Placement Empowerment Program
Cloud Computing and DevOps Centre

Host a Static Website on a Cloud VM Install Apache/Nginx on your cloud VM and host a simple HTML website

aws

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Introduction

➢ Hosting a static website on a cloud virtual machine (VM) provides a scalable and cost effective solution for deploying simple web pages. AWS offers flexible options for setting up a web server using Apache or Nginx on an EC2 instance. This guide provides step-by-step instructions on configuring an EC2 instance to host a static HTML website using either Apache or Nginx.

Steps to Host a Static Website in AWS

1. Launch an EC2 Instance

➢ Log in to AWS Console
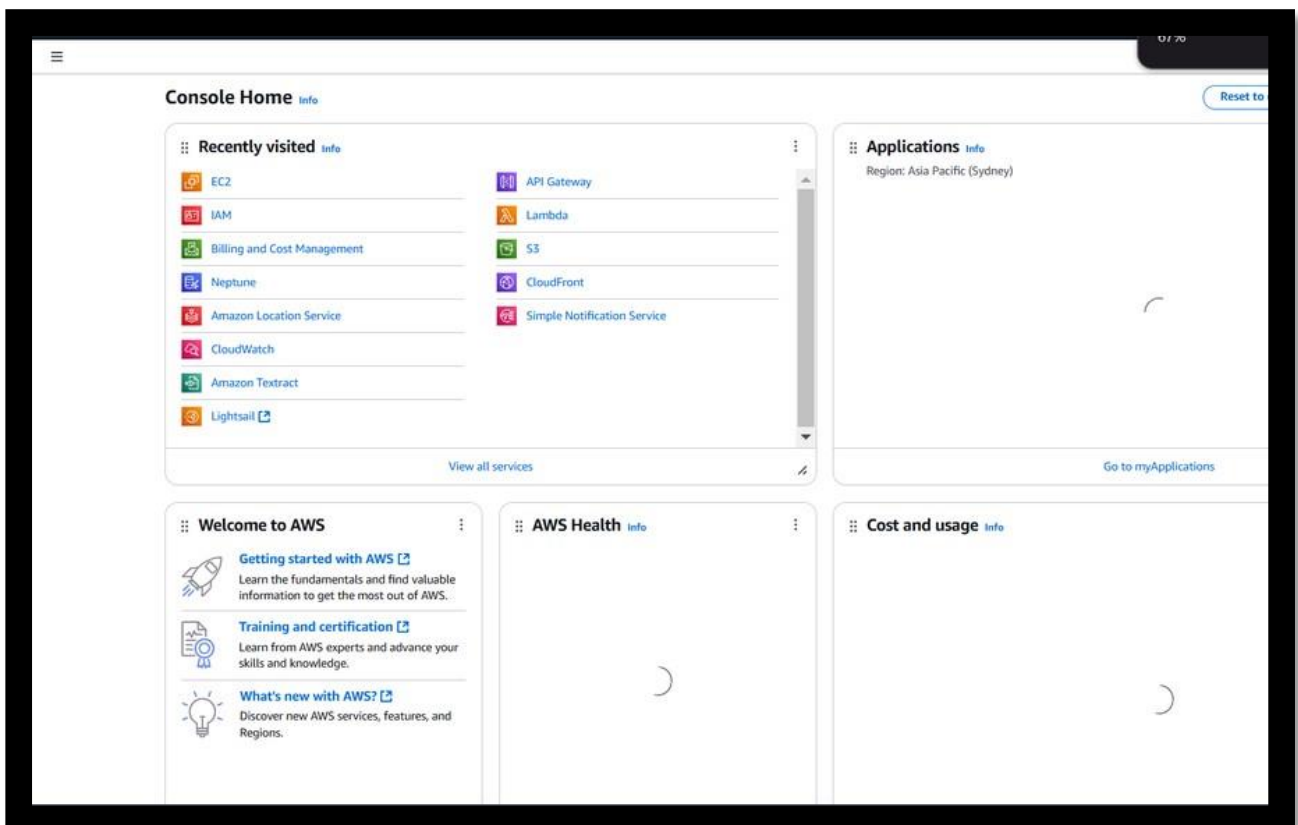
Create a New EC2 Instance:

