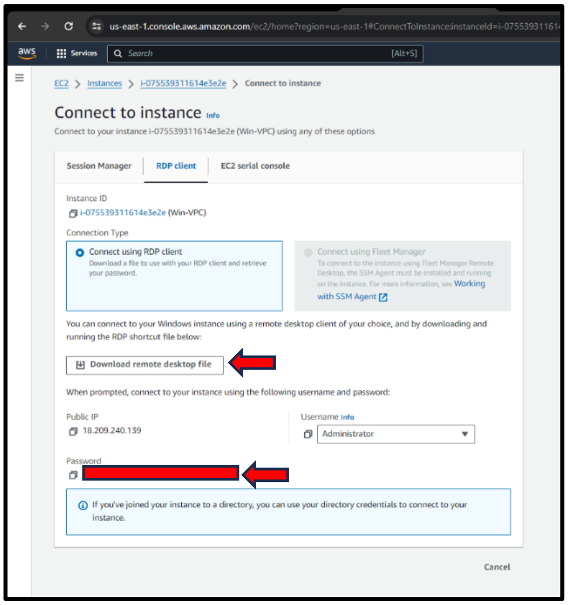
Inbound rules

Security group rule ID	Type	Protocol	Port range	Source		Description - optional
sgr-0371140d5bc79aecf	SSH	TCP	22	Custom	0.0.0.0/0	
sgr-08a34bcab8303d01f	HTTP	TCP	80	Custom	0.0.0.0/0	
-	RDP	TCP	3389	Anywhere-IPv4	0.0.0.0/0	

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

30. Connecting to the Instance

The remote desktop file is downloaded and the keypair file is decrypted to connect to the instance.



us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#ConnectToInstance:instanceId=i-07553931161
aws
Services
Search
[Alt+S]
EC2 > Instances > i-075539311614e3e2e > Connect to instance

Connect to instance Info

Connect to your instance i-075539311614e3e2e (Win-VPC) using any of these options

Session Manager
RDP client
EC2 serial console

Instance ID
i-075539311614e3e2e (Win-VPC)

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 Remote Desktop, the SSM Agent must be installed and running on the instance. For more information, see Working with SSM Agent

You can connect to your Windows instance using a remote desktop client of your choice, and by downloading and running the RDP shortcut file below:

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

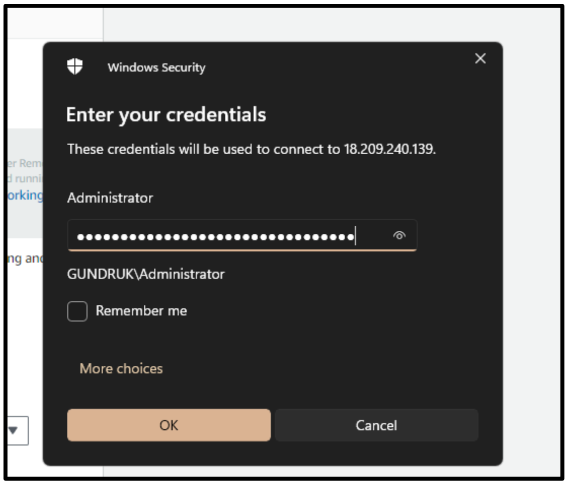
Public IP
18.209.240.139

Username Info
Administrator

Password
[redacted]

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

On running the rdp file, credentials are entered to connect to the instance.



Windows Security

Enter your credentials

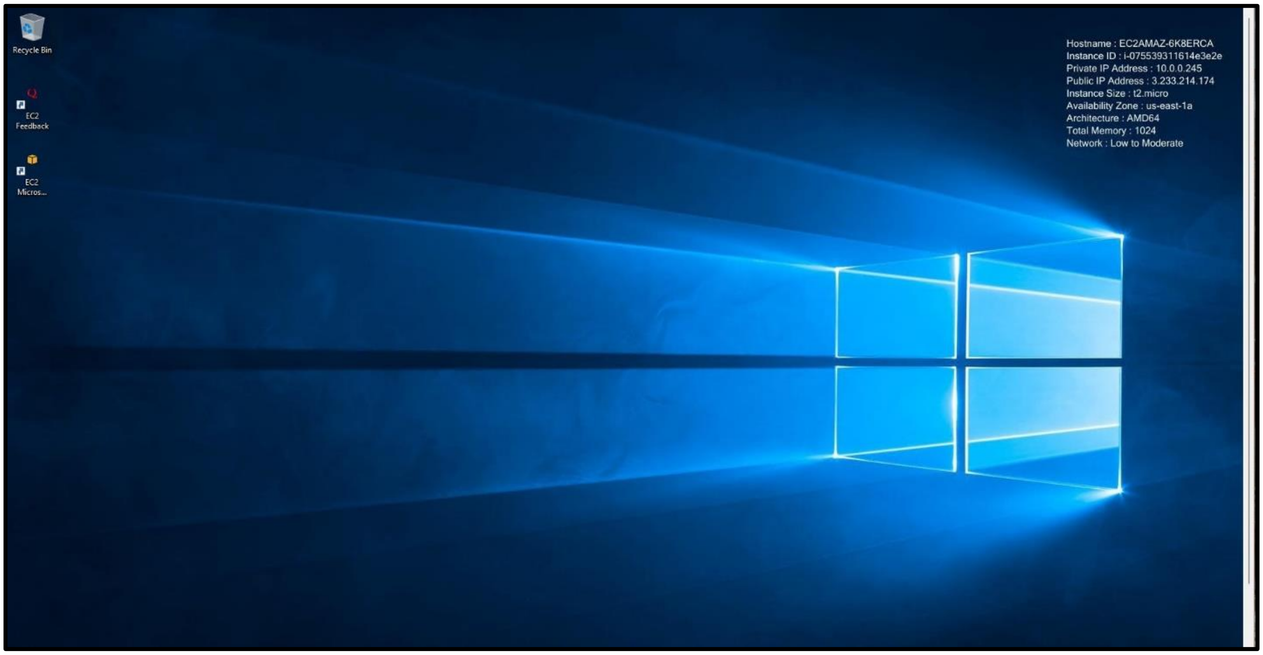
These credentials will be used to connect to 18.209.240.139.

