

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.***



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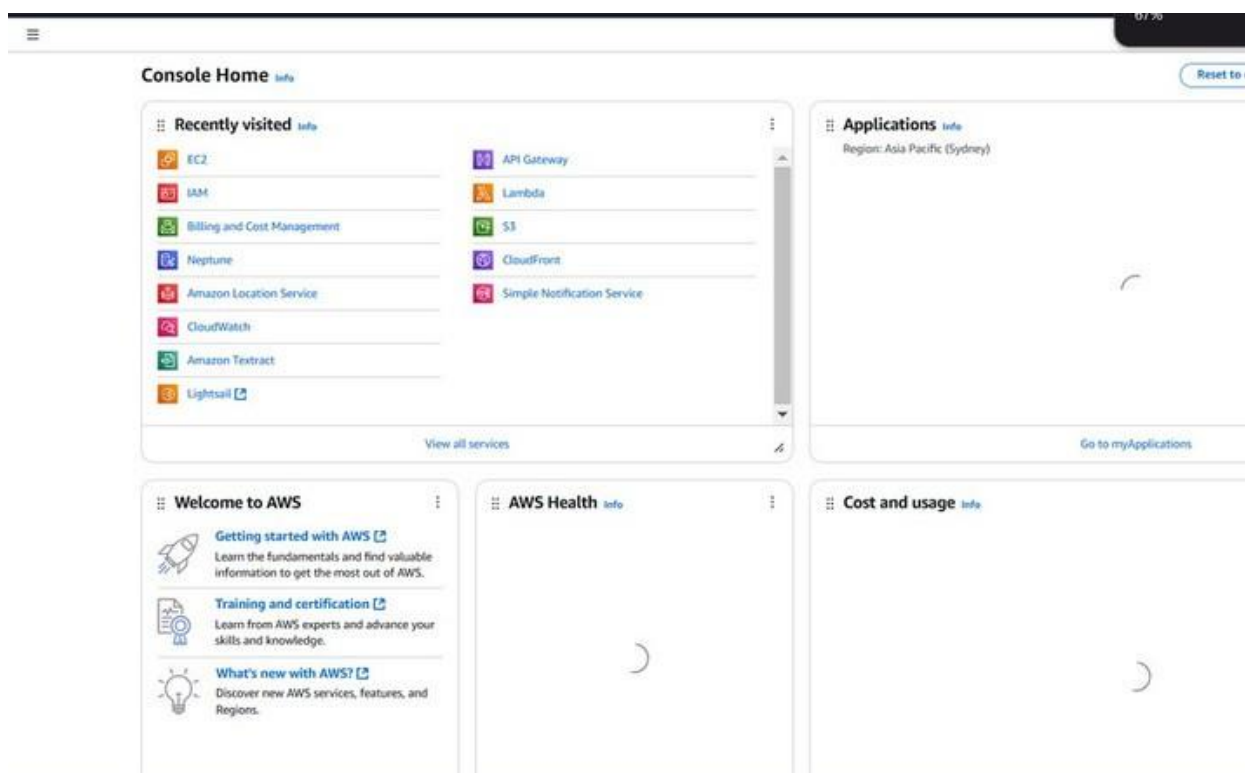
Introduction

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.*

The screenshot shows the AWS Management Console for the 'ap-southeast-2' region. The main content area displays the 'Instances (1/1)' page. The instance 'balainst' is listed with the ID 'i-0f2406bc6a9da48fb' and is in the 'Running' state. The instance type is 't2.nano'. The console also shows a 'Launch instances' button and a search bar for finding instances by attribute or tag.

Name	Instance ID	Instance state	Instance type
balainst	i-0f2406bc6a9da48fb	Running	t2.nano

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:*

```
<!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 ensure optimal performance and security.