 

**Placement Empowerment Program**

***Cloud Computing and DevOps Centre***

Host a Static Website on a Cloud VMInstall Apache on your cloud VM and host a simple HTML website.

Name: Nanthini R Department: ADS



**Introduction**

Hosting a static website on a cloud virtual machine (VM) allows you to serve web pages over the internet with full control over your hosting environment. Apache HTTP Server is one of the most widely used web servers, making it a great choice for deploying static websites.

In this guide, we will install and configure Apache on an AWS EC2 virtual machine, upload a simple HTML website, and make it accessible over the internet. This setup provides a cost-effective and flexible way to deploy web content.

### ****Overview****

### The process of hosting a static website on a cloud VM involves the following steps:

### Set up a cloud virtual machine (EC2 instance) – Use AWS Free Tier to create a Linux-based VM.

### Install Apache Web Server – Set up the Apache HTTP Server to serve web content.

### Configure the Firewall – Allow HTTP (port 80) traffic to enable website access.

### Deploy a simple HTML website – Upload and serve web files using Apache.

### Test website accessibility – Verify that the site is reachable from a web browser

### Step-by-Step Overview

### Step 1: Connect to Your Windows Cloud VM

### Log in to AWS Management Console

### Go to EC2 Dashboard > Instances and find your Windows Server instance.

### Click Connect, then choose RDP Client.

### Download the Remote Desktop File (.rdp) and open it.

### 5.Enter your Administrator password (found in the EC2 dashboard under "Get Windows Password") and log in.

### Step 2: Install Apache Web Server on Windows

### Download Apache HTTP Server from the official website: https://www.apachelounge.com/download/

### Extract the downloaded ZIP file C:\Apache24.

### Open Command Prompt (cmd) as Administrator and navigate to the Apache folder:

### cd C:\Apache24\bin

### Install Apache as a Windows service:

### httpd -k install

### Start the Apache service:

### net start Apache2.4

### Open a web browser and enter http://localhost. You should see the Apache welcome page.

### Step 3: Configure Windows Firewall to Allow Web Traffic

### By default, Windows Firewall blocks HTTP traffic. You need to allow access to port 80 (HTTP):

### Open Windows Defender Firewall from the Start menu.

### Click Advanced settings > Inbound Rules.

### Click New Rule on the right-hand side.

### Select Port, then click Next.

### Choose TCP and enter 80 in the "Specific local ports" field. Click Next.

### Select Allow the connection and click Next.

### Check Domain, Private, and Public, then click Next.

### Name the rule and click Finish.

### Step 4: Deploy a Simple HTML Website

### Open File Explorer and navigate to the Apache web root directory:

### C:\Apache24\htdocs

### Delete any existing index.html file.

### Create a new file named index.html.

### Open index.html in Notepad and add the following sample HTML:

### html

### <!DOCTYPE html>

### <html>

### <head>

### <title>My Cloud Website</title>

### </head>

### <body>

### <h1>Welcome to My Static Website!</h1>

### <p>Hosted on a Windows Cloud VM using Apache.</p>

### </body>

### </html>

### Save the file.

### Step 5: Restart Apache and Test the Website

### Open Command Prompt as Administrator and restart Apache:

### net stop Apache2.4

### net start Apache2.4

### Open a web browser and visit:

### cpp

### http://<your-public-ip>

### You should see the "Welcome to My Static Website!" message displayed.

**Outcome**

Installed Apache Web Server on a Windows cloud VM.  
 Configured Windows Firewall and AWS Security Groups to allow HTTP traffic.  
 Uploaded and hosted a simple HTML website.  
 Tested website accessibility from a web browser.