Administrator
••••••••••••••••••••••••••••••••

GUNDRUK\Administrator

□ Remember me

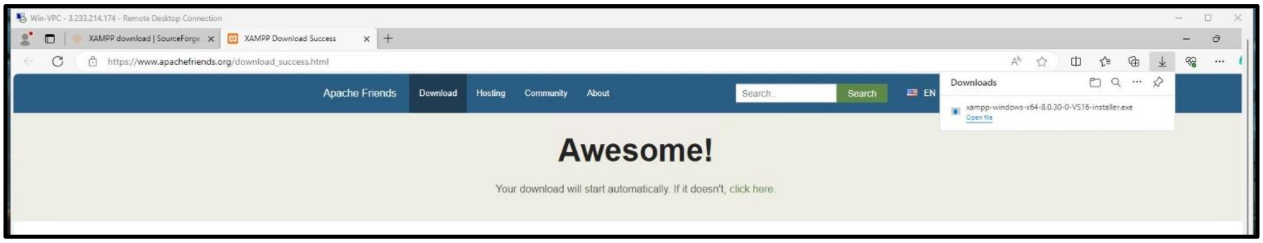
31. Successful Connection to Windows Instance



Hostname : EC2AMAZ-6K8ERCA
Instance ID : i-075539311614e3e2e
Private IP Address : 10.0.0.245
Public IP Address : 3.233.214.174
Instance Size : t2.micro
Availability Zone : us-east-1a
Architecture : AMD64
Total Memory : 1024
Network : Low to Moderate

32. Downloading XAMPP

XAMPP is installed to host the static website.



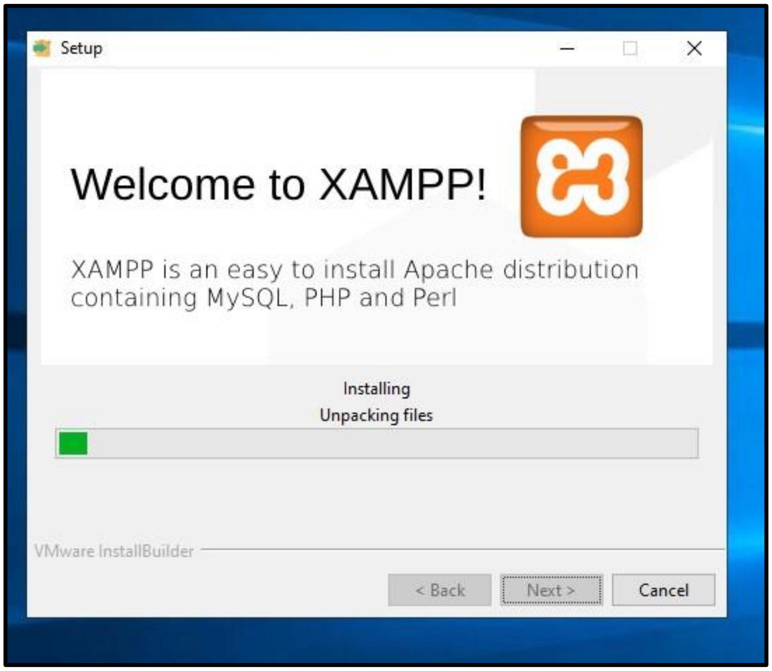
https://www.apachefriends.org/download_success.html

xampp-windows-x64-8.0.30-0-VS16-installer.exe

Awesome!

Your download will start automatically. If it doesn't, click here.

