

## Assignment-2: Cloud Project

IP: 13.51.158.197

DNS: <https://elevateresume.online/>

SEVAK

NAME: NILKANTH

ID: 35489979

Setting up Web Server

1. Lunch Ubuntu based instance on Amazon EC2

Instances (1/1) Info

Last updated less than a minute ago

Connect

Instance state

Actions

Launch instances

Find Instance by attribute or tag (case-sensitive)

All states

| Name          | Instance ID         | Instance state | Instance type | Status check      | Alarm status | Availability Zone | Public IPv4 DNS          | Public IPv4 ... |
|---------------|---------------------|----------------|---------------|-------------------|--------------|-------------------|--------------------------|-----------------|
| ElevateResume | i-0b25ff27eaf4d00a9 | Running        | t3.micro      | 3/3 checks passed | View alarms  | eu-north-1b       | ec2-13-51-158-197.eu-... | 13.51.158.197   |

i-0b25ff27eaf4d00a9 (ElevateResume)

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

Instance summary Info

Instance ID  
i-0b25ff27eaf4d00a9

IPv6 address  
-

Hostname type  
IP name: ip-172-31-34-218.eu-north-1.compute.internal

Answer private resource DNS name  
IPv4 (A)

Auto-assigned IP address  
13.51.158.197 [Public IP]

IAM Role  
-

IMDSv2  
Required

Public IPv4 address  
13.51.158.197 | open address

Instance state  
Running

Private IP DNS name (IPv4 only)  
ip-172-31-34-218.eu-north-1.compute.internal

Instance type  
t3.micro

VPC ID  
vpc-0adb318706e7ddd01

Subnet ID  
subnet-0418390da8232d29c

Instance ARN  
arn:aws:ec2:eu-north-1:036209395102:instance/i-0b25ff27eaf4d00a9

Private IPv4 addresses  
172.31.34.218

Public IPv4 DNS  
ec2-13-51-158-197.eu-north-1.compute.amazonaws.com | open address

Elastic IP addresses  
-

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

Auto Scaling Group name  
-

Managed  
false

- 2. Go to security, edit Inbound Rules and allow port 22 and 80

i-0b25ff27eaf4d00a9 (ElevateResume)

Details

Status and alarms

Monitoring

Security

Networking

Storage

Tags

▼ Instance summary Info

Instance ID

i-0b25ff27eaf4d00a9

IPv6 address

-

Hostname type

IP name: ip-172-31-34-218.eu-north-1.compute.internal

Answer private resource DNS name

IPv4 (A)

Auto-assigned IP address

13.51.158.197 [Public IP]

IAM Role

-

IMDSv2

Required

Public IPv4 address

13.51.158.197 | open address

Instance state

Running

Private IP DNS name (IPv4 only)

ip-172-31-34-218.eu-north-1.compute.internal

Instance type

t3.micro

VPC ID

vpc-0adb318706e7ddd01

Subnet ID

subnet-0418390da8232d29c

Instance ARN

arn:aws:ec2:eu-north-1:036209395102:instance/i-0b25ff27eaf4d00a9

Private IPv4 addresses

172.31.34.218

Public IPv4 DNS

ec2-13-51-158-197.eu-north-1.compute.amazonaws.com | open address

Elastic IP addresses

-

AWS Compute Optimizer finding

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

Auto Scaling Group name

-

Managed

false

Inbound rules (2)

Manage tags

Edit inbound rules

Search

< 1 >

|                          | Name | Security group rule ID | IP version | Type | Protocol | Port range | Source    |
|--------------------------|------|------------------------|------------|------|----------|------------|-----------|
| <input type="checkbox"/> | -    | sgr-0d7dadd6b9b2b0c31  | IPv4       | HTTP | TCP      | 80         | 0.0.0.0/0 |
| <input type="checkbox"/> | -    | sgr-0adf347e07fe735a7  | IPv4       | SSH  | TCP      | 22         | 0.0.0.0/0 |

3

3. Connect your instance to Ubuntu Terminal. You can use both EC2 Instance Connect and SSH Client. [EC2 Instance Connect helps you to connect without opening Ubuntu]

Instances (1/1) [Info](#)

