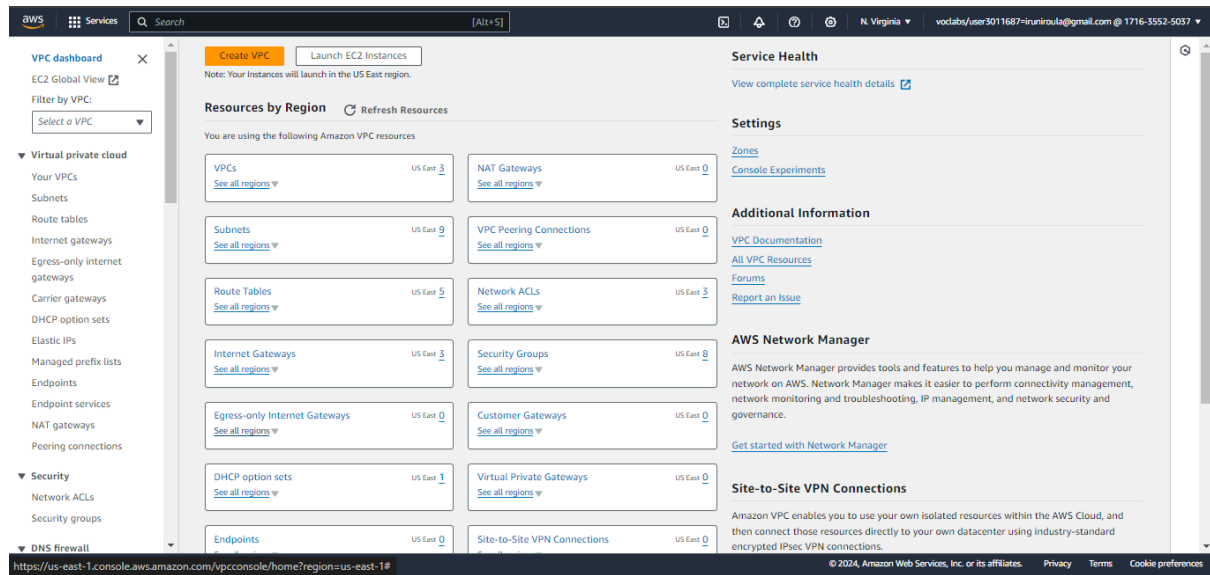
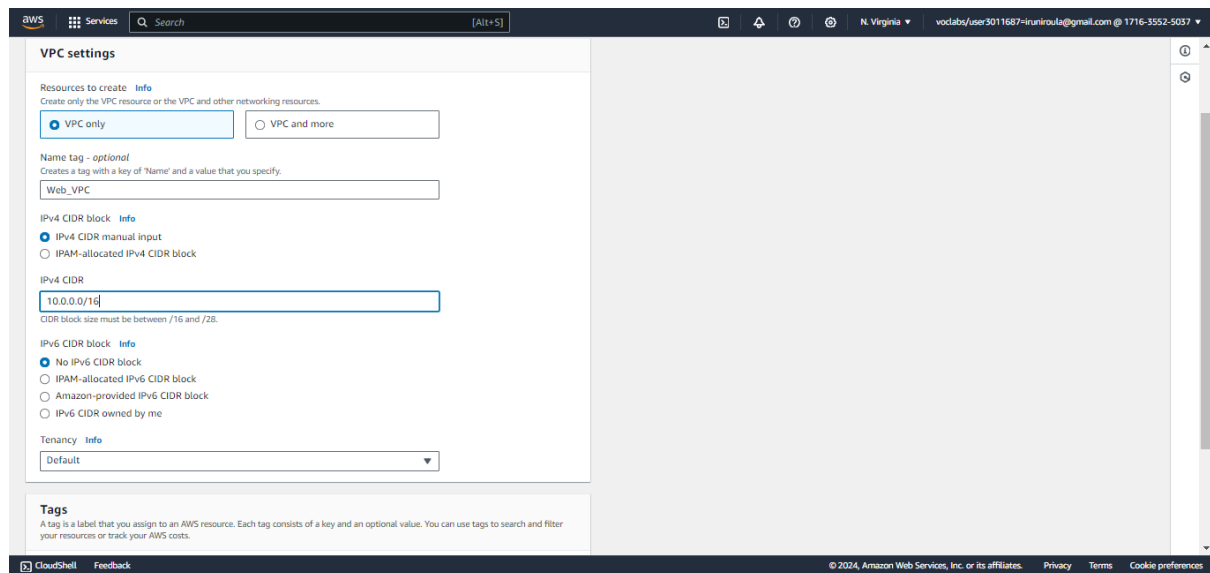


Task 1: hosting static website from linux machine.