33. Installing XAMPP



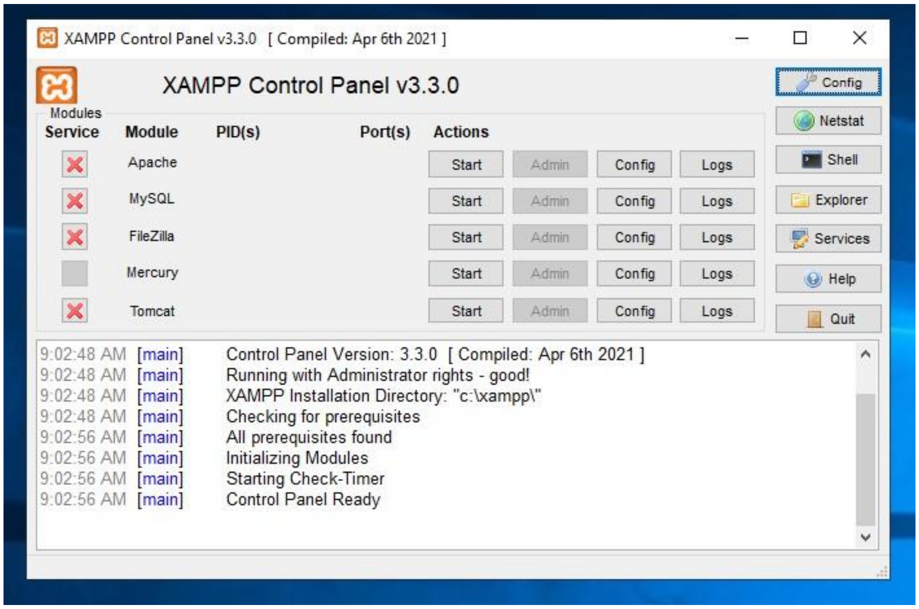
Welcome to XAMPP!

XAMPP is an easy to install Apache distribution containing MySQL, PHP and Perl

Installing

Unpacking files

34. XAMPP Control Panel

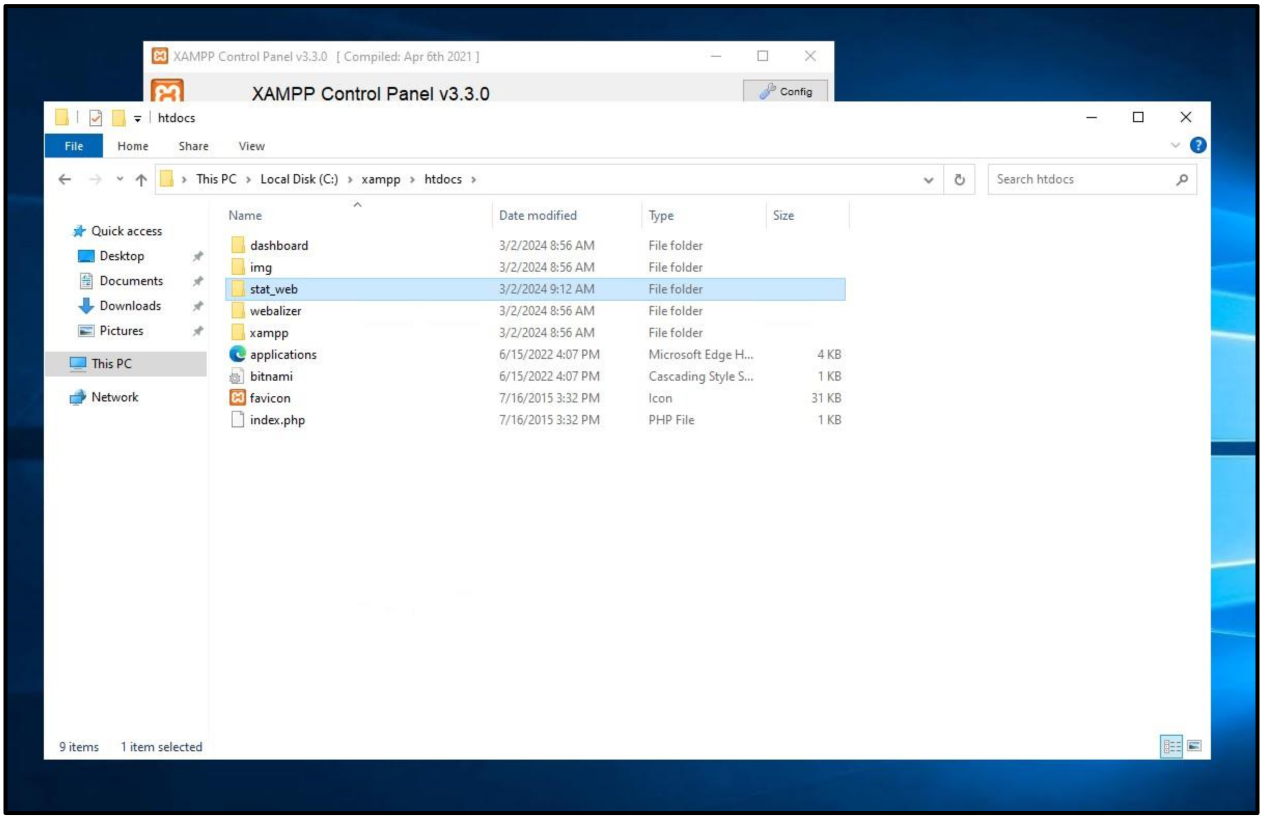

XAMPP Control Panel v3.3.0 [Compiled: Apr 6th 2021]
XAMPP Control Panel v3.3.0
Modules
Config
Netstat
Shell
Explorer
Services
Help
Quit