Find Instance by attribute or tag (case-sensitive) [All states](#) [Connect](#) [Instance state](#) [Actions](#) [Launch instances](#)

Last updated less than a minute ago

| Name          | Instance ID         | Instance state | Instance type | Status check      | Alarm status                | Availability Zone | Public IPv4 DNS          | Public IPv4 ... |
|---------------|---------------------|----------------|---------------|-------------------|-----------------------------|-------------------|--------------------------|-----------------|
| ElevateResume | i-0b25ff27eaf4d00a9 | Running        | t3.micro      | 3/3 checks passed | <a href="#">View alarms</a> | eu-north-1b       | ec2-13-51-158-197.eu-... | 13.51.158.197   |

### Connect to instance [Info](#)

Connect to your instance i-0b25ff27eaf4d00a9 (ElevateResume) using any of these options

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

Instance ID  
i-0b25ff27eaf4d00a9 (ElevateResume)

Connection Type

☒ Connect using EC2 Instance Connect  
Connect using the EC2 Instance Connect browser-based client, with a public IPv4 or IPv6 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 IPv4 address  
13.51.158.197

☐ IPv6 address  
-

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, ubuntu.

[Note](#): In most cases, the default username, ubuntu, is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI username.

[Cancel](#) [Connect](#)

### Connect to instance [Info](#)

Connect to your instance i-0b25ff27eaf4d00a9 (ElevateResume) using any of these options

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

Instance ID  
i-0b25ff27eaf4d00a9 (ElevateResume)

1. Open an SSH client.

2. Locate your private key file. The key used to launch this instance is ElevateResume.pem

3. Run this command, if necessary, to ensure your key is not publicly viewable.  
`chmod 400 "ElevateResume.pem"`

4. Connect to your instance using its Public DNS:  
ec2-13-51-158-197.eu-north-1.compute.amazonaws.com

Example:  
`ssh -i "ElevateResume.pem" ubuntu@ec2-13-51-158-197.eu-north-1.compute.amazonaws.com`

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

[Cancel](#)

```
nilkanth@nilkanth-VirtualBox:~$ cd Downloads
nilkanth@nilkanth-VirtualBox:~/Downloads$ chmod 400 ElevateResume.pem
nilkanth@nilkanth-VirtualBox:~/Downloads$ ssh -i ElevateResume.pem ubuntu@ec2-13
-51-158-197.eu-north-1.compute.amazonaws.com
Welcome to Ubuntu 24.04.2 LTS (GNU/Linux 6.8.0-1026-aws x86_64)
```

4. Download Apache2 page to check whether your IP is working or not

```
ubuntu@ip-172-31-34-218:~$ sudo apt install apache2
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
apache2 is already the newest version (2.4.58-1ubuntu8.6).
0 upgraded, 0 newly installed, 0 to remove and 30 not upgraded.
```

```
sudo apt install apache2
```

```
sudo apt-get update
```

```
sudo su
```

```
sudo systemctl status apache2
```

```
sudo ss -lntp
```

```
telnet localhost [Port No.]
```

```
sudo snap install --classic certbot
```

```
sudo ln -s /snap/bin/certbot /usr/bin/certbot
```

```
sudo certbot --apache
```

#### Codes for SSL/TLS Certificate

```
sudo snap install --classic certbot
```

```
sudo ln -s /snap/bin/certbot
```

```
sudo certbot --apach
```

## Connection Domain To IP

- 1) Change your Nameserver in Godaddy to connect website to your Instance IP.

## DNS Management

elevateresume.online
Domain Settings
Select a different domain

DNS Records
Forwarding
Nameservers
Premium DNS
Hostnames
DNSSEC
Crypto Wallet

**Add a new record**

DNS records define how your domain behaves, like showing your website content and delivering your email.

Add New Record

**Easily verify domain ownership**

Need to verify ownership of your domain to connect to an external service? We've made it easier than ever.

