

Objective:- Giving patch to private server using S3 bucket and EndPoint

- Create VPC and subnet

The screenshot shows the 'Create VPC' page in the AWS Management Console. The breadcrumb navigation is 'VPC > Your VPCs > Create VPC'. The page title is 'Create VPC' with an 'Info' link. A descriptive text states: 'A VPC is an isolated portion of the AWS Cloud populated by AWS objects, such as Amazon EC2 instances.' The 'VPC settings' section includes: 'Resources to create' with radio buttons for 'VPC only' (selected) and 'VPC and more'; 'Name tag - optional' with a text input field containing 'MyVPC'; 'IPv4 CIDR block' with radio buttons for 'IPv4 CIDR manual input' (selected) and 'IPAM-allocated IPv4 CIDR block'; and an 'IPv4 CIDR' text input field containing '172.21.0.0/17'. A note below the field states: 'CIDR block size must be between /16 and /28.'

The screenshot shows the 'Subnet 1 of 2' page in the AWS Management Console. The breadcrumb navigation is 'Subnet 1 of 2'. The page title is 'Subnet 1 of 2'. The 'Subnet name' section has a text input field containing 'PublicCN'. The 'Availability Zone' section has a dropdown menu showing 'US East (N. Virginia) / us-east-1a'. The 'IPv4 VPC CIDR block' section has a dropdown menu showing '172.21.0.0/17'. The 'IPv4 subnet CIDR block' section has a text input field containing '172.21.0.0/23' and a '512 IPs' label. Below the input field is a navigation bar with arrows for navigating between subnets.

aws

Services

Search

[Alt+S]

Subnet 2 of 2

Subnet name

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

PrivateSN

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.

172.21.0.0/17

IPv4 subnet CIDR block

172.21.123.0/23

512 IPs

< > ^ v

Create Internet Gateway, then attach to VPC

aws

Services

Search

[Alt+S]

N. Virginia

Sarvesh Chaudhari

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.

MyGTW

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

Value - optional

Q Name X

Q MyGTW X

Remove

Add new tag

You can add 49 more tags.

Cancel Create internet gateway

Create RouteTable

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.

PublicRT

VPC
The VPC to use for this route table.

vpc-0a1bd482bac2f8616 (MyVPC)

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 PublicRT X Remove

Add new tag

Add route to public for IGW and add Public subnet association

Edit routes

VPC > Route tables > rtb-03d3ac159053f9cce > Edit routes

Destination	Target	Status	Propagated
172.21.0.0/17	local	Active	No
Q 0.0.0.0/0 X	Internet Gateway	-	No
	Q igw-012d22c98b122a5fb X		

Add route

Cancel Preview **Save changes**

Similarly create PrivateRT then associate it with PrivateSubnet

- In S3 create bucket

Create bucket [Info](#)

Buckets are containers for data stored in S3.

General configuration

AWS Region

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

Bucket type [Info](#)

☒ **General purpose**
Recommended for most use cases and access patterns. General purpose buckets are the original S3 bucket type. They allow a mix of storage classes that redundantly store objects across multiple Availability Zones.