Service	Module	PID(s)	Port(s)	Actions
☒	Apache			Start Admin Config Logs
☒	MySQL			Start Admin Config Logs
☒	FileZilla			Start Admin Config Logs
□	Mercury			Start Admin Config Logs
☒	Tomcat			Start Admin Config Logs

```
9:02:48 AM  [main]     Control Panel Version: 3.3.0  [ Compiled: Apr 6th 2021 ]
9:02:48 AM  [main]     Running with Administrator rights - good!
9:02:48 AM  [main]     XAMPP Installation Directory: "c:\xampp\"
9:02:48 AM  [main]     Checking for prerequisites
9:02:56 AM  [main]     All prerequisites found
9:02:56 AM  [main]     Initializing Modules
9:02:56 AM  [main]     Starting Check-Timer
9:02:56 AM  [main]     Control Panel Ready
```

35. Uploading Website Files

The HTML and image file is added inside htdocs of XAMPP. It can be done by clicking the Explorer button and searching for the htdocs directory.



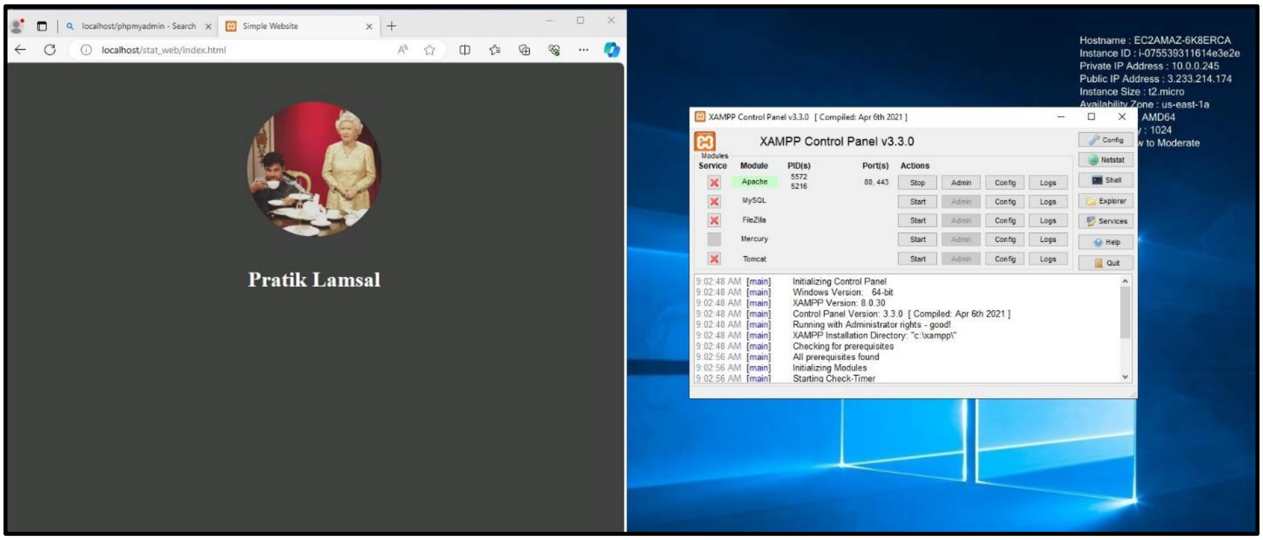
XAMPP Control Panel v3.3.0 [Compiled: Apr 6th 2021]

This PC › Local Disk (C:) › xampp › htdocs ›

Name	Date modified	Type	Size
dashboard	3/2/2024 8:56 AM	File folder	
img	3/2/2024 8:56 AM	File folder	
stat_web	3/2/2024 9:12 AM	File folder	
webalizer	3/2/2024 8:56 AM	File folder	
xampp	3/2/2024 8:56 AM	File folder	
applications	6/15/2022 4:07 PM	Microsoft Edge H...	4 KB
bitnami	6/15/2022 4:07 PM	Cascading Style S...	1 KB
favicon	7/16/2015 3:32 PM	Icon	31 KB
index.php	7/16/2015 3:32 PM	PHP File	1 KB

9 items 1 item selected

36. Opening HTML file within the Instance



localhost/stat_web/index.html

Pratik Lamsal

Hostname : EC2AMAZ-6K8ERCA
Instance ID : i-075539311614e3e2e
Private IP Address : 10.0.0.245
Public IP Address : 3.233.214.174
Instance Size : t2.micro
Availability Zone : us-east-1a

