Static Website Deployment

Project Title - Static Website Hosting and Deployment using AWS EC2 Project Goal To successfully deploy, configure, and host a publicly accessible static website on a virtual server instance within the Amazon Web Services (AWS) cloud environment.

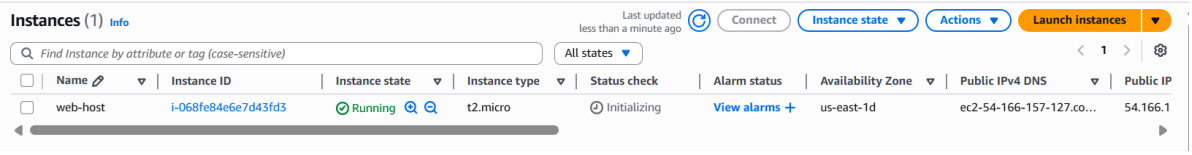
Objectives

1. Infrastructure Provisioning: Launch and configure an Amazon Elastic Compute Cloud (EC2) instance suitable for web hosting.
2. Web Server Installation & Setup: Install and start the Apache HTTP Server (httpd) on the EC2 instance's operating system (Amazon Linux 2023).
3. Content Deployment: Transfer and correctly position the website's static files (HTML, CSS, images) into the Apache web root directory.
4. Public Accessibility: Validate that the deployed website is publicly accessible via the EC2 instance's Public IP address.

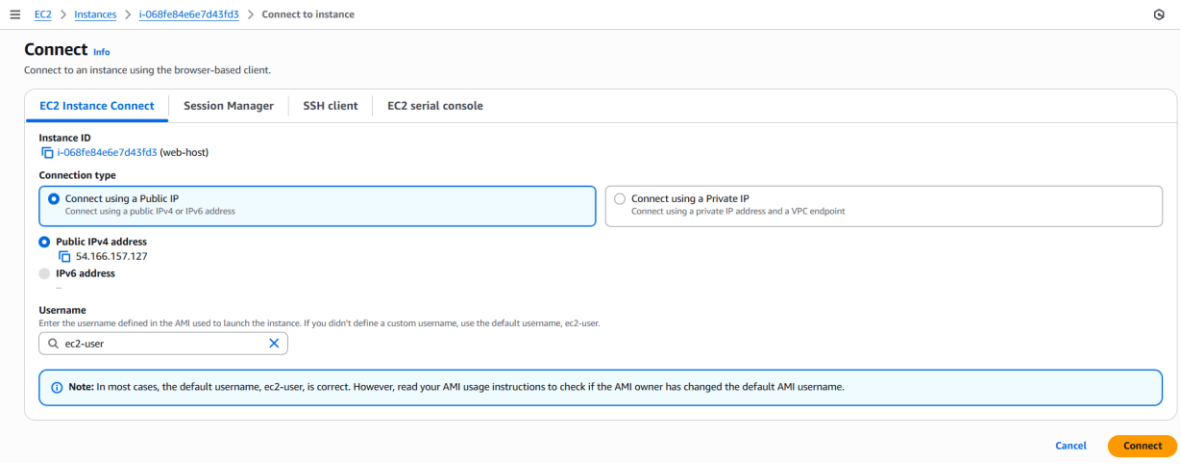
Technologies Used

1. Cloud platform: AWS
2. Compute Service: AWS EC2
3. Web server: Apache HTTPD
4. Operating System: Amazon Linux

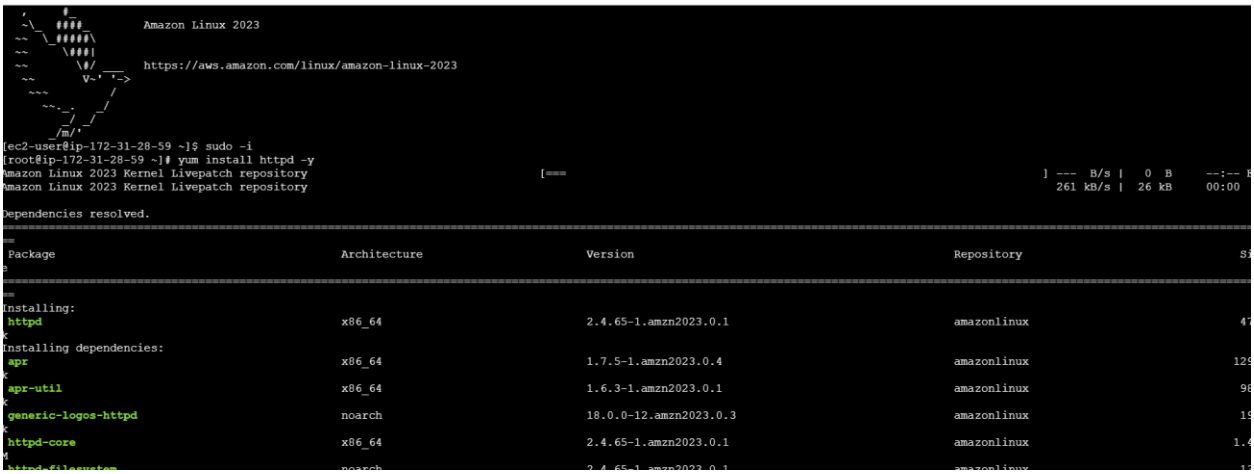
Step 1: Launch EC2 Instance



Step 2: Connect with instance



Step 3: installation of the Apache HTTP Server (httpd)