From the VPC dashboard click on create VPC



Configure VPC settings as follows: Provide name and IPv4 CIDR



Click on create VPC

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

Remove tag

Add tag

You can add 49 more tags

Cancel

Create VPC

VPC with the name web_vpc is created

You successfully created vpc-04a6940553cf8d3d7 / Web_VPC

VPC > Your VPCs > vpc-04a6940553cf8d3d7

vpc-04a6940553cf8d3d7 / Web_VPC

Actions

Details Info

VPC ID vpc-04a6940553cf8d3d7	State Available	DNS hostnames Disabled	DNS resolution Enabled
Tenancy Default	DHCP option set dopt-0f97bffadfd4242ea	Main route table rtb-0696c40307fe30f35	Main network ACL acl-0d3a476480cd021da
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 171635525037	

Resource map

CIDRs

Flow logs

Tags

Integrations

Click on Create Subnet by navigating to Subnets from the VPC dashboard

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

Subnets (9) Info

Find resources by attribute or tag

Name	Subnet ID	State	VPC	IPv4 CIDR	IPv6 CIDR
-	subnet-0e101950a4da923e	Available	vpc-0165c93cef9816695	172.31.32.0/20	-
-	subnet-0ecb397c57085480f	Available	vpc-0165c93cef9816695	172.31.16.0/20	-
subnet-2024	subnet-0a9d4ae2d33b89648	Available	vpc-0fd2386dc9b6533b2 vpc-1	10.0.0.0/26	-
-	subnet-08d6aefc66524669ac	Available	vpc-0165c93cef9816695	172.31.80.0/20	-
-	subnet-0cd369aa2b2877ea7	Available	vpc-0165c93cef9816695	172.31.64.0/20	-
-	subnet-0ee33de39a36d3211	Available	vpc-0165c93cef9816695	172.31.0.0/20	-
Publicsubnet	subnet-0cf36ca6f3ecd2fc2	Available	vpc-0943b5ee49164164e Myn...	10.0.0.0/24	-

Select a subnet

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Here two subnets are created: Private and Public. This is the configuration for Private Subnet.

aws

Services

Search

[Alt+S]

N. Virginia

vodabs/user3011687=iruniroula@gmail.com @ 1716-3552-5037

Specify the CIDR blocks and Availability zone for the subnet.

Subnet 1 of 2

Subnet name

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

Priv_subnet

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

10.0.1.0/24

256 IPs

Tags - optional

Key

Q Name

Value - optional

Q Priv_subnet

Remove

Add new tag

You can add 49 more tags.

Remove

CloudShell

Feedback

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This is the configuration for Public Subnet

aws

Services

Search

[Alt+S]

N. Virginia

vodabs/user3011687=iruniroula@gmail.com @ 1716-3552-5037

Subnet 2 of 2

Subnet name

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

Pub_subnet

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.

No preference

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

10.0.1/24

256 IPs

Tags - optional

Key

Q Name

Value - optional

Q Pub_subnet

Remove

Add new tag

You can add 49 more tags.

