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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Department: INFORMATION TECHNOLOGY

Introduction

This proof of concept (POC) demonstrates how to locally host a static website using the Apache HTTP Server. The process includes setting up a local web server, configuring it properly, and hosting a basic HTML page. By completing these steps, you will gain practical experience in configuring and managing an Apache server, a fundamental skill for web hosting and server administration.

Objective

The objective of this project is to:

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

Importance

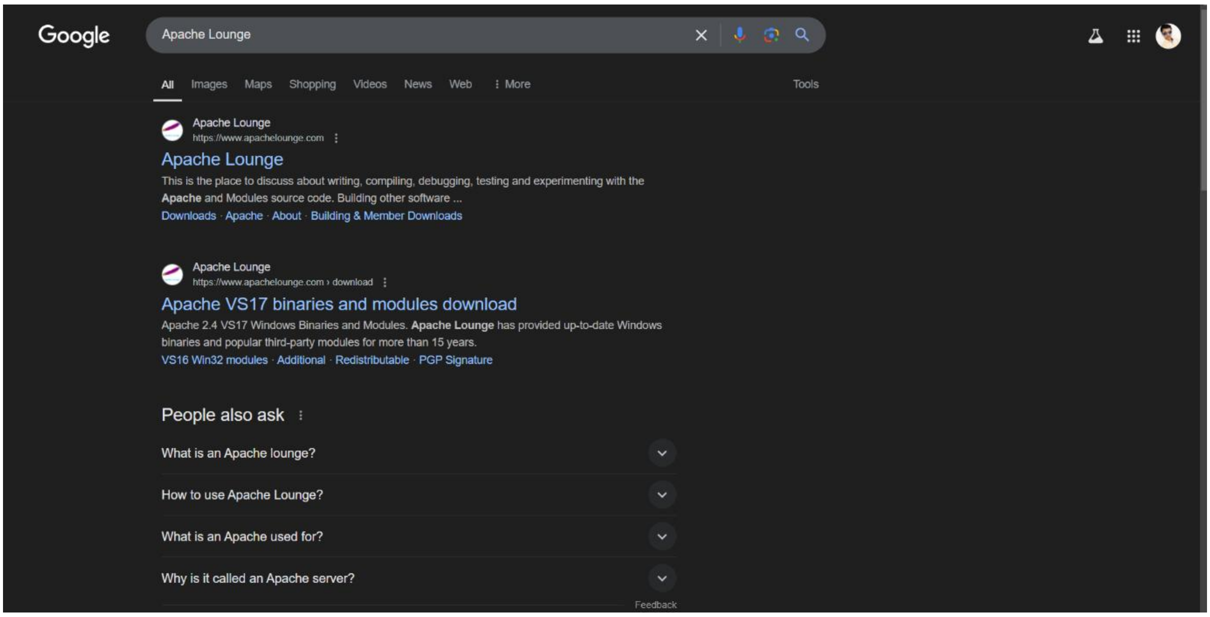
Local hosting is a fundamental skill for developers, enabling them to test and refine web applications in a controlled environment. It provides several key benefits:

- **Hands-On Learning:** Develop practical experience with server setup and configuration.
- **Testing Environment:** Safely test and debug websites before deploying them to a live server.
- **Offline Development:** Work on web projects without relying on an internet connection.

Step-by-step Overview

Step 1:

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



Apache Lounge
https://www.apachelounge.com

Apache Lounge

This is the place to discuss about writing, compiling, debugging, testing and experimenting with the **Apache** and Modules source code. Building other software ...

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Apache Lounge
https://www.apachelounge.com › download

Apache VS17 binaries and modules download

Apache 2.4 VS17 Windows Binaries and Modules. **Apache Lounge** has provided up-to-date Windows binaries and popular third-party modules for more than 15 years.

VS16 Win32 modules · Additional · Redistributable · PGP Signature

People also ask

What is an Apache lounge?