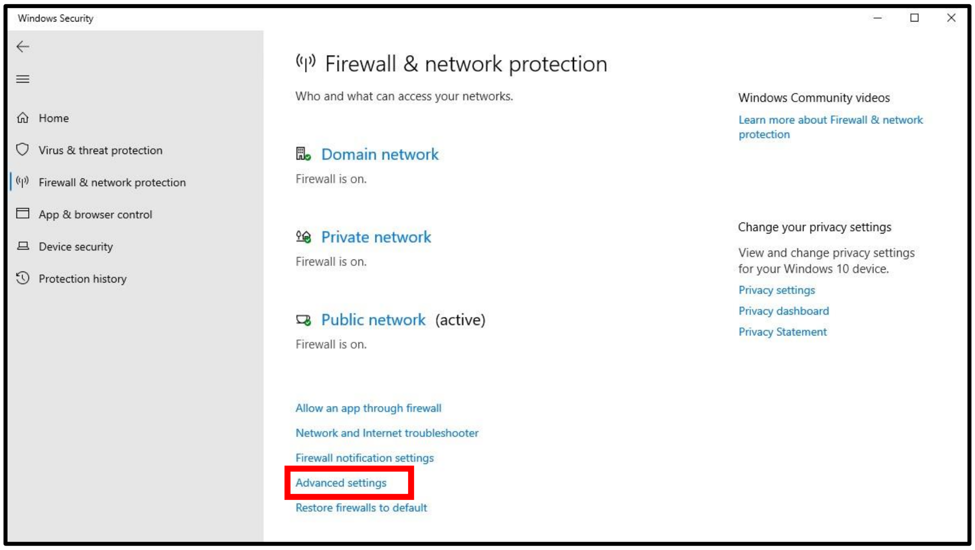
XAMPP Control Panel v3.3.0 [Compiled: Apr 6th 2021]

Service	Module	PID(s)	Port(s)	Actions			
☒	Apache	5572 5216	80, 443	Stop	Admin	Config	Logs
☒	MySQL			Start	Admin	Config	Logs
☒	FileZilla			Start	Admin	Config	Logs
□	Mercury			Start	Admin	Config	Logs
☒	Tomcat			Start	Admin	Config	Logs

```
9:02:48 AM  [main]  Initializing Control Panel
9:02:48 AM  [main]  Windows Version:  64-bit
9:02:48 AM  [main]  XAMPP Version: 8.0.30
9:02:48 AM  [main]  Control Panel Version: 3.3.0  [ Compiled: Apr 6th 2021 ]
9:02:48 AM  [main]  Running with Administrator rights - good!
9:02:48 AM  [main]  XAMPP Installation Directory: "c:\xampp\"
9:02:48 AM  [main]  Checking for prerequisites
9:02:56 AM  [main]  All prerequisites found
9:02:56 AM  [main]  Initializing Modules
9:02:56 AM  [main]  Starting Check-Timer
```

37. Changing Firewall Settings

Firewall Settings need to be changed if the website is to be accessed by the local machine.


Windows Security
Home
Virus & threat protection
Firewall & network protection
App & browser control
Device security
Protection history

Firewall & network protection

Who and what can access your networks.

Domain network
Firewall is on.

Private network
Firewall is on.

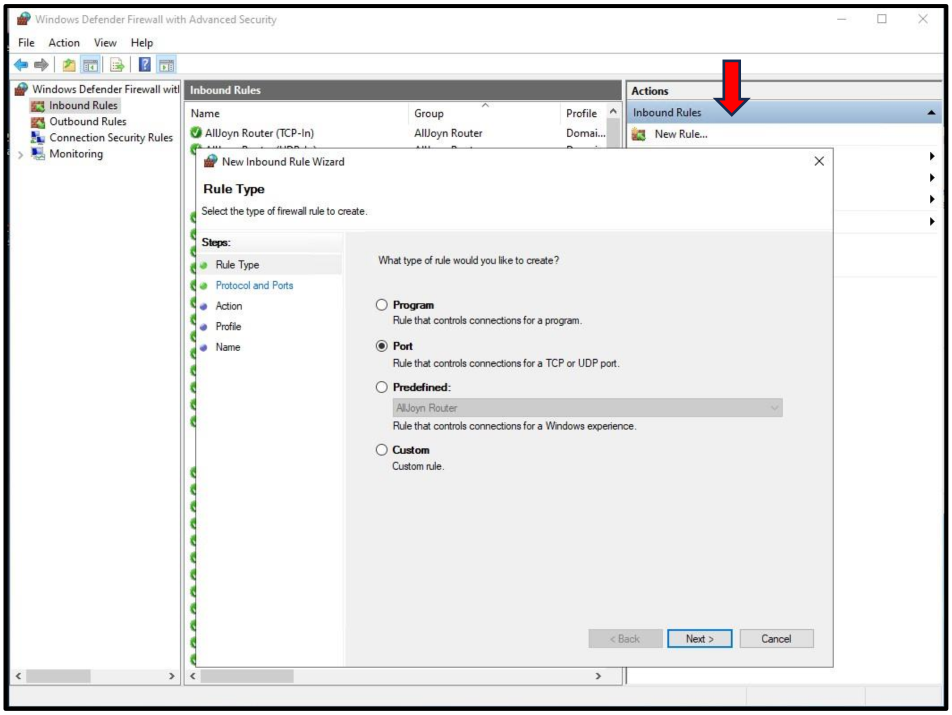
Public network (active)
Firewall is on.

Windows Community videos
Learn more about Firewall & network protection

Change your privacy settings
View and change privacy settings for your Windows 10 device.

