

Placement Empowerment Program

Cloud Computing and DevOps Centre

Host a Static Website Locally: Set Up a Local Server
Apache and Host a Simple HTML page with your
name

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Introduction and Overview

In this POC, we will learn how to host a static website locally using the Apache HTTP Server. This process involves setting up a local web server, configuring it correctly, and hosting a simple HTML page. By following these steps, you'll get hands-on experience with configuring and running a local Apache server, which is a foundational skill for web hosting and server management.

To host a static website locally, you'll set up an Apache server on your computer. This allows you to serve HTML pages without needing an external host. First, you'll install Apache, then create a simple HTML page (e.g., with your name displayed). Once that's done, you'll configure Apache to serve your page, and voilà – your static website will be up and running on your local machine! This is a great way to practice web development before deploying your site online.

Objective

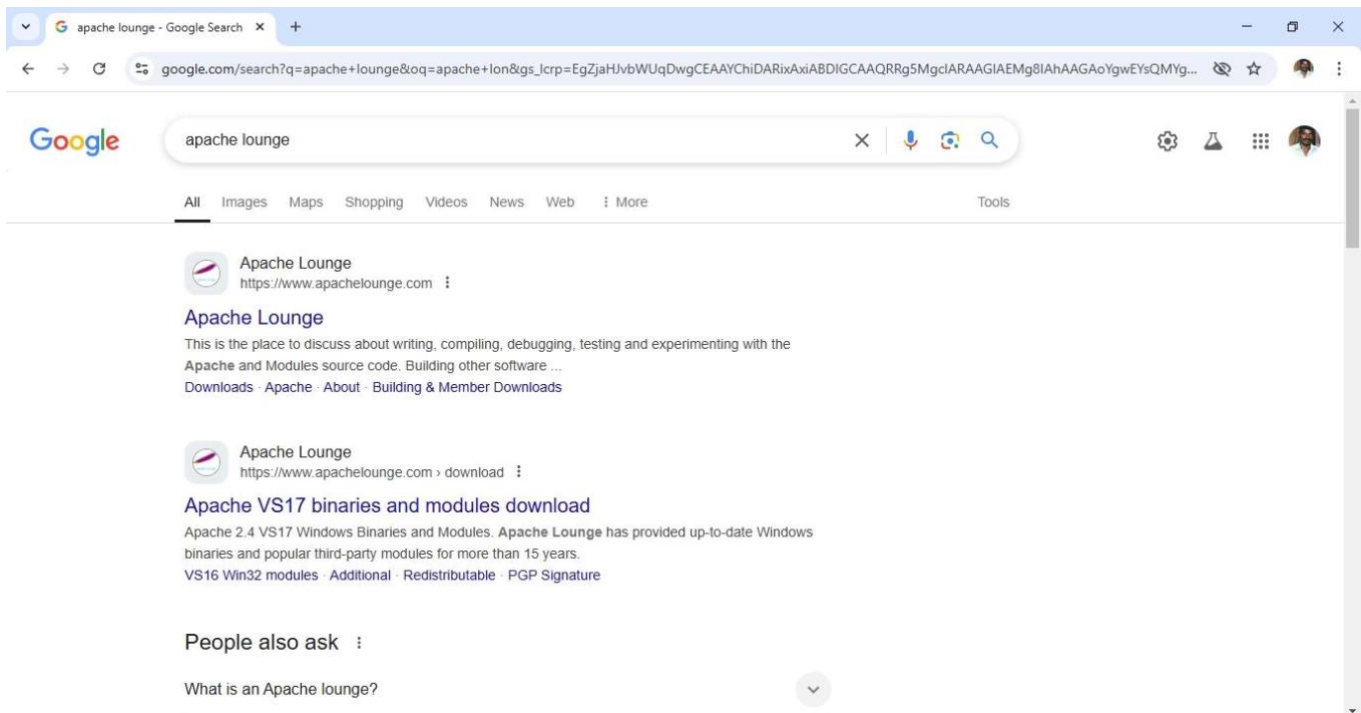
The goal of this project is to:

1. Set up a local web server using Apache.
2. Configure the server to host static files.
3. Create and host a simple HTML page displaying your name.

Step-by-Step Overview

Step 1:

Search for "Apache Lounge" on Google and click the first link to access the official website.



Step 2 :

Click on the "Downloads" option located on the left-hand side of the Apache Lounge website.