Remove

Add new subnet

Cancel

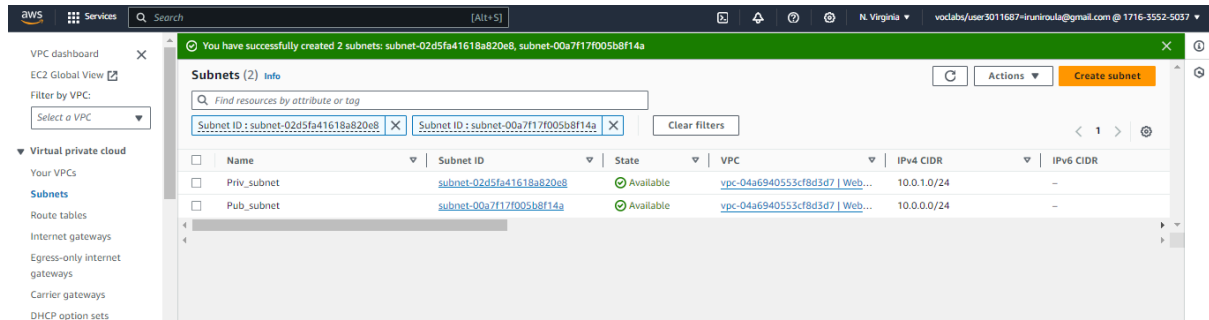
Create subnet

CloudShell

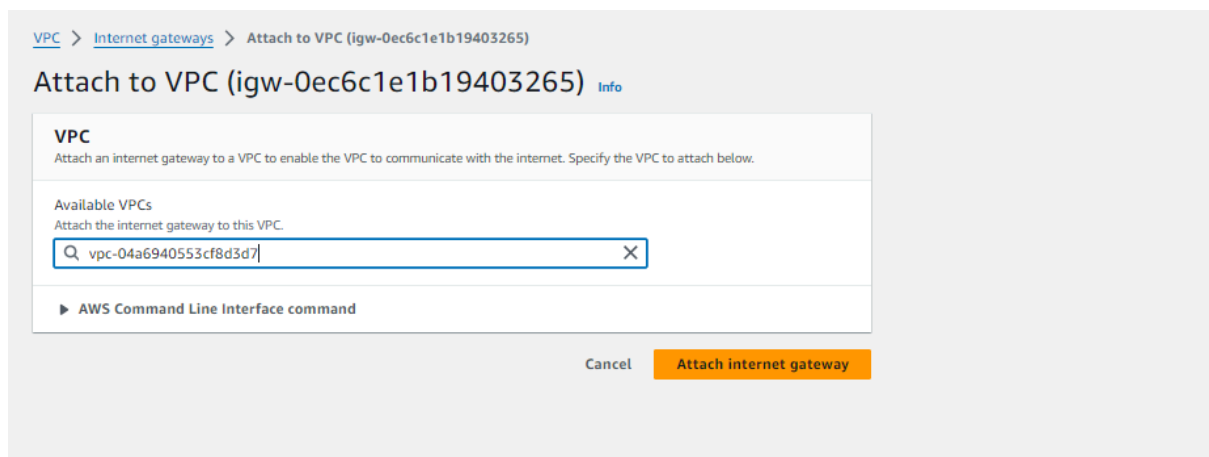
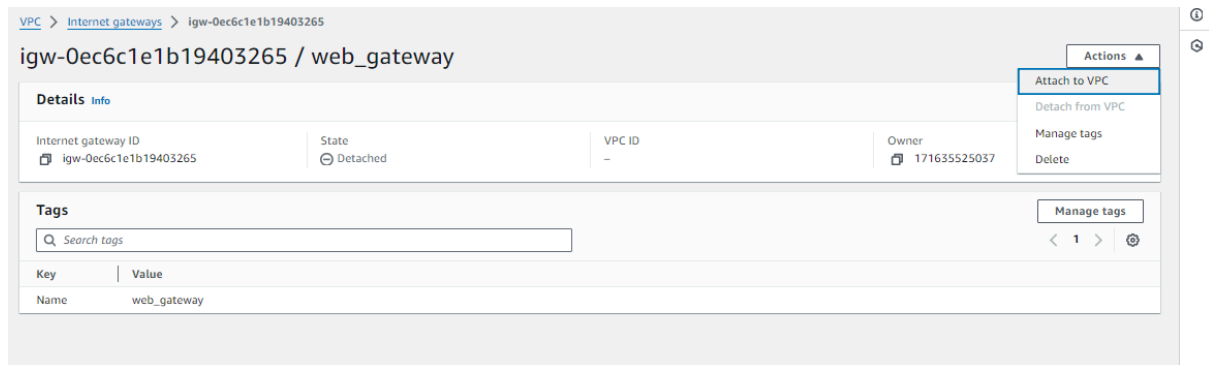
Feedback

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Both subnets are created.



Create internet gateway and attach to VPC here web_gateway has been created and attached.



Navigate to Route Tables in VPC Dashboard and click on create route table

Name	Route table ID	Explicit subnet associ...	Edge associations	Main	VPC	Own...
route1	rtb-0199f2d22e1af4694	subnet-0cf36eaf3ecd2fc...	-	No	vpc-0943b5ee49164164e Myn...	171635...
route-	rtb-0a69687c1048b20a9	-	-	Yes	vpc-0165c93cef9816695	171635...
route-2024	rtb-061aa37c5d0381073	subnet-0a9d4ae2d33b89...	-	No	vpc-0fd2386dc9b6533b2 vpc-1	171635...
route-	rtb-043b1db106124a523	-	-	Yes	vpc-0943b5ee49164164e Myn...	171635...