Privacy settings
Privacy dashboard
Privacy Statement
Allow an app through firewall
Network and Internet troubleshooter
Firewall notification settings
Advanced settings
Restore firewalls to default

Add Rules is selected which is under the Inbound Rules section. Port rule type is to be added.



Rule Type

Select the type of firewall rule to create.

What type of rule would you like to create?

○ Program
Rule that controls connections for a program.

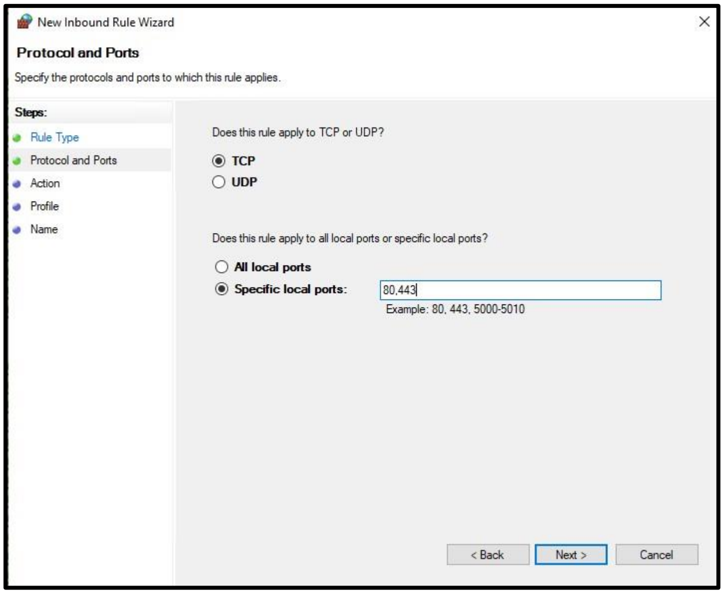
● Port
Rule that controls connections for a TCP or UDP port.

○ Predefined:
AllJoyn Router
Rule that controls connections for a Windows experience.

○ Custom
Custom rule.

38. Allowing Specific Ports

HTTP (Port 80) and HTTPS (Port 443) is allowed.



New Inbound Rule Wizard

Protocol and Ports

Specify the protocols and ports to which this rule applies.

Steps:
- Rule Type
- Protocol and Ports
- Action
- Profile
- Name

Does this rule apply to TCP or UDP?

● TCP
○ UDP

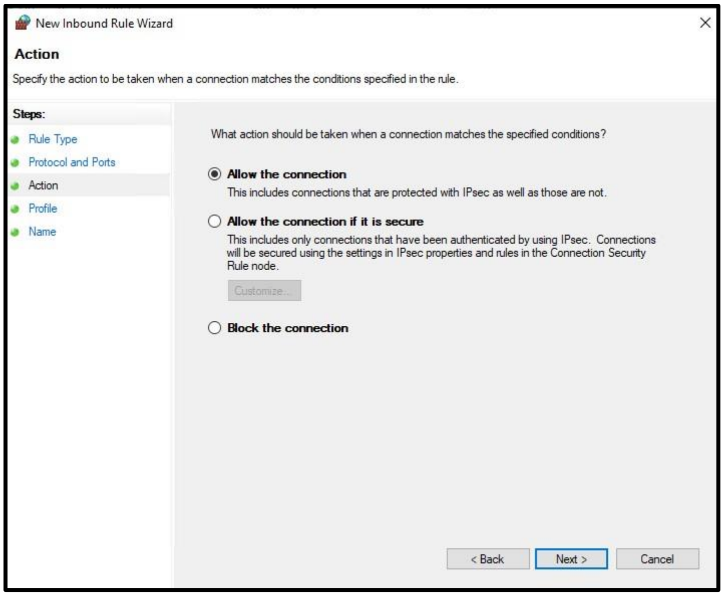
Does this rule apply to all local ports or specific local ports?

○ All local ports
● Specific local ports: 80,443

Example: 80, 443, 5000-5010

39. Connection Conditions

Connection Matches Conditions are to be selected. For now, it allows for all connections be it protected by IPsec or not.



New Inbound Rule Wizard

Action

Specify the action to be taken when a connection matches the conditions specified in the rule.

Steps:
- Rule Type
- Protocol and Ports
- Action
- Profile
- Name

What action should be taken when a connection matches the specified conditions?

● Allow the connection

This includes connections that are protected with IPsec as well as those are not.

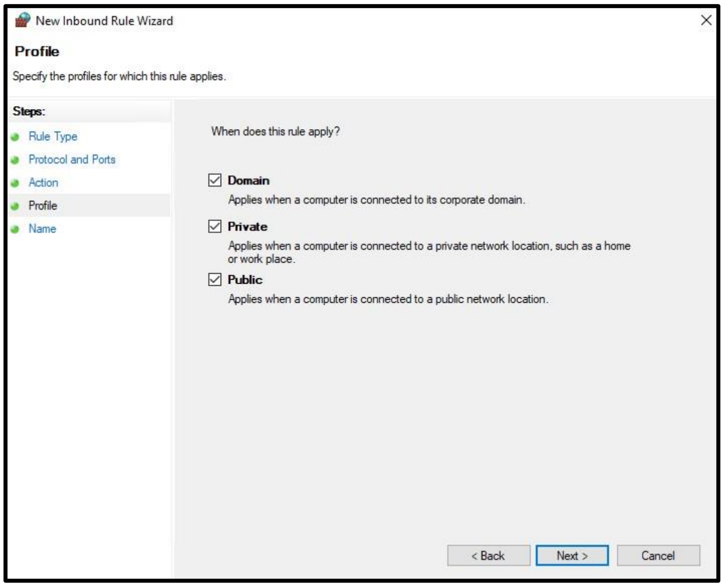
○ Allow the connection if it is secure

This includes only connections that have been authenticated by using IPsec. Connections will be secured using the settings in IPsec properties and rules in the Connection Security Rule node.