Verify Domain Ownership

2. Open route53 in your AWS and create a hosted zone

Public
elevateresume.online
Info
Delete zone
Test record
Configure query logging

Hosted zone details
Edit hosted zone

Records (2)
DNSSEC signing
Hosted zone tags (0)

**Records (2)** Info

Automatic mode is the current search behavior optimized for best filter results. [To change modes go to settings.](#)

Filter records by property or value

Type Routing p... Alias

|                          | Record name         | Type | Routin... | Differ... | Alias | Value/Route traffic to   | TTL (s... | Health ... |
|--------------------------|---------------------|------|-----------|-----------|-------|--|-----------|------------|
| <input type="checkbox"/> | elevateresume.on... | NS   | Simple    | -         | No    | ns-1939.awsdns-50.co.uk.<br>ns-937.awsdns-53.net.<br>ns-1040.awsdns-02.org.<br>ns-7.awsdns-00.com. | 172800    | -          |
| <input type="checkbox"/> | elevateresume.on... | SOA  | Simple    | -         | No    | ns-1939.awsdns-50.co.uk. a...  | 900       | -          |

### 3. Create Record

#### Define simple record

Record name

Info

To route traffic to a subdomain, enter the subdomain name. For example, to route traffic to blog.example.com, enter *blog*. If you leave this field blank, the default record name is the name of the domain.

elevateresume.online

Keep blank to create a record for the root domain.

Record type

Info

The DNS type of the record determines the format of the value that Route 53 returns in response to DNS queries.

A – Routes traffic to an IPv4 address and some AWS resources

▼

Choose when routing traffic to AWS resources for EC2, API Gateway, Amazon VPC, CloudFront, Elastic Beanstalk, ELB, or S3. For example: 192.0.2.44.

Value/Route traffic to

Info

The option that you choose determines how Route 53 responds to DNS queries. For most options, you specify where you want to route internet traffic.

Choose endpoint

▼

Enter multiple values on separate lines.

TTL (seconds)

Info

The amount of time, in seconds, that DNS resolvers and web browsers cache the settings in this record. ("TTL" means "time to live."). This value does not apply to alias records. [Learn more](#)

1m

1h

1d

Recommended values: 60 to 172800 (two days)

Cancel

Define simple record

### 4. Copy this Type: NS value and paste it on the Nameservers

Public

elevateresume.online

Info

Delete zone

Test record

Configure query logging

► Hosted zone details

Edit hosted zone

Records (4)

DNSSEC signing

Hosted zone tags (0)

Records (4)

Info

Refresh

Delete record

Import zone file

Create record

Automatic mode is the current search behavior optimized for best filter results. [To change modes go to settings.](#)

Type ▼

Routing p... ▼

Alias ▼

< 1 >

⚙

| <input type="checkbox"/> | Record name ▼       | Type ▼ | Routin... ▼ | Differ... ▼ | Alias ▼ | Value/Route traffic to ▼   | TTL (s... ▼ | Health ... |
|--------------------------|---------------------|--------|-------------|-------------|---------|--|-------------|------------|
| <input type="checkbox"/> | elevateresume.on... | A      | Simple      | -           | No      | 13.51.158.197  | 300         | -          |
| <input type="checkbox"/> | elevateresume.on... | NS     | Simple      | -           | No      | ns-1939.awsdns-50.co.uk.<br>ns-937.awsdns-53.net.<br>ns-1040.awsdns-02.org.<br>ns-7.awsdns-00.com. | 172800      | -          |
| <input type="checkbox"/> | elevateresume.on... | SOA    | Simple      | -           | No      | ns-1939.awsdns-50.co.uk. a...  | 900         | -          |
| <input type="checkbox"/> | www.elevateresu...  | CNAME  | Simple      | -           | No      | elevateresume.online   | 300         | -          |



×

## Edit nameservers

Choose nameservers for **elevateresume.online**

☒ GoDaddy Nameservers (recommended)

ns57.domaincontrol.com

ns58.domaincontrol.com

☐ I'll use my own nameservers

**Save** Cancel

5. Choose I'll use my own Nameservers and paste here

×

## Edit nameservers

Choose nameservers for **elevateresume.online**

☐ GoDaddy Nameservers (recommended)

☒ I'll use my own nameservers

ns-1939.awsdns-50.co.uk

ns-937.awsdns-53.net

ns-1040.awsdns-02.org

ns-7.awsdns-00.com

[+ Add Nameserver](#)

**Save** Cancel