Configure 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.
web_route

VPC
The VPC to use for this route table.
vpc-04a6940553cf8d3d7 (Web_VPC)

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	web_route	Remove

Add new tag
You can add 49 more tags.

Cancel Create route table

Click on Edit Subnet Associations

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

Route table rtb-063f7b6ab62d2a34a | web_route was created successfully.

VPC > Route tables > rtb-063f7b6ab62d2a34a

rtb-063f7b6ab62d2a34a / web_route

Details info

Route table ID

rtb-063f7b6ab62d2a34a

VPC

vpc-04a6940553cf8d3d7 | Web_VPC

Main

No

Owner ID

171635525037

Explicit subnet associations

-

Edge associations

-

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

Actions

Set main route table

Edit subnet associations

Edit edge associations

Edit route propagation

Edit routes

Manage tags

Delete

CloudShell

Feedback

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VPC > Route tables > rtb-063f7b6ab62d2a34a > Edit subnet associations

Edit subnet associations

Change which subnets are associated with this route table.

Available subnets (2/2)

Filter subnet associations

	Name	Subnet ID	IPv4 CIDR	IPv6 CIDR	Route table ID
<input checked="" type="checkbox"/>	Priv_subnet	subnet-02d5fa41618a820e8	10.0.1.0/24	-	Main (rtb-0696c40307fe30f35)
<input checked="" type="checkbox"/>	Pub_subnet	subnet-00a7f171005b8f14a	10.0.0.0/24	-	Main (rtb-0696c40307fe30f35)

Selected subnets

subnet-02d5fa41618a820e8 / Priv_subnet

subnet-00a7f171005b8f14a / Pub_subnet

Cancel Save associations

Click on Edit Routes and connect it to the Internet gateway

aws

Services

Search

[Alt+S]

N. Virginia

vodafone/user3011687-rirunirouta@gmail.com @ 1716-3552-5037

VPC

Route tables

rtb-063f7b6ab62d2a34a

Edit routes

Edit routes

Destination	Target	Status	Propagated
10.0.0.0/16	local	Active	No
0.0.0.0/0	Internet Gateway	-	No

Remove

Add route

Cancel

Preview

Save changes

Route has been successfully configured.

Updated routes for rtb-063f7b6ab62d2a34a / web_route successfully

Details

VPC

Route tables

rtb-063f7b6ab62d2a34a

rtb-063f7b6ab62d2a34a / web_route

Actions

Details

Route table ID
rtb-063f7b6ab62d2a34a

VPC
vpc-04a6940553cf8d3d7 | Web_VPC

Main
No

Owner ID
171635525037

Explicit subnet associations
2 subnets

Edge associations
-

Routes

Subnet associations

Edge associations

Route propagation

Tags

Routes (2)

Both

Edit routes

Filter routes

1

Destination	Target	Status	Propagated
0.0.0.0/0	igw-0ec6c1e1b19403265	Active	No
10.0.0.0/16	local	Active	No

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Navigate to the EC2 Dashboard and click on Launch Instance

Launch instance

To get started, launch an Amazon EC2 instance, which is a virtual server in the cloud.

Launch instance

▼

Migrate a server [↗](#)

Note: Your instances will launch in the US East (N. Virginia) Region

After providing name and selecting AMI as Linux for the EC2 configure its network settings by connecting it to the VPC created earlier.

▼ Network settings [Info](#)

VPC - required [Info](#)

vpc-0165c93cef9816695
172.31.0.0/16 (default) ▲

Q |

vpc-0943b5ee49164164e (MynewVpc)
10.0.0.0/16

vpc-0165c93cef9816695
172.31.0.0/16 (default) ✓

vpc-04a6940553cf8d3d7 (Web_VPC)
10.0.0.0/16

vpc-0fd2386dc9b6533b2 (vpc-1)
10.0.0.0/25

Create security group

Select existing security group

Create new subnet [↗](#)

specific traffic to reach your

Security group name - required

launch-wizard-5

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 _-./()#,@[]+=&:{}!\$*

Set security group rule type as HTTP

▼ 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 ✕</div>	<div>e.g. SSH for admin desktop</div>