○ Block the connection

40. Rule Profile

It is to determine from where the connection can be made from. For now, it can be allowed from everywhere.



New Inbound Rule Wizard

Profile

Specify the profiles for which this rule applies.

When does this rule apply?

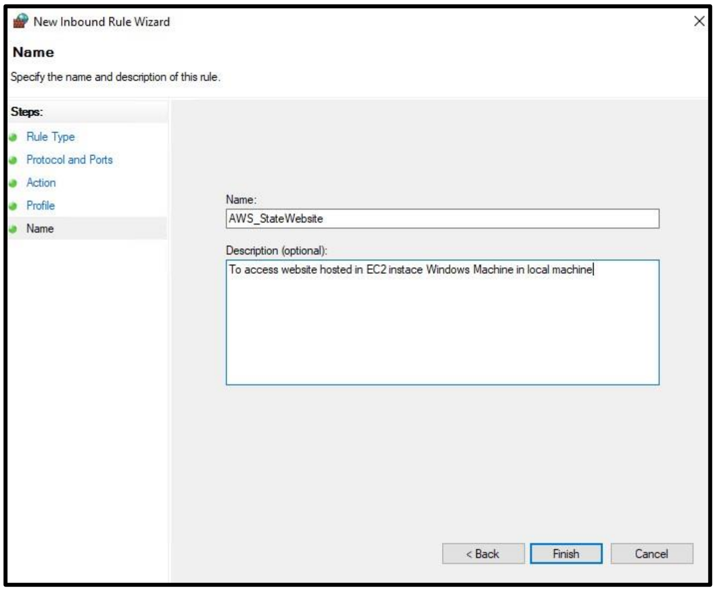
☑ **Domain**
Applies when a computer is connected to its corporate domain.

☑ **Private**
Applies when a computer is connected to a private network location, such as a home or work place.

☑ **Public**
Applies when a computer is connected to a public network location.

41. Rule Name and Description

Rule Name and what it does is described.



New Inbound Rule Wizard

Name

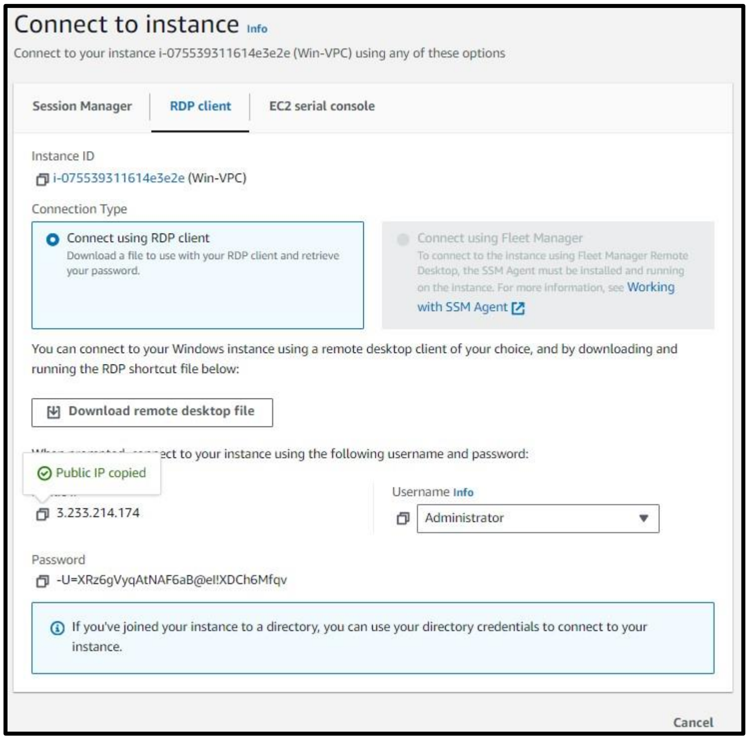
Specify the name and description of this rule.

Name:
AWS_StateWebsite

Description (optional):
To access website hosted in EC2 instace Windows Machine in local machine

42. Connecting to the Instance

Now connection to the instance is made using the Public IP Address.