- ➢ Click on Launch Instance.
- ➢ Choose an Amazon Machine Image (AMI) (e.g., Amazon Linux, Ubuntu).
- ➢ Select an appropriate instance type (e.g., t2.micro for free tier users).
- ➢ Configure instance details and enable HTTP/HTTPS traffic under Security Group settings.
- ➢ Launch the instance and download the key pair for SSH access.
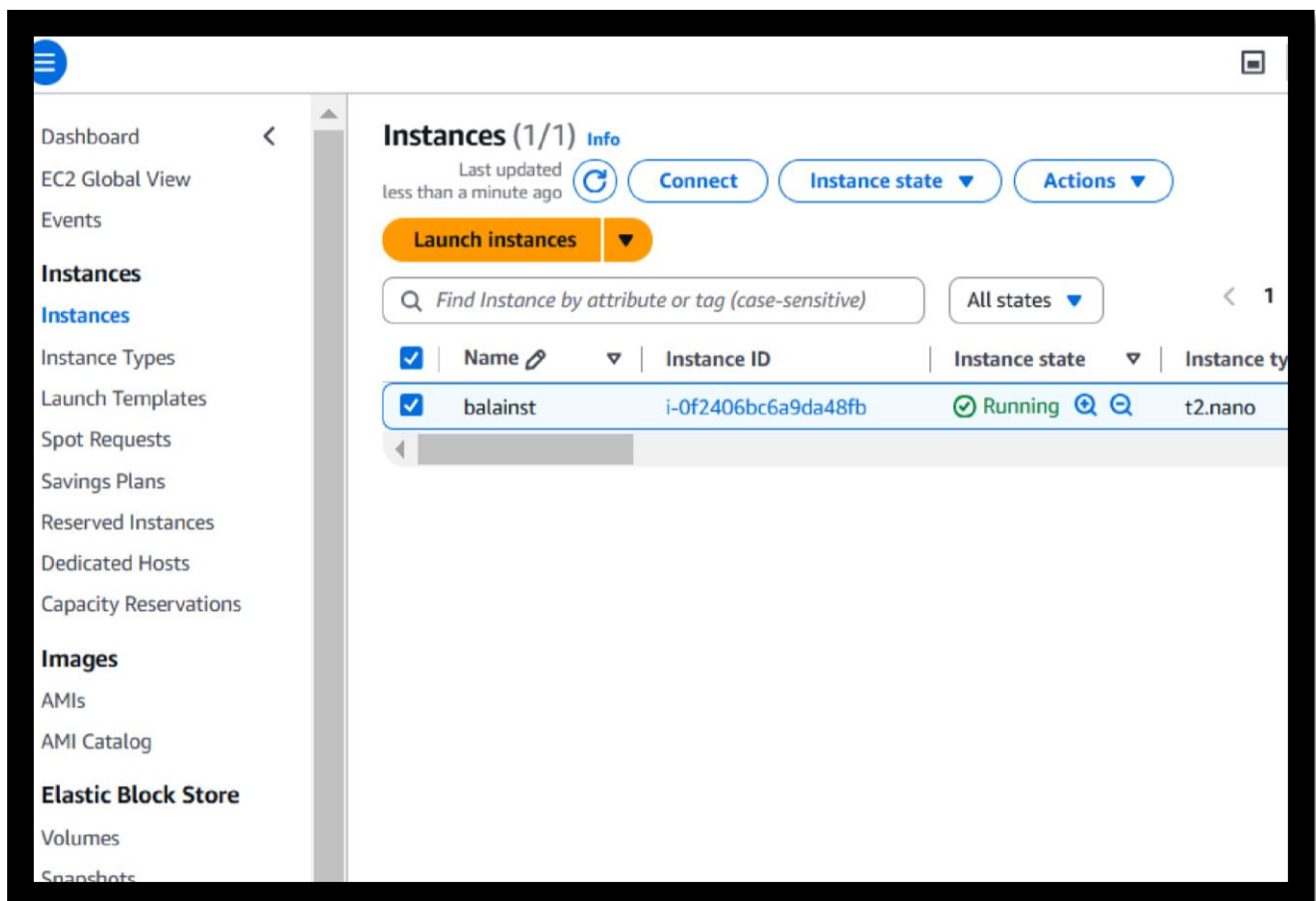
2. Connect to the Windows Instance and Install Apache

- ➢ Connect to the EC2 Windows Instance.
- ➢ Open Remote Desktop Connection (RDP) on your local machine.
- ➢ Use the downloaded key pair to retrieve the Administrator password from the EC2 console.
- ➢ Enter the public IP of your instance and login with Administrator credentials.

Install Apache Web Server:

- ➢ Download the latest Apache HTTP Server for Windows from the Apache Lounge.
- ➢ Extract the Apache files to C:\Apache24 (or your preferred location).

Open Command Prompt as Administrator and navigate to the Apache bin directory:

```
C:\Users\ASUS> cd C:\Apache24\bin
```

```
PS C:\Apache24\bin> httpd -k install
```

```
PS C:\Apache24\bin> httpd -k start
```

3. Deploy a Static Website

Navigate to Apache Web Directory:

➢   Open File Explorer and go to C:\Apache24\htdocs.

➢   Upload HTML Files.

➢   Create an index.html file inside C:\Apache24\htdocs and add the following content:

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <!DOCTYPE html>
    <html lang="en">
    <head>
        <meta charset="UTF-8">
        <meta name="viewport" content="width=device-width, initial-scale=1.0">
        <title>My Apache Hosted Website</title>
        <style>
            body {
                text-align: center;
                background-color: #f0f8ff;
                font-family: Arial, sans-serif;
                padding: 50px;
            }
            h1 {
                color: #ff4500;
                font-size: 50px;
                text-shadow: 2px 2px 5px rgba(0, 0, 0, 0.3);
            }
            p {
                font-size: 24px;
                color: #008000;
                font-weight: bold;
            }
        </style>
    </head>
    <body>
        <h1>BALASUBRAMANIAN.V</h1>
        <p>Hosted a Sample Website using Apache</p>
    </body>
    </html>
```

- ➢ Configure Apache to Serve Your Website.
- ➢ Open C:\Apache24\conf\httpd.conf using a text editor.
- ➢ Locate the DocumentRoot directive and ensure it points to C:\Apache24\htdocs.
- ➢ Restart Apache using:

```
PS C:\Apache24\bin> httpd -k restart
```

4. Configure Security Group and Test Website

- ➢ Modify Security Group.
- ➢ Allow inbound HTTP (port 80) and HTTPS (port 443) traffic to access the website.
- ➢ Test Your Website.
- ➢ Open a web browser and enter your EC2 instance's public IP address.
- ➢ If configured correctly, your static website should load successfully.

Conclusion:

- ➢ Hosting a static website on an AWS EC2 Windows instance using Apache is a straightforward process. By following these steps, you can deploy a scalable web server in minutes. Regularly update and secure your server to ensure optimal performance and security.

THANK YOU!