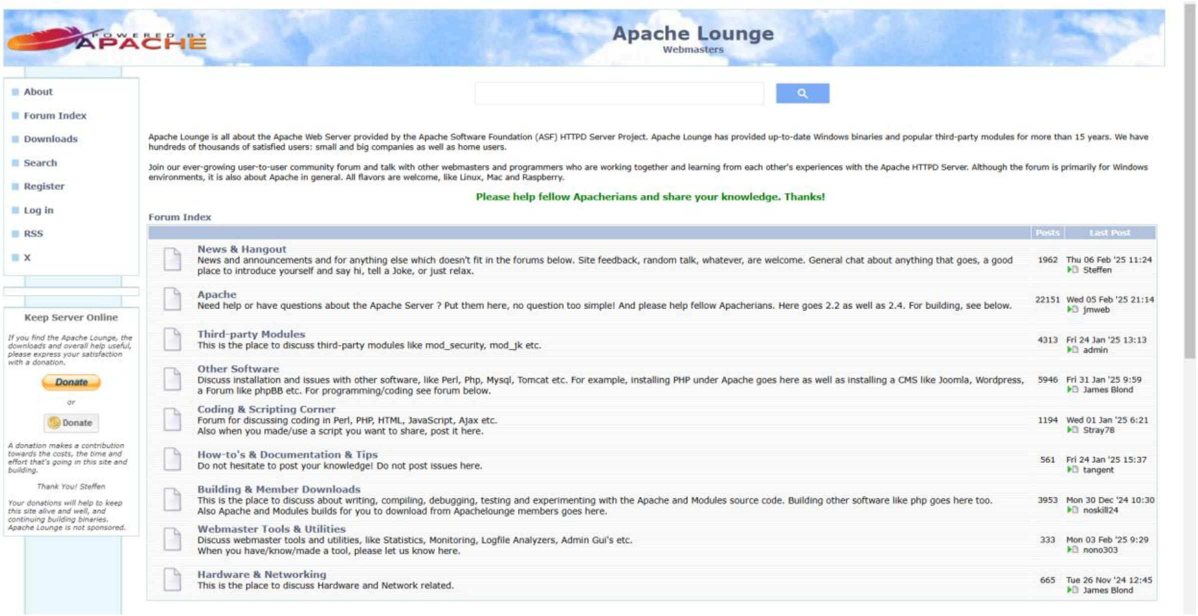
How to use Apache Lounge?

What is an Apache used for?

Why is it called an Apache server?

Step 2:

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



Keep Server Online

If you find the Apache Lounge, the downloads and overall help useful, please express your satisfaction with a donation.

A donation makes a contribution towards the costs, the time and effort that's going in this site and building.

Thank You! Steffen

Your donations will help to keep this site alive and well, and continuing building binaries. Apache Lounge is not sponsored.

Apache Lounge is all about the Apache Web Server provided by the Apache Software Foundation (ASF) HTTPD Server Project. Apache Lounge has provided up-to-date Windows binaries and popular third-party modules for more than 15 years. We have hundreds of thousands of satisfied users: small and big companies as well as home users.

Join our ever-growing user-to-user community forum and talk with other webmasters and programmers who are working together and learning from each other's experiences with the Apache HTTPD Server. Although the forum is primarily for Windows environments, it is also about Apache in general. All flavors are welcome, like Linux, Mac and Raspberry.