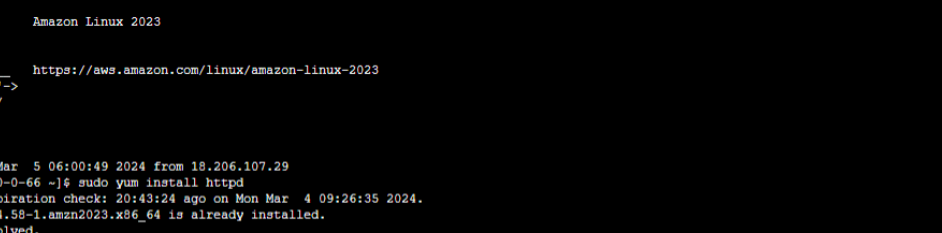
Add another Security group rule and set its type as HTTPS

▼ Security group rule 3 (TCP, 443, 0.0.0.0/0)

Remove

Type Info	Protocol Info	Port range Info
HTTPS ▼	TCP	443
Source type Info	Source Info	Description - optional Info
Anywhere ▼	<div>Q Add CIDR, prefix list or security</div> <div>0.0.0.0/0 ✕</div>	<div>e.g. SSH for admin desktop</div>

Launch Instance and connect to the instance and install httpd service



The screenshot shows an AWS Management Console terminal window for an Amazon Linux 2023 EC2 instance. The terminal output shows the user logging in, running a command to install httpd, and then starting the service. The output is as follows:

```
Amazon Linux 2023

https://aws.amazon.com/linux/amazon-linux-2023

Last login: Tue Mar  5 06:00:49 2024 from 18.206.107.29
[ec2-user@ip-10-0-0-66 ~]$ sudo yum install httpd
Last metadata expiration check: 20:43:24 ago on Mon Mar  4 09:26:35 2024.
Package httpd-2.4.58-1.amzn2023.x86_64 is already installed.
Dependencies resolved.
Nothing to do.
Complete!
[ec2-user@ip-10-0-0-66 ~]$ sudo service httpd start
Redirecting to /bin/systemctl start httpd.service
[ec2-user@ip-10-0-0-66 ~]$
```

The terminal window title is "EC2". The AWS console header shows the "Services" tab, a search bar, and the instance name "i-0b4c8aa75f33aeacf (Web_Instance)".

Loading data into the ec2 instance and hosted from local machine.

```

C:\> Command Prompt

Microsoft Windows [Version 10.0.19045.4046]
(c) Microsoft Corporation. All rights reserved.

C:\Users\HP>cd Downloads

C:\Users\HP\Downloads>scp -i "newkey.pem" C:\Users\HP\OneDrive\Desktop\New folder/* ec2-user@44.211.96.177:temp/
The authenticity of host '44.211.96.177 (44.211.96.177)' can't be established.
ECDSA key fingerprint is SHA256:W1ZByRjeD53q/MwIV8nsp31l6NCKe4qaoHrhnaZV450.
Are you sure you want to continue connecting (yes/no/[fingerprint])?
Please type 'yes', 'no' or the fingerprint:
Warning: Permanently added '44.211.96.177' (ECDSA) to the list of known hosts.
C:\Users\HP\OneDrive\Desktop\New: No such file or directory
folder/*: No such file or directory

C:\Users\HP\Downloads>scp -i "newkey.pem" C:\Users\HP\OneDrive\Desktop\profile/* ec2-user@44.211.96.177:temp/
iru.png 100% 575KB 325.7KB/s 00:01
index.html 100% 1192 4.0KB/s 00:00

C:\Users\HP\Downloads>

```

Profile hosted.

Not secure

44.211.96.177

☆

🛡️

📄

🖨️

👤

Finish update

Gmail

R

The social construct...

work your ass off

Daily Singing Exerci...

This is a great book...

Google Colab


Create Matrix Pytho...

Data Science Projec...

»

All Bookmarks

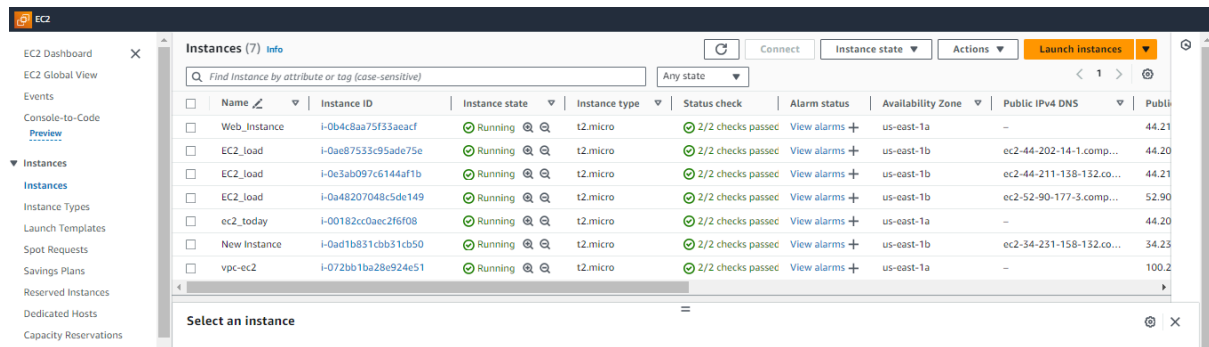
Iru Niroula



Hello! This is Iru. I am happy to have completed this task.