The screenshot shows the Apache Lounge website homepage. The header features the Apache logo and the text "POWERED BY APACHE" and "Apache Lounge Webmasters". A navigation menu on the left includes links for About, Forum Index, Downloads, Search, Register, Log in, RSS, and X. The main content area contains a search bar, a welcome message, and a "Forum Index" table. The table lists various forum categories with their respective post counts and last post dates.

	Posts	Last Post
News & Hangout News and announcements and for anything else which doesn't fit in the forums below. Site feedback, random talk, whatever, are welcome. General chat about anything that goes, a good place to introduce yourself and say hi, tell a Joke, or just relax.	1957	Sun 26 Jan '25 4:19 Stray78
Apache Need help or have questions about the Apache Server ? Put them here, no question too simple! And please help fellow Apacherians. Here goes 2.2 as well as 2.4. For building, see below.	22109	Tue 28 Jan '25 11:01 RodneyReor
Third-party Modules This is the place to discuss third-party modules like mod_security, mod_jk etc.	4313	Fri 24 Jan '25 13:13 admin
Other Software Discuss installation and issues with other software, like Perl, Php, Mysql, Tomcat etc. For example, installing PHP under Apache goes here as well as installing a CMS like Joomla, Wordpress, a Forum like phpBB etc. For programming/coding see forum below.	5941	Tue 28 Jan '25 12:18 Kreten8
Coding & Scripting Corner Forum for discussing coding in Perl, PHP, HTML, JavaScript, Ajax etc. Also when you made/use a script you want to share, post it here.	1194	Wed 01 Jan '25 6:21 Stray78
How-to's & Documentation & Tips Do not hesitate to post your knowledge! Do not post issues here.	561	Fri 24 Jan '25 15:37 tangent

Step 3 :

Click on the link "Apache 2.4.62-240904 Win64" (Windows version), download the file, and extract all its contents.

The screenshot shows the Apache Lounge website download page. The header features the Apache logo and the text "POWERED BY APACHE" and "Apache Lounge Webmasters". A navigation menu on the left includes links for Home, VS17, and Additional. The main content area contains a search bar, a welcome message, and a "Downloads" section. The "Downloads" section lists various download links for Apache 2.4.62-240904 Win64, including a link to the "Apache 2.4.62-240904 Win64" download.

Apache 2.4.62-240904 Win64

Info & Changelog

[httpd-2.4.62-240904-win64-VS17.zip](#) 22 Jan '25 11.787K
PGP Signature (Public PGP key), SHA1-SHA512 Checksums

Apache 2.4.62-240904 Win32

[httpd-2.4.62-240904-win32-VS17.zip](#) 22 Jan '25 10.589K
PGP Signature (Public PGP key), SHA1-SHA512 Checksums

To be sure that a download is intact and has not been tampered with, use PGP, see [PGP Signature](#)

Step 4 :

Open Command Prompt as Administrator (Windows + R, type cmd, right-click and select 'Run as Administrator') and use the command `cd C:\path\to\apache\bin` to set the path to the Apache bin folder.

```
C:\Users\HP\Downloads\httpd-2.4.62-240904-win64-VS17\Apache24>cd C:\Users\HP\Downloads\httpd-2.4.62-240904-win64-VS17\Apache24\bin
```

Step 5 :

Then Run the installation command :

