

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.

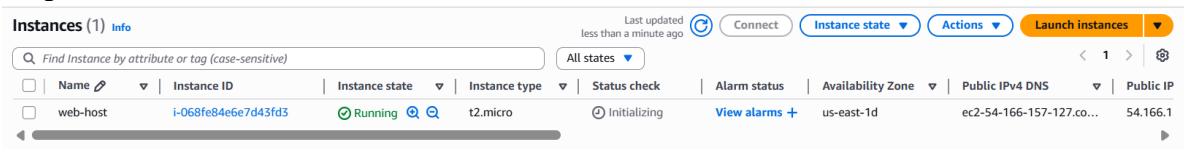
Objectives

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

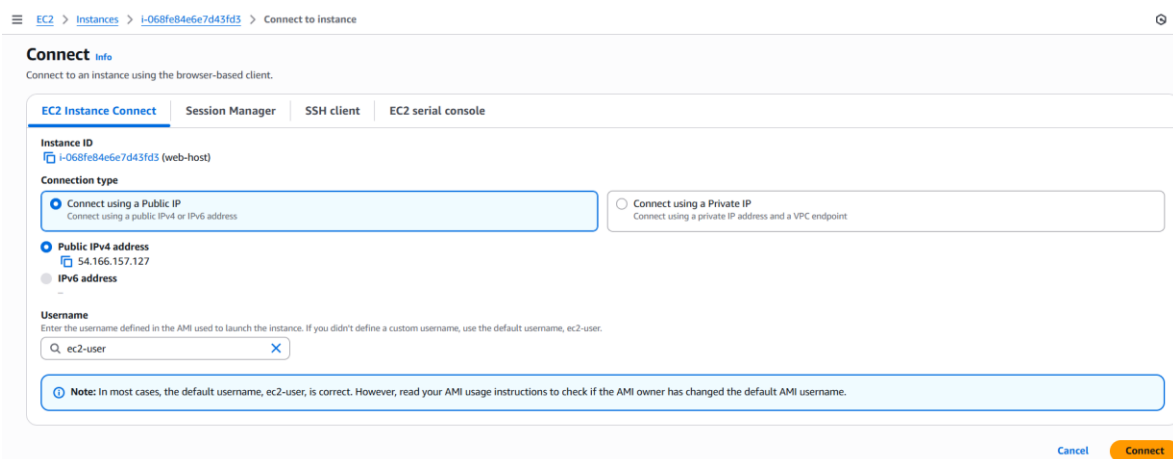
1. Cloud platform: AWS
2. Compute Service: AWS EC2
3. Web server: Apache HTTPD
4. Operating System: Amazon Linux

Step 1: Launch EC2 Instance



Instances (1) Info									
Find Instance by attribute or tag (case-sensitive)									
All states									
<input type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IP
<input type="checkbox"/>	web-host	i-068fe84e6e7d43fd3	Running	t2.micro	Initializing	View alarms +	us-east-1d	ec2-54-166-157-127.co...	54.166.1

Step 2: Connect with instance



Connect [Info](#)

Connect to an instance using the browser-based client.

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

Instance ID
[i-068fe84e6e7d43fd3](#) (web-host)

Connection type

☒ Connect using a Public IP
Connect using a public IP v4 or IP v6 address

☐ Connect using a Private IP
Connect using a private IP address and a VPC endpoint

☒ Public IPv4 address
[54.166.157.127](#)

☐ 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, ec2-user.

Note: In most cases, the default username, ec2-user, is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI username.

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

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

```
Amazon Linux 2023
https://aws.amazon.com/linux/amazon-linux-2023

[ec2-user@ip-172-31-28-59 ~]$ sudo -i
[root@ip-172-31-28-59 ~]# yum install httpd -y
Amazon Linux 2023 Kernel Livepatch repository
Amazon Linux 2023 Kernel Livepatch repository
Dependencies resolved.
=====
Package                                Architecture      Version            Repository          Size
-----
Installing:
httpd                                  x86_64            2.4.65-1.amzn2023.0.1  amazonlinux         47
Installing dependencies:
apr                                    x86_64            1.7.5-1.amzn2023.0.4  amazonlinux         125
apr-util                              x86_64            1.6.3-1.amzn2023.0.1  amazonlinux          96
generic-logos-httpd                  noarch            18.0.0-12.amzn2023.0.3  amazonlinux          15
httpd-core                            x86_64            2.4.65-1.amzn2023.0.1  amazonlinux         1.4
httpd-filterussem                     noarch            2.4.65-1.amzn2023.0.1  amazonlinux          15
```

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
           % of total                               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