Task 2: hosting static website from windows machine

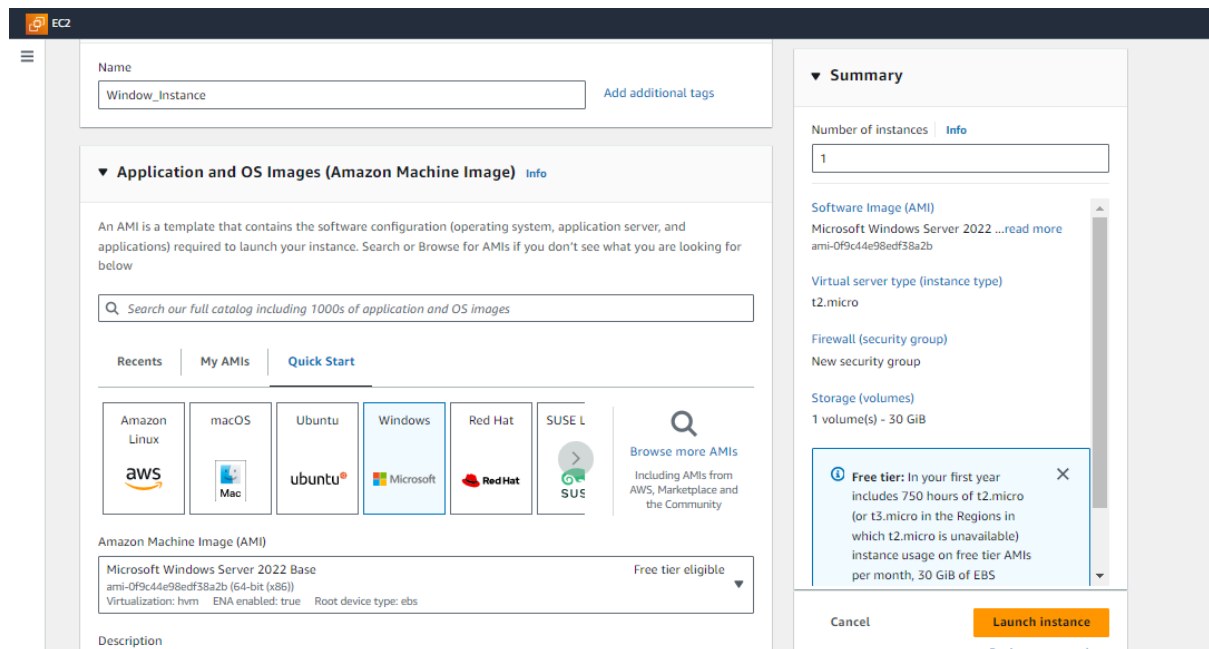
Launch a new ec2 instance



The screenshot shows the AWS Management Console's EC2 Instances page. The left sidebar contains navigation links for EC2 Dashboard, EC2 Global View, Events, Console-to-Code, and a list of instance types. The main area displays a table of 7 instances. The 'Launch instances' button is highlighted in orange in the top right corner.

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IP
Web_Instance	i-0b4c8aa75f33aeacf	Running	t2.micro	2/2 checks passed	View alarms	us-east-1a	-	44.21
EC2_load	i-0ae87533c95ade75e	Running	t2.micro	2/2 checks passed	View alarms	us-east-1b	ec2-44-202-14-1.comp...	44.20
EC2_load	i-0e3ab097c6144af1b	Running	t2.micro	2/2 checks passed	View alarms	us-east-1b	ec2-44-211-138-132.co...	44.21
EC2_load	i-0a48207048c5de149	Running	t2.micro	2/2 checks passed	View alarms	us-east-1b	ec2-52-90-177-3.comp...	52.90
ec2_today	i-00182cc0aec2f6f08	Running	t2.micro	2/2 checks passed	View alarms	us-east-1a	-	44.20
New Instance	i-0ad1b831cbb31cb50	Running	t2.micro	2/2 checks passed	View alarms	us-east-1b	ec2-34-231-158-132.co...	34.23
vpc-ec2	i-072bb1ba28e924e51	Running	t2.micro	2/2 checks passed	View alarms	us-east-1a	-	100.2