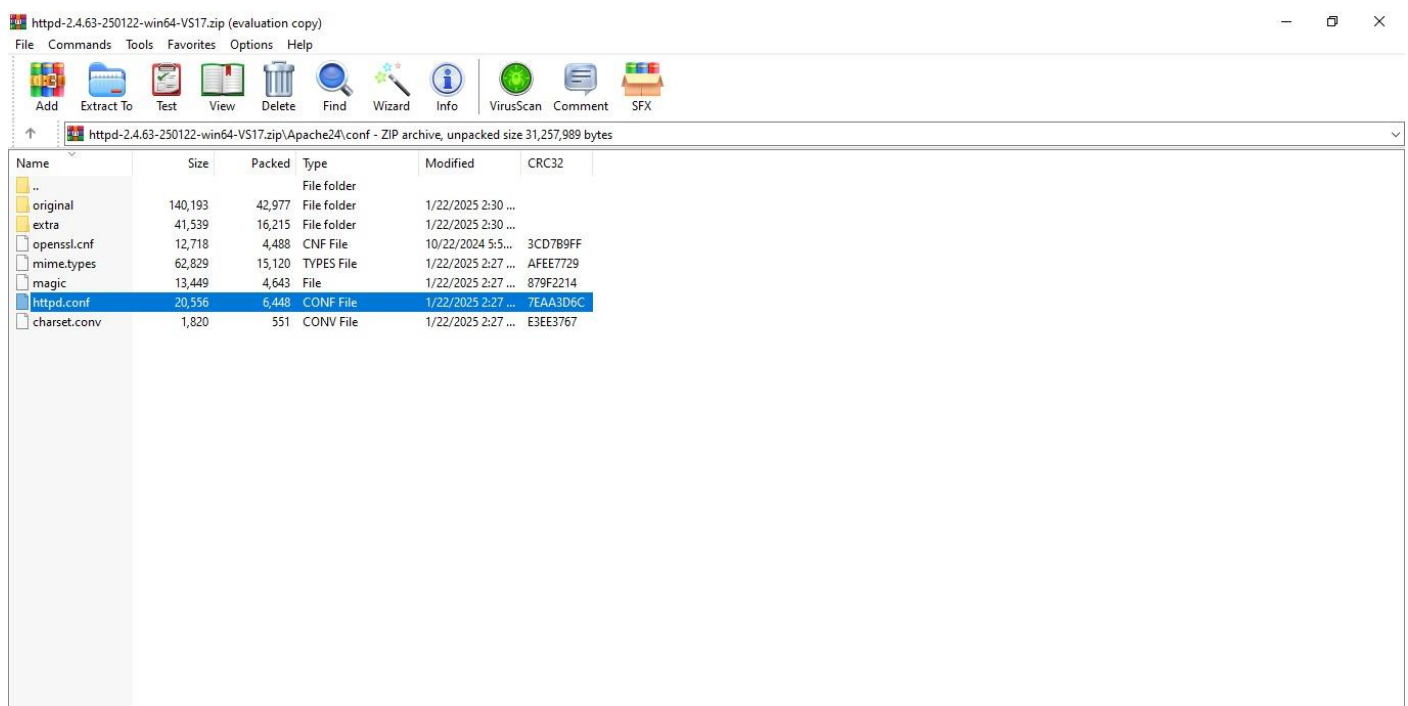
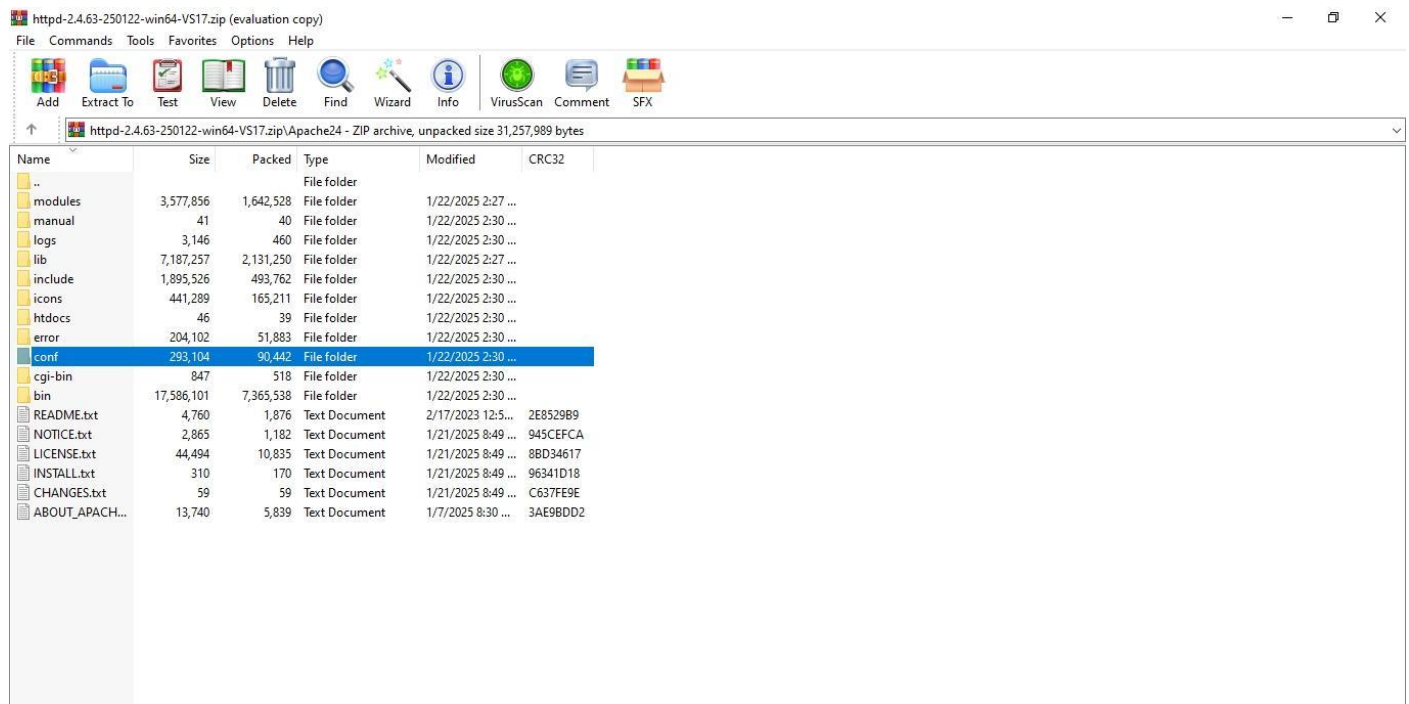
httpd.exe -k install

```
C:\Users\HP\Downloads\httpd-2.4.62-240904-win64-VS17\Apache24\bin>httpd.exe -k install
Installing the 'Apache2.4' service
The 'Apache2.4' service is successfully installed.
```