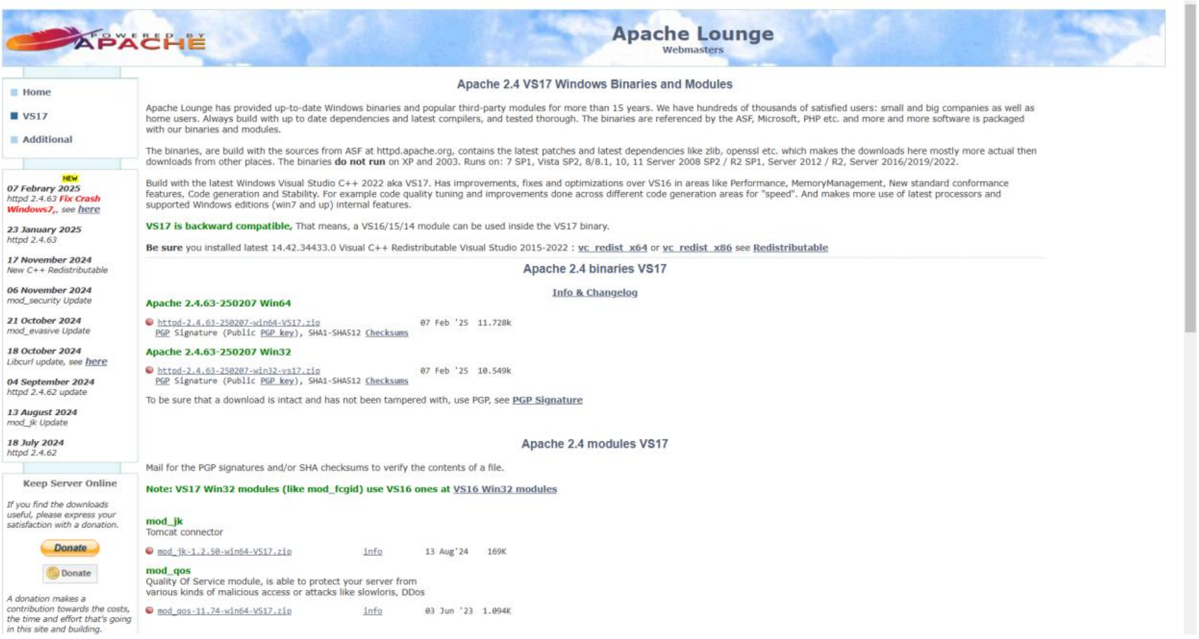
Please help fellow Apacherians and share your knowledge. Thanks!

Forum Index

	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.	1962	Thu 06 Feb '25 11:24 Steffen
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.	22151	Wed 05 Feb '25 21:14 jmweb
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.	5946	Fri 31 Jan '25 9:59 James Blond
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
Building & Member Downloads This is the place to discuss about writing, compiling, debugging, testing and experimenting with the Apache and Modules source code. Building other software like php goes here too. Also Apache and Modules builds for you to download from Apachelounge members goes here.	3953	Mon 30 Dec '24 10:30 noskill24
Webmaster Tools & Utilities Discuss webmaster tools and utilities, like Statistics, Monitoring, Logfile Analyzers, Admin Gui's etc. When you have/know/made a tool, please let us know here.	333	Mon 03 Feb '25 9:29 nono303
Hardware & Networking This is the place to discuss Hardware and Network related.	665	Tue 26 Nov '24 12:45 James Blond

Step 3:

- Download **"Apache 2.4.62-240904 Win64"** (Windows version).
- Extract all its contents to a preferred location on your system.



Apache Lounge
Webmasters

Apache 2.4 VS17 Windows Binaries and Modules

Apache Lounge has provided up-to-date Windows binaries and popular third-party modules for more than 15 years. We have hundreds of thousands of satisfied users: small and big companies as well as home users. Always build with up to date dependencies and latest compilers, and tested thorough. The binaries are referenced by the ASF, Microsoft, PHP etc. and more and more software is packaged with our binaries and modules.

The binaries, are build with the sources from ASF at httpd.apache.org, contains the latest patches and latest dependencies like zlib, openssl etc. which makes the downloads here mostly more actual then downloads from other places. The binaries **do not run** on XP and 2003. Runs on: 7 SP1, Vista SP2, 8/8.1, 10, 11 Server 2008 SP2 / R2 SP1, Server 2012 / R2, Server 2016/2019/2022.

Build with the latest Windows Visual Studio C++ 2022 aka VS17. Has improvements, fixes and optimizations over VS16 in areas like Performance, MemoryManagement, New standard conformance features, Code generation and Stability. For example code quality tuning and improvements done across different code generation areas for "speed". And makes more use of latest processors and supported Windows editions (win7 and up) internal features.