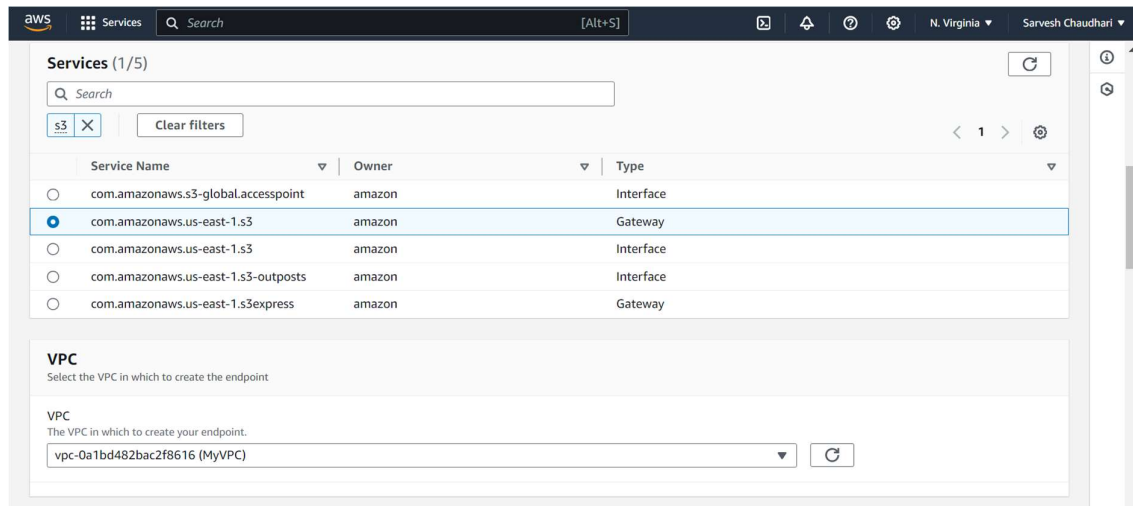
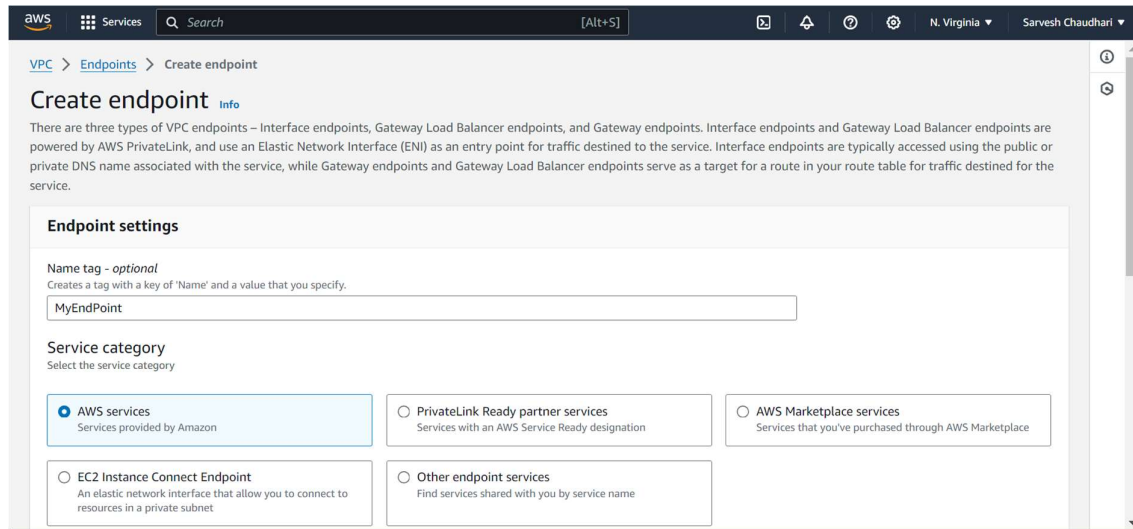
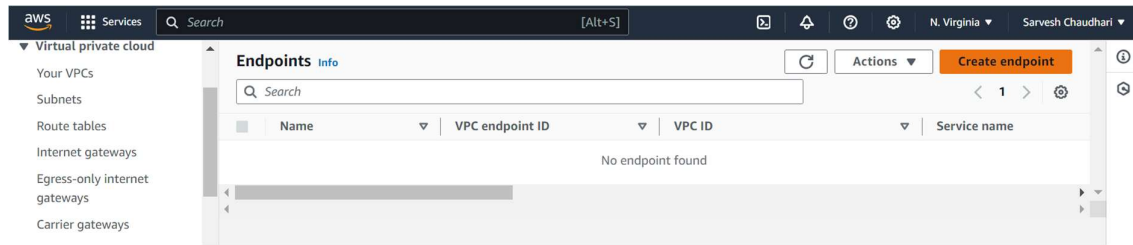
☐ **Directory - New**
Recommended for low-latency use cases. These buckets use only the S3 Express One Zone storage class, which provides faster processing of data within a single Availability Zone.

Bucket name [Info](#)

Bucket1109

Untick the public access permission
Tick in the checkbox and click on create bucket.

- Now go to Endpoints from VPC



Route tables (1/3) [Info](#)

Search

Name	Route Table ID	Main	Associated Id
<input checked="" type="checkbox"/> PrivateRT	rtb-0d7bb2ef04c9805bb (PrivateRT)	No	subnet-05ad30db7eea8ee1a (Priv
<input type="checkbox"/> PublicRT	rtb-03d3ac159053f9cce (PublicRT)	No	subnet-0e1ebf929b5a7ab55 (Publ

When you use an endpoint, the source IP addresses from your instances in your affected subnets for accessing the AWS service in the same region will be private IP addresses, not public IP addresses. Existing connections from your affected subnets to the AWS service that use public IP addresses may be dropped. Ensure that you don't have critical tasks running when you create or modify an endpoint.

rtb-0d7bb2ef04c9805bb X

Policy [Info](#)
VPC endpoint policy controls access to the service.