Step 6 :

Navigate to the Apache folder you downloaded, go to the **conf** folder, and right-click on the httpd.conf file; select 'Edit with Notepad'

(Apache/conf/httpd.conf)



Step 7 :

Inside the **httpd.conf** file, replace the content with the provided configuration. Ensure you update the SRVROOT directive with your Apache installation path. This configuration defines the server's root directory, listening port, modules,

document root for serving web files, logging paths, and basic permissions, ensuring Apache serves content correctly from the specified htdocs directory.

```
# Define SRVROOT
Define SRVROOT "C:/Users/Hi/Downloads/httpd-2.4.62-240904-win64-VS17/Apache24"

# Ensure the path resolves correctly for DocumentRoot
ServerRoot "${SRVROOT}"

# Listening Port
Listen 80

# ServerName (optional, but recommended for local testing)
ServerName localhost:80

# LoadModules (essential modules)
LoadModule access_compat_module modules/mod_access_compat.so
LoadModule actions_module modules/mod_actions.so
LoadModule alias_module modules/mod_alias.so
LoadModule allowmethods_module modules/mod_allowmethods.so
LoadModule auth_basic_module modules/mod_auth_basic.so
LoadModule authn_core_module modules/mod_authn_core.so
LoadModule authz_core_module modules/mod_authz_core.so
LoadModule dir_module modules/mod_dir.so
LoadModule log_config_module modules/mod_log_config.so
LoadModule mime_module modules/mod_mime.so
LoadModule rewrite_module modules/mod_rewrite.so
LoadModule setenvif_module modules/mod_setenvif.so

# DocumentRoot and Directory configuration
DocumentRoot "${SRVROOT}/htdocs"
<Directory "${SRVROOT}/htdocs">
    Options Indexes FollowSymLinks
    AllowOverride None
    Require all granted
</Directory>

# Logs (you can adjust the paths as needed)
ErrorLog "${SRVROOT}/logs/error.log"
CustomLog "${SRVROOT}/logs/access.log" common
```

```
# Additional settings for MIME types, DirectoryIndex, etc.
<IfModule mime_module>
    TypesConfig conf/mime.types
    AddType application/x-compress .Z
    AddType application/x-gzip .gz .tgz
</IfModule>

<IfModule dir_module>
    DirectoryIndex index.html
</IfModule>
```

Step 8 :

Open Command Prompt and type the command **httpd.exe -t** to test the configuration file. If the configuration is correct, you should see '**Syntax OK**'.

```
C:\Users\HP\Downloads\httpd-2.4.62-240904-win64-VS17\Apache24\bin>httpd.exe -t
Syntax OK
```