VS17 is backward compatible, That means, a VS16/15/14 module can be used inside the VS17 binary.

Be sure you installed latest 14.42.34433.0 Visual C++ Redistributable Visual Studio 2015-2022 : vc_redist_x64 or vc_redist_x86 see **Redistributable**

Apache 2.4 binaries VS17

Info & Changelog

Apache 2.4.63-250207 Win64

```
● httpd-2.4.63-250207-win64-VS17.zip          07 Feb '25  11.728k
  PGP Signature (Public PGP key), SHA1-SHA512 Checksums
```

Apache 2.4.63-250207 Win32

```
● httpd-2.4.63-250207-win32-vs17.zip          07 Feb '25  10.549k
  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**

Apache 2.4 modules VS17

Mail for the PGP signatures and/or SHA checksums to verify the contents of a file.

Note: VS17 Win32 modules (like mod_fcgid) use VS16 ones at VS16 Win32 modules

mod_jk
Tomcat connector

```
● mod_jk-1.2.50-win64-VS17.zip        info        13 Aug'24    169K
```

mod_qos
Quality Of Service module, is able to protect your server from
various kinds of malicious access or attacks like slowloris, DDos

```
● mod_qos-11.74-win64-VS17.zip        info        03 Jun '23  1.094K
```

07 Febrary 2025
httpd 2.4.63 Fix Crash Windows7,, see here

23 January 2025
httpd 2.4.63

17 November 2024
New C++ Redistributable

06 November 2024
mod_security Update

21 October 2024
mod_evasive Update

18 October 2024
Libcurl update, see here

04 September 2024
httpd 2.4.62 update

13 August 2024
mod_jk Update

18 July 2024
httpd 2.4.62

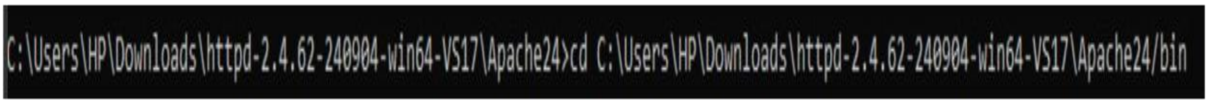
Keep Server Online

If you find the downloads useful, please express your satisfaction with a donation.

A donation makes a contribution towards the costs, the time and effort that's going in this site and building.

Step 4:

- Open **Command Prompt as Administrator** (Press **Windows + R**, type cmd, right-click, and select **'Run as Administrator'**).
- Set the path to the Apache bin folder using:

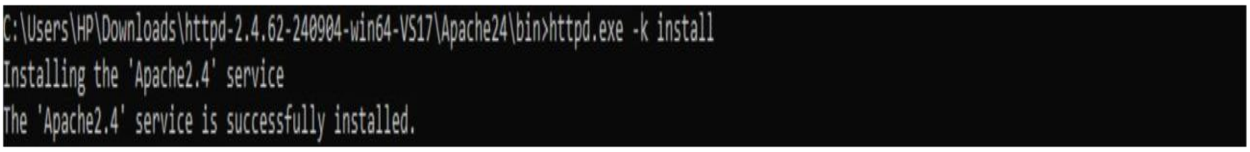