Full access
Allow access by any user or service within the VPC using credentials from any Amazon Web Services accounts to any resources in this Amazon Web Services service. All policies — IAM user policies, VPC endpoint policies, and Amazon Web Services service-specific policies (e.g. Amazon S3 bucket policies, any S3 ACL policies) — must grant the necessary permissions for access to succeed.

Custom
Use the [policy creation tool](#) to generate a policy, then paste the generated policy below.

- Now download AWS CLI
- Create EC2 instance Webserver & DBserver

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: Webserver [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

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

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

Cancel [Launch instance](#)

Key pair name - required

b12 [Create new key pair](#)

Network settings [Info](#)

VPC - required: vpc-0a1bd482bac2f8616 (MyVPC) 172.21.0.0/17

Subnet: subnet-0e1ebf929b5a7ab55 PublicSN VPC: vpc-0a1bd482bac2f8616 Owner: 992382819518 Availability Zone: us-east-1a IP addresses available: 507 CIDR: 172.21.0.0/23 [Create new subnet](#)

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

Security group name - required: launch-wizard-14
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.

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

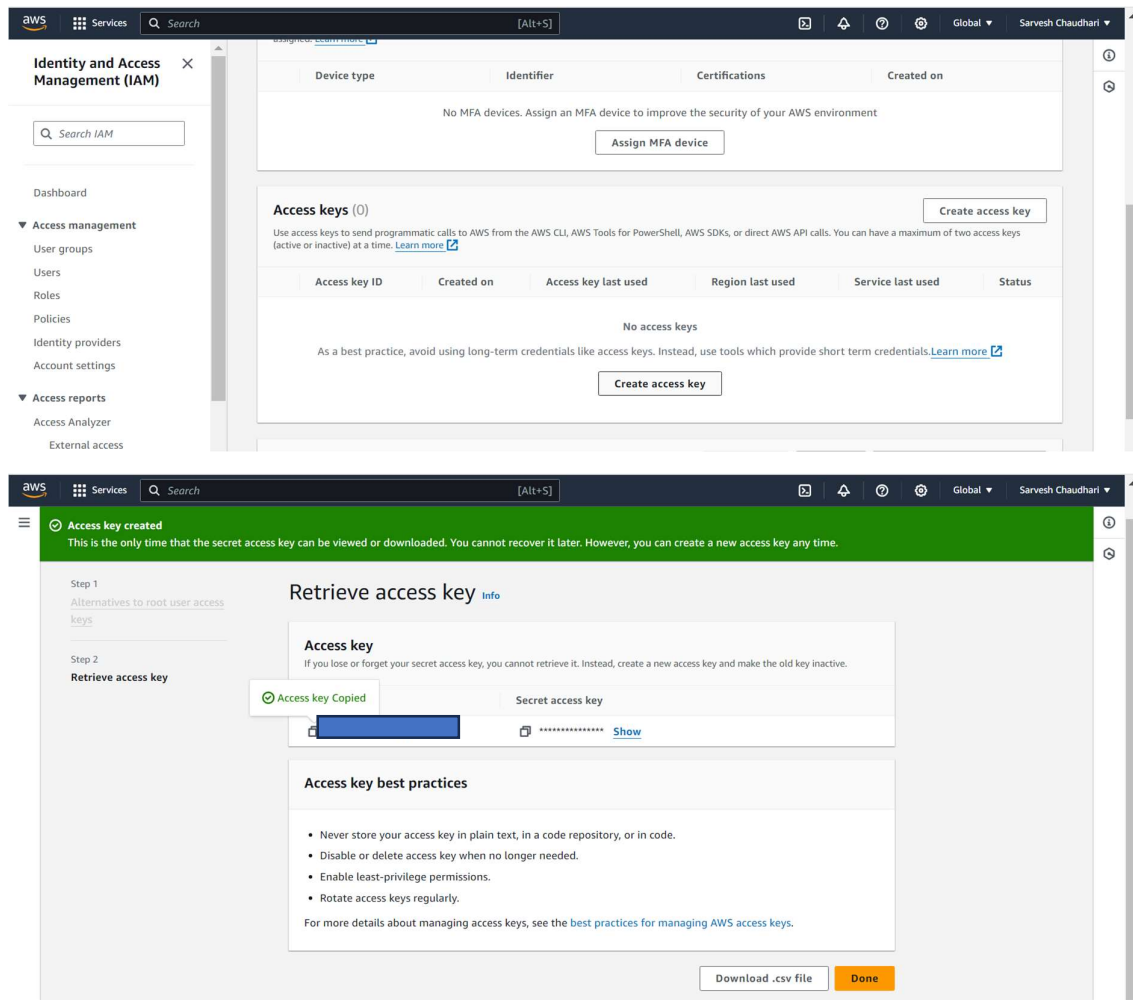
Cancel [Launch instance](#) [Review commands](#)