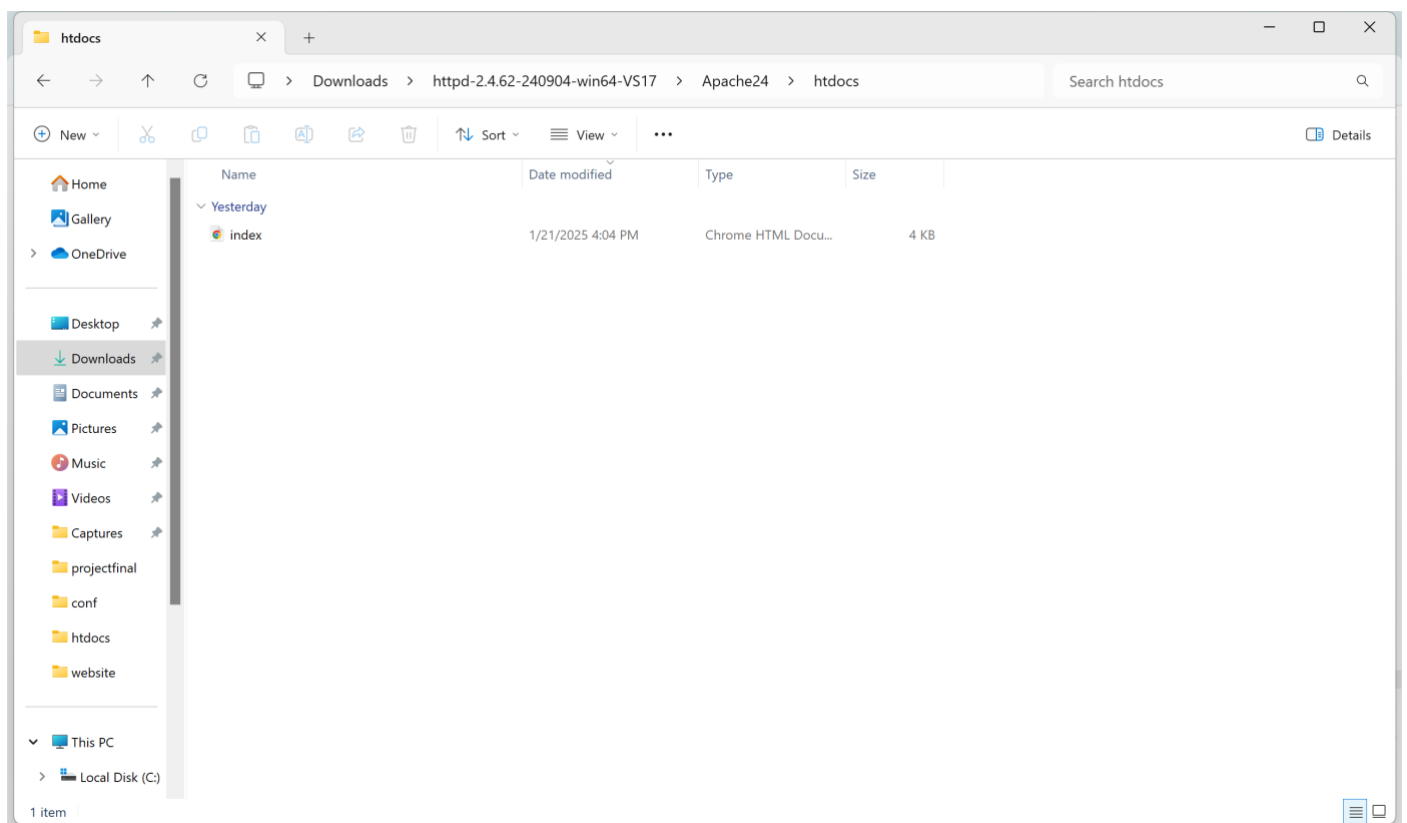
Step 9 :

Run the command **httpd.exe -k start** to start the Apache server.

```
C:\Users\HP\Downloads\httpd-2.4.62-240904-win64-VS17\Apache24\bin>httpd.exe -k start
```

Step10:

Go to the Apache folder, navigate to the **htdocs** folder, and find the **index.html** file. Right-click on it and select 'Edit with Notepad'.



Step 11 :

Create a simple model to display your name in HTML (you may optionally add CSS for styling).



```
Untitled - Notepad
File Edit Format View Help
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>AWS Academy Cloud Foundations Completion</title>
</head>
<body>
  <div class="container">
    <h1>HELLO, THIS IS KEERTHIKA</h1>
  </div>
</body>
</html>
```

Step 12 :

Open the Chrome browser and type **localhost/index.html** in the address bar. You should be able to see the website hosted successfully.



Expected Outcome

By completing this POC, you will:

1. Successfully configure and run an Apache server locally.

2. Host a static HTML website that displays your name.
3. Understand the basics of web server configuration and file hosting.