```
C:\Users\HP\Downloads\httpd-2.4.62-240904-win64-VS17\Apache24>cd C:\Users\HP\Downloads\httpd-2.4.62-240904-win64-VS17\Apache24/bin
```

Step 5:

Run the following command to install Apache:

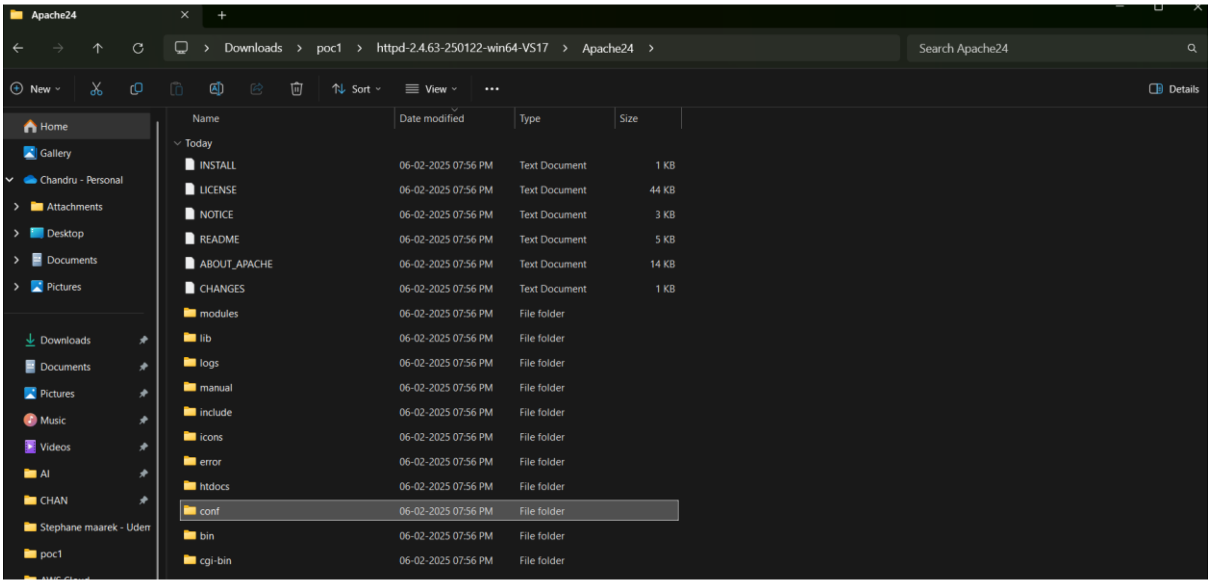
httpd.exe -k install



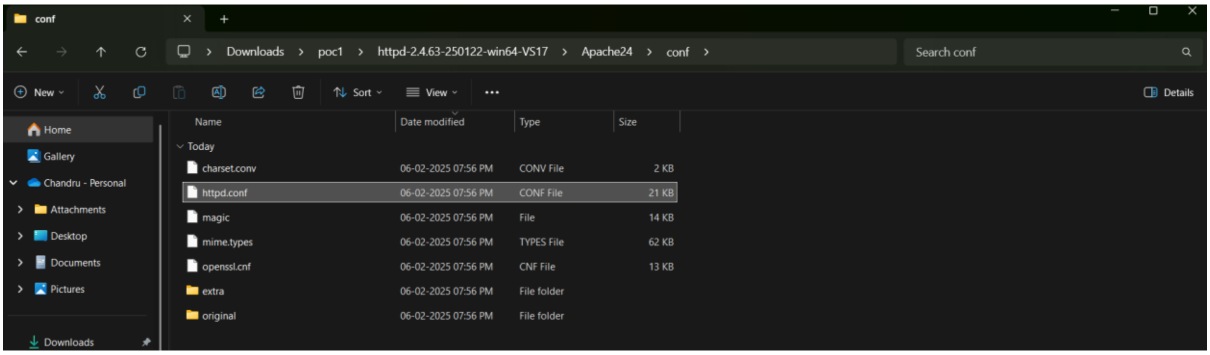
```
C:\Users\HP\Downloads\httpd-2.4.62-240904-win64-VS17\Apache24\bin>httpd.exe -k install
Installing the 'Apache2.4' service
The 'Apache2.4' service is successfully installed.
```

Step 6:

- Navigate to the **Apache installation folder**, open the conf folder, and locate httpd.conf.
- Right-click on httpd.conf and select **'Edit with Notepad'**.



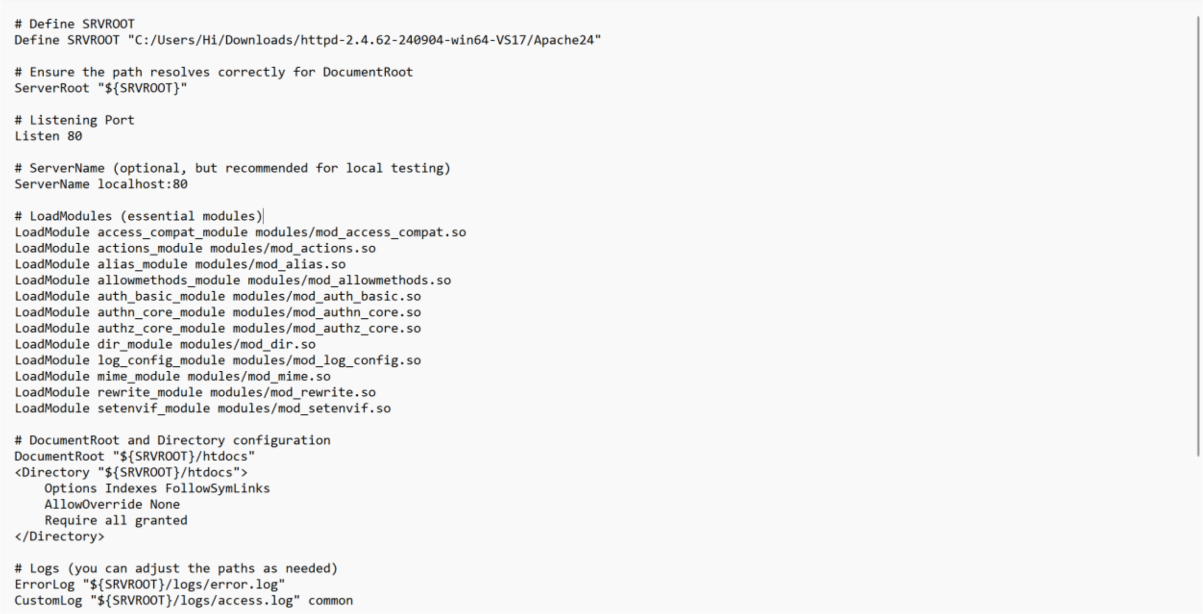
Name	Date modified	Type	Size
Today			
INSTALL	06-02-2025 07:56 PM	Text Document	1 KB
LICENSE	06-02-2025 07:56 PM	Text Document	44 KB
NOTICE	06-02-2025 07:56 PM	Text Document	3 KB
README	06-02-2025 07:56 PM	Text Document	5 KB
ABOUT_APACHE	06-02-2025 07:56 PM	Text Document	14 KB
CHANGES	06-02-2025 07:56 PM	Text Document	1 KB
modules	06-02-2025 07:56 PM	File folder	
lib	06-02-2025 07:56 PM	File folder	
logs	06-02-2025 07:56 PM	File folder	