2nd private Dbserver

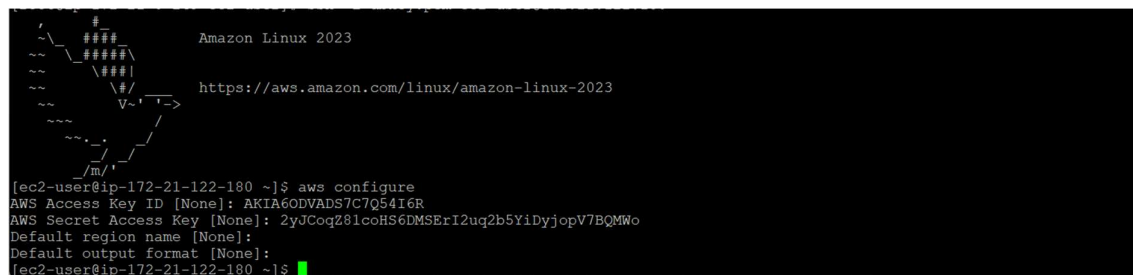
The first screenshot shows the 'Launch an instance' page in the AWS Management Console. The 'Name and tags' section has 'DBserver' entered. The 'Application and OS Images (Amazon Machine Image)' section has a search bar. The 'Summary' section on the right shows 'Number of instances' as 1, 'Software Image (AMI)' as 'Amazon Linux 2023 AMI 2023.3.2', 'Virtual server type (instance type)' as 't2.micro', 'Firewall (security group)' as 'New security group', and 'Storage (volumes)' as '1 volume(s) - 8 GiB'. A 'Free tier' notification is visible.

The second screenshot shows the 'Network settings' section. 'Key pair name' is 'b12'. 'VPC' is 'vpc-0a1bd482bac2f8616 (MyVPC)'. 'Subnet' is 'subnet-05ad30db7eea8ee1a'. 'Auto-assign public IP' is 'Disable'. 'Firewall (security groups)' has 'Create security group' selected. 'Security group name' is 'launch-wizard-15'. The 'Summary' section on the right is identical to the first screenshot.

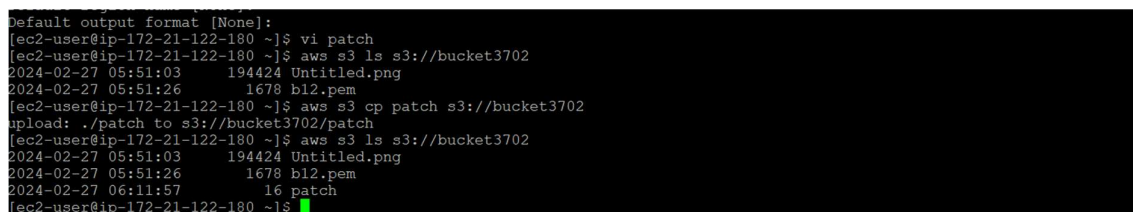
- Now open putty then give host name as Public IP then give putty key to Configuration file we entered the machine



Now enter this credentials into machine



Now type the command to copy Machine files to bucket



Command to copy file from bucket to machine


```
[ec2-user@ip-172-21-122-180 ~]$ ls
patch
[ec2-user@ip-172-21-122-180 ~]$ aws s3 cp s3://bucket3702/b12.pem ./
download: s3://bucket3702/b12.pem to ./b12.pem
[ec2-user@ip-172-21-122-180 ~]$ ls
b12.pem  patch
[ec2-user@ip-172-21-122-180 ~]$
```

Command to copy file from bucket to bucket

```
[ec2-user@ip-172-21-122-180 ~]$ aws s3 cp s3://bucket3702/b12.pem s3://bucket372119/
copy: s3://bucket3702/b12.pem to s3://bucket372119/b12.pem
[ec2-user@ip-172-21-122-180 ~]$ aws s3 ls s3://bucket372119
2024-02-27 06:37:16      1678 b12.pem
[ec2-user@ip-172-21-122-180 ~]$
```