St. JOSEPH'S GROUP OF INSTITUTIONS
OMR, CHENNAI - 119

Placement Empowerment Program

Cloud Computing and DevOps Centre

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

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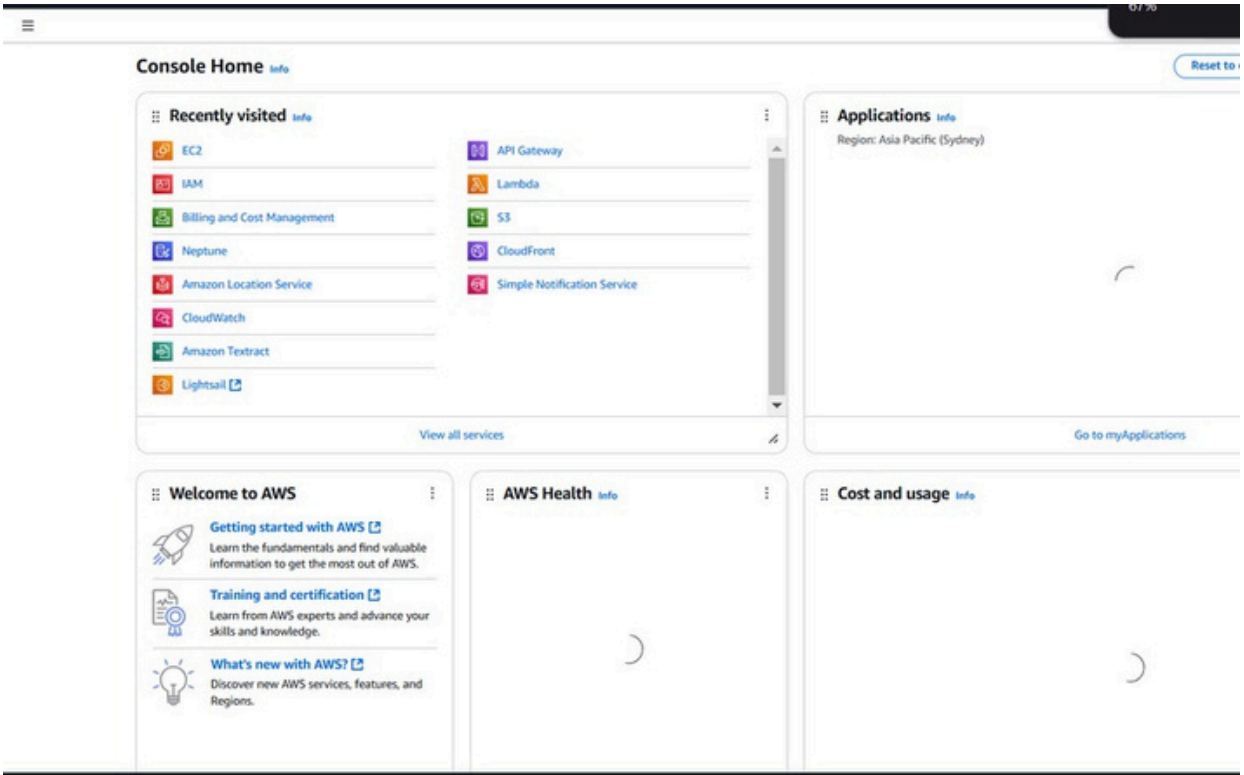
Introduction

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.

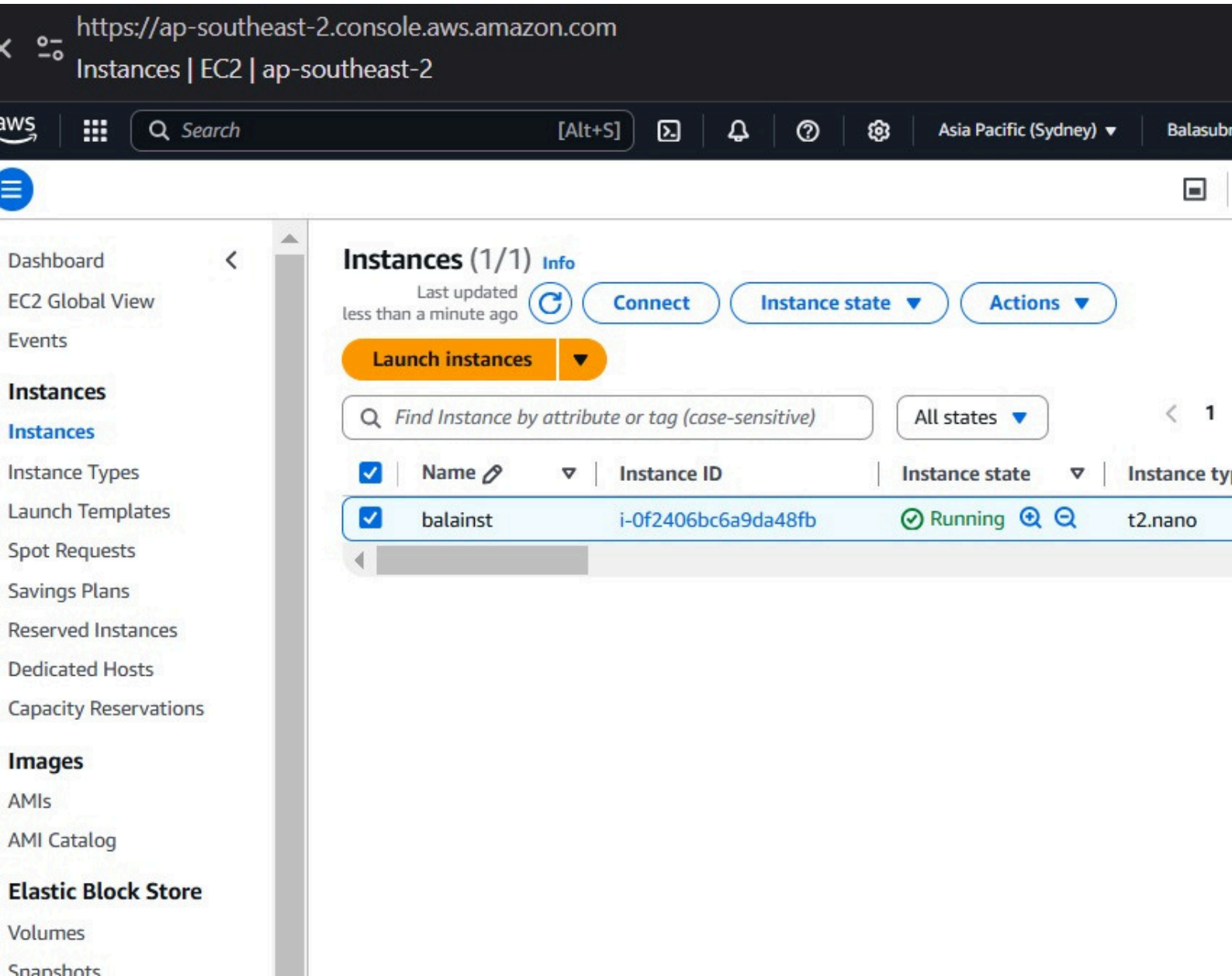
Steps to Host a Static Website in AWS

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.***



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 your update and ensure optimal performance and security.