Step 5: Download and extract the website template. Curl -L -o “Mentore.zip”

https://templatemo.com/download/templatemo_531_reflux

```
[root@ip-172-31-28-59 ~]# curl -L -o "Mentore.zip" https://templatemo.com/download/templatemo_531_reflux
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
  0     0    0     0    0     0      0      0 --:--:-- --:--:-- --:--:--     0
100 1857k  100 1857k    0     0  4929k      0 --:--:-- --:--:-- --:--:-- 4929k
[root@ip-172-31-28-59 ~]# ls
Mentore.zip
[root@ip-172-31-28-59 ~]#
```

Step 6: Unzip the file

```
[root@ip-172-31-28-59 ~]# unzip mentore.zip
unzip:  cannot find or open mentore.zip, mentore.zip.zip or mentore.zip.ZIP.
[root@ip-172-31-28-59 ~]# unzip Mentore.zip
Archive:  Mentore.zip
   creating: templatemo_531_reflux/
   creating: templatemo_531_reflux/assets/
   creating: templatemo_531_reflux/assets/css/
  inflating: templatemo_531_reflux/assets/css/flex-slider.css
  inflating: templatemo_531_reflux/assets/css/fontawesome.css
  inflating: templatemo_531_reflux/assets/css/lightbox.css
  inflating: templatemo_531_reflux/assets/css/owl.css
  inflating: templatemo_531_reflux/assets/css/templatemo-style.css
   creating: templatemo_531_reflux/assets/fonts/
  inflating: templatemo_531_reflux/assets/fonts/Flaticon.woff
  inflating: templatemo_531_reflux/assets/fonts/flexslider-icon.eot
  inflating: templatemo_531_reflux/assets/fonts/flexslider-icon.svg
  inflating: templatemo_531_reflux/assets/fonts/flexslider-icon.ttf
  inflating: templatemo_531_reflux/assets/fonts/flexslider-icon.woff
  inflating: templatemo_531_reflux/assets/fonts/fontawesome-webfont.eot
  inflating: templatemo_531_reflux/assets/fonts/fontawesome-webfont.svg
  inflating: templatemo_531_reflux/assets/fonts/fontawesome-webfont.ttf
  inflating: templatemo_531_reflux/assets/fonts/fontawesome-webfont.woff
  inflating: templatemo_531_reflux/assets/fonts/fontawesome-webfont.woff2
  inflating: templatemo_531_reflux/assets/fonts/FontAwesome.otf
  inflating: templatemo_531_reflux/assets/fonts/slick.eot
  inflating: templatemo_531_reflux/assets/fonts/slick.svg
  inflating: templatemo_531_reflux/assets/fonts/slick.ttf
  inflating: templatemo_531_reflux/assets/fonts/slick.woff
   creating: templatemo_531_reflux/assets/images/
  inflating: templatemo_531_reflux/assets/images/author-image.jpg
  inflating: templatemo_531_reflux/assets/images/close.png
  inflating: templatemo_531_reflux/assets/images/first-main-icon.png
  inflating: templatemo_531_reflux/assets/images/first-white-icon.png
  inflating: templatemo_531_reflux/assets/images/fourth-main-icon.png
  inflating: templatemo_531_reflux/assets/images/fourth-white-icon.png
  inflating: templatemo_531_reflux/assets/images/left-image.jpg
```

Step 7:

1) Moving the extracted template files to the Apache web root directory (/var/www/html/).
2) Starting the httpd service (systemctl start httpd).
3) Enabling the httpd service to start on boot (systemctl enable httpd). These commands complete the web server setup and content deployment.

```
[root@ip-172-31-28-59 ~]# mv templatemo_531_reflux/* /var/www/html
[root@ip-172-31-28-59 ~]# cd /var/www/html/
[root@ip-172-31-28-59 html]# ls
assets  index.html  prepros-6.config  vendor
[root@ip-172-31-28-59 html]#
```

```
[root@ip-172-31-28-59 html]# systemctl start httpd
[root@ip-172-31-28-59 html]# systemctl enable httpd
Created symlink /etc/systemd/system/multi-user.target.wants/httpd.service → /usr/lib/systemd/system/httpd.service.
[root@ip-172-31-28-59 html]#
```

Step 8: Access the website in browser through public IP