

Create Vpc:

[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.

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.

revision_vpc

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](#)

CloudShell Feedback

Create private subnet:

Subnet 1 of 2

Subnet name

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

The name can be up to 256 characters long.

Availability Zone [Info](#)

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



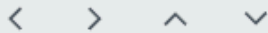
IPv4 VPC CIDR block [Info](#)

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



IPv4 subnet CIDR block

256 IPs



▼ Tags - optional

Create public subnet:

Subnet 2 of 2

Subnet name

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

The name can be up to 256 characters long.

Availability Zone [Info](#)

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

IPv4 VPC CIDR block [Info](#)

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

IPv4 subnet CIDR block

256 IPs

< > ^ v

▼ **Tags - optional**

Create internet gateway

Create internet gateway [Info](#)

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

Internet gateway settings

Name tag

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

Tags - optional

Attach vpc to internet gateway:

Attach to VPC (igw-083787c62c4f4cf42) [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.

► **AWS Command Line Interface command**

[Cancel](#) [Attach internet gateway](#)

Create router 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.

VPC
The VPC to use for this route table.

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

Key	Value - optional	
<input type="text" value="Name"/>	<input type="text" value="my_router_table_1-1"/>	Remove

[Add new tag](#)

You can add 49 more tags.

[Cancel](#) [Create route table](#)

Edit subnet allocation:

VPC > Route tables > rtb-00489c1e5a5ff5e94 > Edit subnet associations

Edit subnet associations

Change which subnets are associated with this route table.

Available subnets (1/2)

Filter subnet associations

	Name	Subnet ID	IPv4 CIDR	IPv6 CIDR	Route table ID
<input checked="" type="checkbox"/>	public_subnet	subnet-09f6e26f3819be36e	10.0.2.0/24	-	Main (rtb-04aa4a503e5f98a07)
<input type="checkbox"/>	private_subnet	subnet-0226aa52cef54ec32	10.0.1.0/24	-	Main (rtb-04aa4a503e5f98a07)

Selected subnets

subnet-09f6e26f3819be36e / public_subnet X

Edit route table:

VPC > Route tables > rtb-00489c1e5a5ff5e94 > Edit routes

Edit routes

Destination	Target	Status	Propagated
10.0.0.0/16	local	Active	No
Q 0.0.0.0/0 X	Internet Gateway	-	No
	Q igw-083787c62c4f4cf42 X		

Add route

Cancel Preview S

Create ec2 instance with following network configuration:

▼ Network settings [Info](#)

VPC - *required* [Info](#)

vpc-0b7ae4d7c7e184258
10.0.0.0/16

↻

Subnet [Info](#)

subnet-09f6e26f3819be36e public_subnet
VPC: vpc-0b7ae4d7c7e184258 Owner: 912292072026
Availability Zone: us-east-1b IP addresses available: 251 CIDR: 10.0.2.0/24

↻ [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

Security group name - *required*

vpc_security_troupe

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

Description - *required* [Info](#)

launch-wizard-2 created 2024-02-26T06:25:36.554Z

Inbound Security Group Rules

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

Remove

Install webserver:

```
Complete!
[ec2-user@ip-10-0-2-174 ~]$ sudo yum install httpd
Last metadata expiration check: 0:03:49 ago on Mon Feb 26 06:35:41 2024.
Dependencies resolved.
```

Start webserver:

```
[ec2-user@ip-10-0-2-174 ~]$ sudo service httpd start
Redirecting to /bin/systemctl start httpd.service
[ec2-user@ip-10-0-2-174 ~]$
```

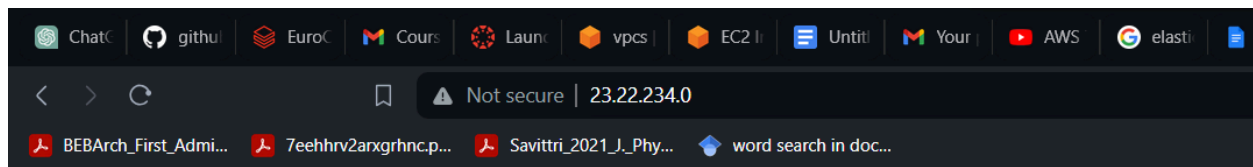
Access the webserver public ip:

```
Redirecting to /bin/systemctl start httpd.service
[ec2-user@ip-10-0-2-174 ~]$
```

i-0be0ac0fc46851dae (vpc_webserver_instance)

PublicIPs: 23.22.234.0 PrivateIPs: 10.0.2.174

WErver server running:



It works!

Now we need to upload our static portfolio website files.

For my case i upload a index.html and a image file

To upload the website file we first need to create a temp folder inside the EC2:

```
[ec2-user@ip-10-0-2-30 ~]$ mkdir temp
[ec2-user@ip-10-0-2-30 ~]$ ls
temp
```

Now upload the website files to this temp folder from local machine as:

```
C:\Users\hp\Downloads>scp -i "keys2.pem" C:\Users\hp\Desktop\static_web/* ec2-user@3.85.81.49:temp/
The authenticity of host '3.85.81.49 (3.85.81.49)' can't be established.
ED25519 key fingerprint is SHA256:9aPSGZI9Yg\KS0xNsgHouRQ02kqxJ4tcBPdIfaicDJ4.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])?
Warning: Permanently added '3.85.81.49' (ED25519) to the list of known hosts.
index1.html      100% 818      2.7KB/s   00:00
ppss.jpg         100% 231KB 157.2KB/s 00:01
C:\Users\hp\Downloads>
```

Now with sudo permission we can move file from temp folder to /var/www/html/ folder inside ec2 machine:

```
[ec2-user@ip-10-0-2-30 ~]$ cd temp
[ec2-user@ip-10-0-2-30 temp]$ ls
index1.html  ppss.jpg
[ec2-user@ip-10-0-2-30 temp]$ sudo mv * /var/www/html/
[ec2-user@ip-10-0-2-30 temp]$ cd /var/www/html/
[ec2-user@ip-10-0-2-30 html]$ ls
index1.html  ppss.jpg
```

Now start the httpd servers:

```
[ec2-user@ip-10-0-2-30 /]$ sudo service httpd start
Redirecting to /bin/systemctl start httpd.service
```

Now access the site with the public ip of vpc:

PublicIPs: 3.85.81.49 PrivateIPs: 10.0.2

Finally here we go!! The simple static portfolio is hosted:



Dipesh Tripathi



Enthusiastic developer and lifelong learner.
Passionate about technology and innovation.

Hosted file:

```
1 <!-->
2
3 <!-->
4 <meta charset="UTF-8">
5 <meta name="viewport" content="width=device-width, initial-scale=1.0">
6 <title>Dipesh Tripathi's Portfolio</title>
7 <style>
8   body {
9     font-family: Arial, sans-serif;
10    text-align: center;
11    margin-top: 50px;
12  }
13  img {
14    border-radius: 50%; /* Circular photo */
15    width: 200px; /* Adjust as needed */
16    height: auto;
17  }
18  .description {
19    margin-top: 20px;
20  }
21 </style>
22 </head>
23 <body>
24   <h1>Dipesh Tripathi</h1>
25   
26   <p class="description">Enthusiastic developer and lifelong learner.<br>Passionate about technology and innovation.</p>
27 </body>
```

In this lab we learn to configure VPC and assign vpc to ec2 and finally host a static website through EC2.