Connect to instance Info

Connect to your instance i-075539311614e3e2e (Win-VPC) using any of these options

Instance ID
i-075539311614e3e2e (Win-VPC)

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 Remote Desktop, the SSM Agent must be installed and running on the instance. For more information, see Working with SSM Agent

You can connect to your Windows instance using a remote desktop client of your choice, and by downloading and running the RDP shortcut file below:

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

3.233.214.174

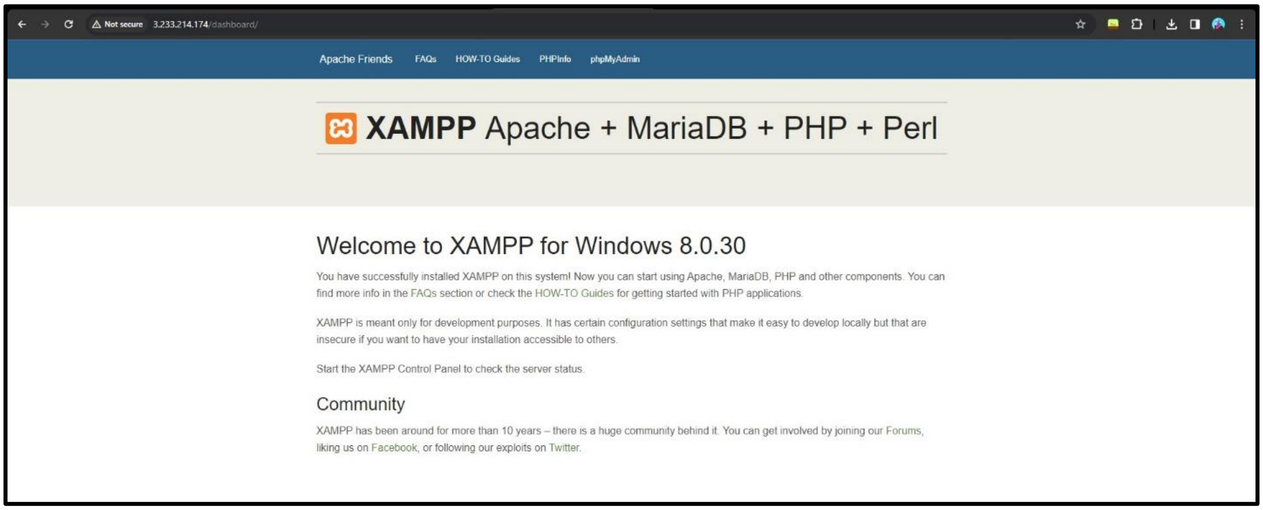
Username Info
Administrator

Password
-U=XRz6gVyqAtNAF6aB@el!XDCh6Mfqv

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

43. XAMPP Landing Page

On using the Public IP Address to access in the local machine, XAMPP Landing is shown. To view the website, proper path needs to be provided.



Not secure 3.233.214.174/dashboard/

XAMPP Apache + MariaDB + PHP + Perl

Welcome to XAMPP for Windows 8.0.30

You have successfully installed XAMPP on this system! Now you can start using Apache, MariaDB, PHP and other components. You can find more info in the FAQs section or check the HOW-TO Guides for getting started with PHP applications.

XAMPP is meant only for development purposes. It has certain configuration settings that make it easy to develop locally but that are insecure if you want to have your installation accessible to others.

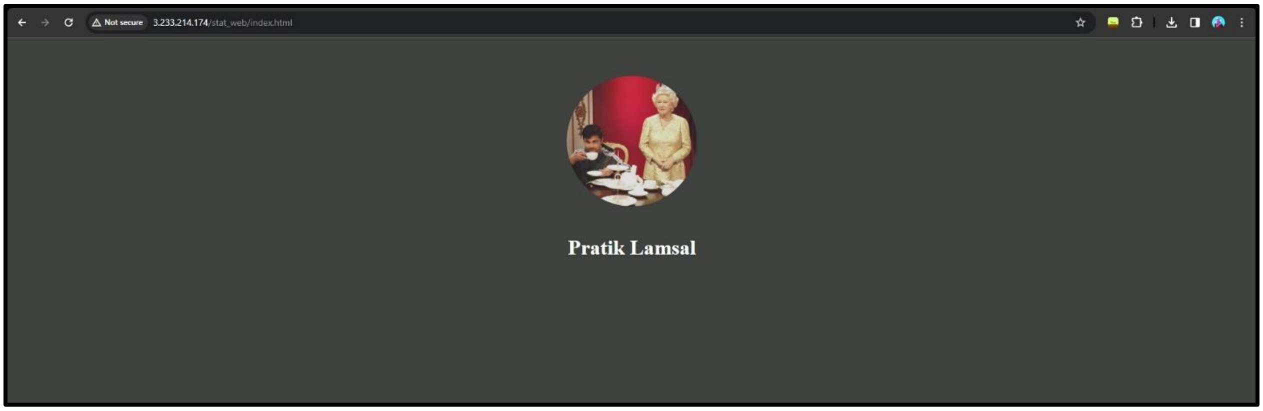
Start the XAMPP Control Panel to check the server status.

Community

XAMPP has been around for more than 10 years – there is a huge community behind it. You can get involved by joining our Forums, liking us on Facebook, or following our exploits on Twitter.

44. Static Website on Local Machine

Using proper path, the static website is accessible by the Local Machine.



Pratik Lamsal

45. TASK COMPLETE