manual	06-02-2025 07:56 PM	File folder	
include	06-02-2025 07:56 PM	File folder	
icons	06-02-2025 07:56 PM	File folder	
error	06-02-2025 07:56 PM	File folder	
htdocs	06-02-2025 07:56 PM	File folder	
conf	06-02-2025 07:56 PM	File folder	
bin	06-02-2025 07:56 PM	File folder	
cgi-bin	06-02-2025 07:56 PM	File folder	



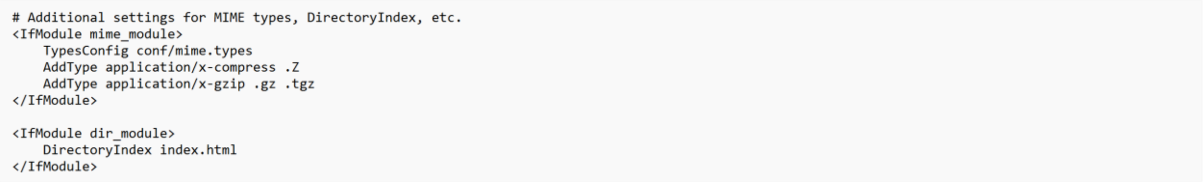
Name	Date modified	Type	Size
Today			
charset.conv	06-02-2025 07:56 PM	CONV File	2 KB
httpd.conf	06-02-2025 07:56 PM	CONF File	21 KB
magic	06-02-2025 07:56 PM	File	14 KB
mime.types	06-02-2025 07:56 PM	TYPES File	62 KB
openssl.cnf	06-02-2025 07:56 PM	CNF File	13 KB
extra	06-02-2025 07:56 PM	File folder	
original	06-02-2025 07:56 PM	File folder	

Step 7:

- Replace the content with the provided configuration.
- Update the **SRVROOT** directive with your Apache installation path.
- Ensure settings like the **server's root directory, listening port, document root, logging paths, and permissions** are correctly defined.



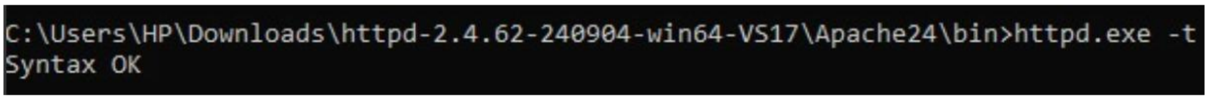
```
# Define SRVROOT
Define SRVROOT "C:/Users/Hi/Downloads/httpd-2.4.62-240904-win64-VS17/Apache24"