Provide name and select Windows as AMI



The screenshot shows the 'Launch Instance' wizard in the AWS Management Console. The 'Name' field is set to 'Window_Instance'. The 'Application and OS Images (Amazon Machine Image)' section shows 'Microsoft Windows Server 2022 Base' selected. The 'Summary' section shows the instance configuration, including the number of instances (1), software image (Microsoft Windows Server 2022 Base), virtual server type (t2.micro), firewall (New security group), and storage (1 volume(s) - 30 GiB). The 'Launch instance' button is visible in the bottom right corner.

Name
Window_Instance

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

Search our full catalog including 1000s of application and OS images

Recents | My AMIs | Quick Start

Amazon Linux | macOS | Ubuntu | Windows | Red Hat | SUSE L

Microsoft Windows Server 2022 Base
ami-0f9c44e98edf38a2b (64-bit (x86))
Virtualization: hvm ENA enabled: true Root device type: ebs

Free tier eligible

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

Cancel Launch instance

Configure network settings as follows

▼ Network settings Info

VPC - required Info

vpc-0165c93cef9816695
172.31.0.0/16 (default) ▲

Q |

vpc-0943b5ee49164164e (MynewVpc)
10.0.0.0/16

vpc-0165c93cef9816695
172.31.0.0/16 (default) ✓

vpc-04a6940553cf8d3d7 (Web_VPC)
10.0.0.0/16

vpc-0fd2386dc9b6533b2 (vpc-1)
10.0.0.0/25

Create security group

Select existing security group

Create new subnet

specific traffic to reach your

Security group name - required

launch-wizard-5

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 ._-:/()#,@[]+=&{}!\$*

▼ 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 ▼

Q Add CIDR, prefix list or security

e.g. SSH for admin desktop

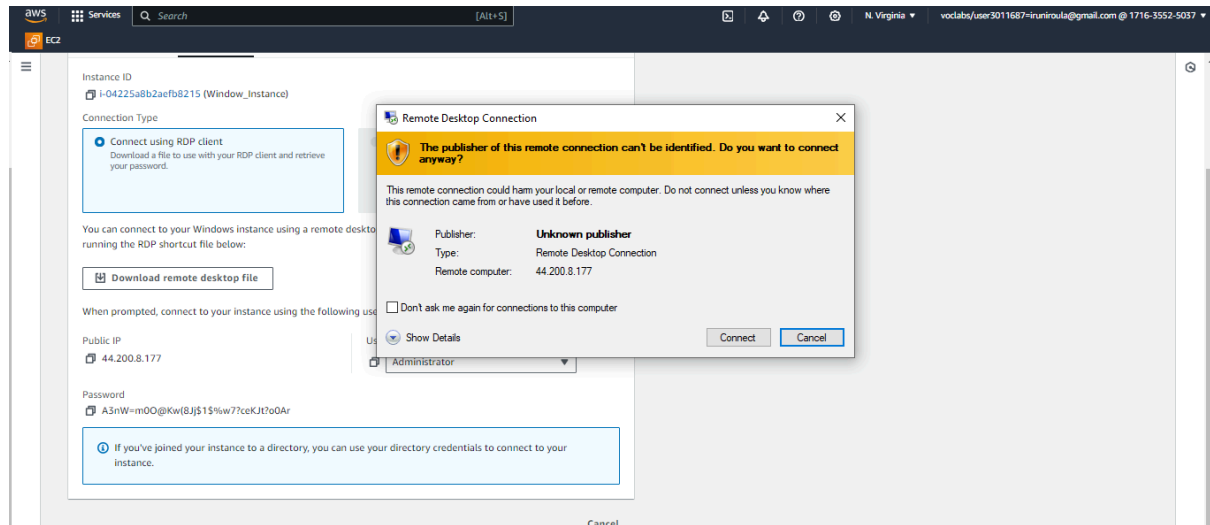
0.0.0.0/0 X

Connect to the EC2 instance via RDP client and click on Download remote desktop file

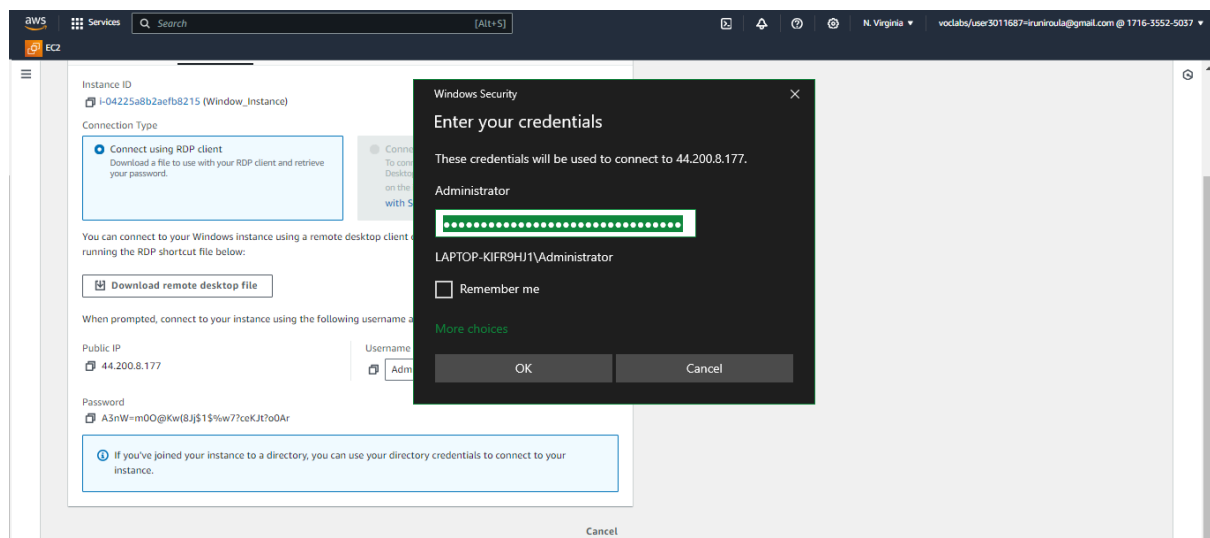
Getting Windows password

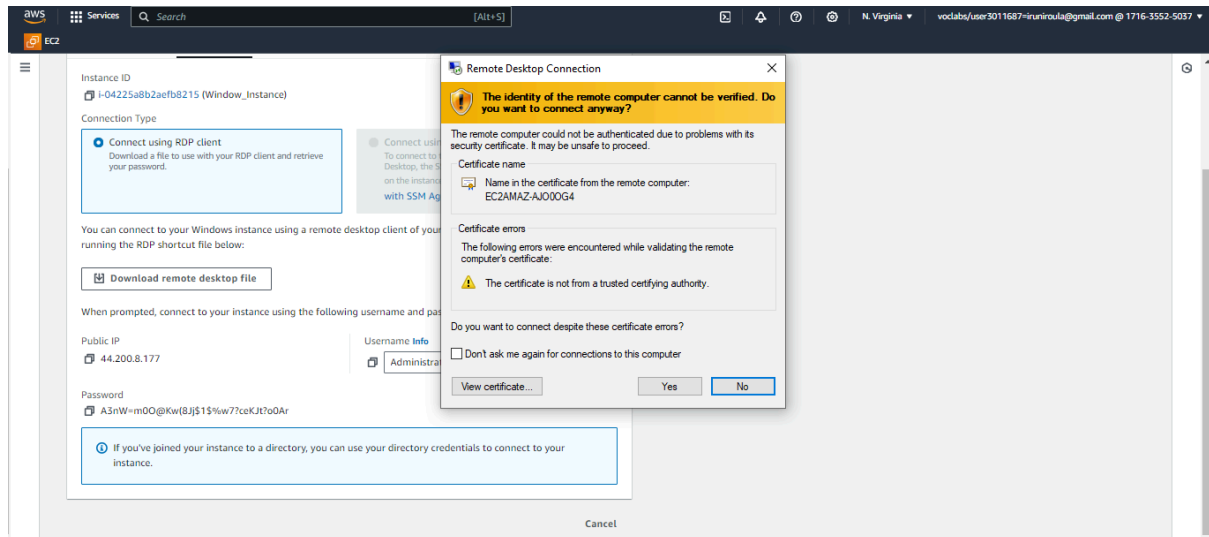
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Connecting to local machine



Using the password to connect to local machine





The Apache server was started once XAMPP was installed. Then, a folder was made in the XAMPP directory on the C drive of the local computer. After that, access to the local system was permitted changing the firewall's inbound rule to allow all incoming traffic. The website was accessed via the public IP address.