# 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 run: **httpd.exe -t**
- If the configuration is correct, you should see **'Syntax OK'**.

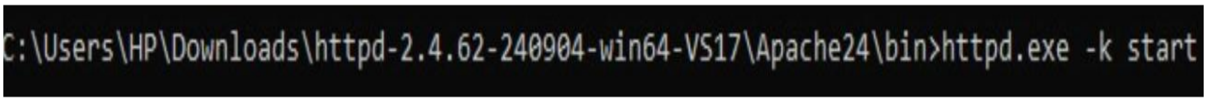


```
C:\Users\HP\Downloads\httpd-2.4.62-240904-win64-VS17\Apache24\bin>httpd.exe -t
Syntax OK
```

Step 9:

Run the following command to start Apache:

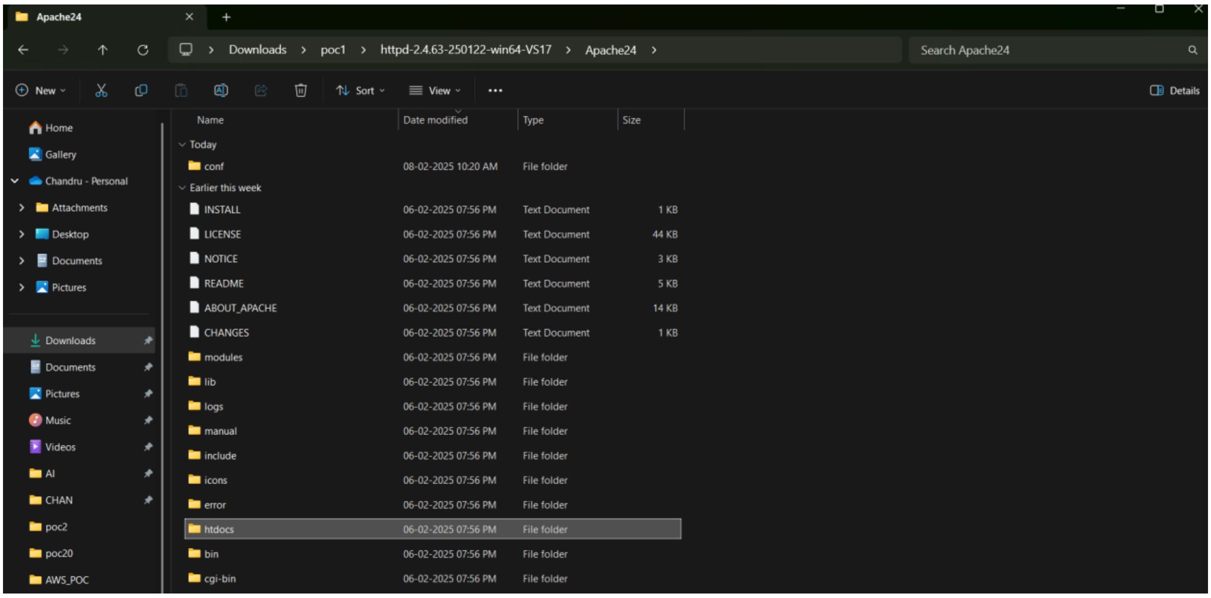
httpd.exe -k start



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

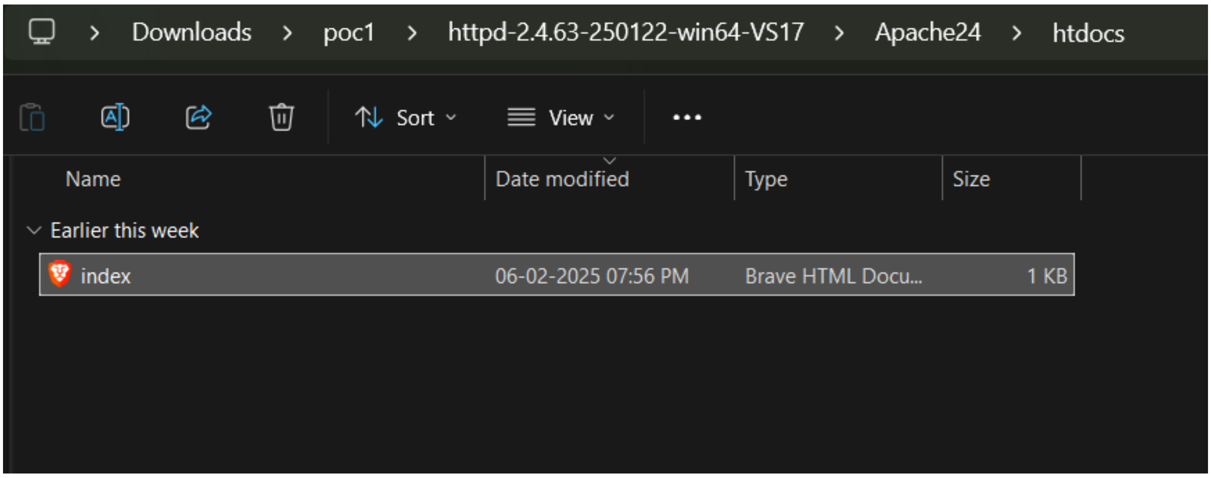
Step 10:

- Navigate to the **htdocs** folder inside your Apache directory.
- Right-click on index.html and select **'Edit with Notepad'**.



Downloads > poc1 > httpd-2.4.63-250122-win64-VS17 > Apache24 >

Name	Date modified	Type	Size
Today			
conf	08-02-2025 10:20 AM	File folder	
Earlier this week			
INSTALL	06-02-2025 07:56 PM	Text Document	1 KB
LICENSE	06-02-2025 07:56 PM	Text Document	44 KB
NOTICE	06-02-2025 07:56 PM	Text Document	3 KB
README	06-02-2025 07:56 PM	Text Document	5 KB
ABOUT_APACHE	06-02-2025 07:56 PM	Text Document	14 KB
CHANGES	06-02-2025 07:56 PM	Text Document	1 KB
modules	06-02-2025 07:56 PM	File folder	
lib	06-02-2025 07:56 PM	File folder	
logs	06-02-2025 07:56 PM	File folder	
manual	06-02-2025 07:56 PM	File folder	
include	06-02-2025 07:56 PM	File folder	
icons	06-02-2025 07:56 PM	File folder	
error	06-02-2025 07:56 PM	File folder	
htdocs	06-02-2025 07:56 PM	File folder	
bin	06-02-2025 07:56 PM	File folder	
cgi-bin	06-02-2025 07:56 PM	File folder	

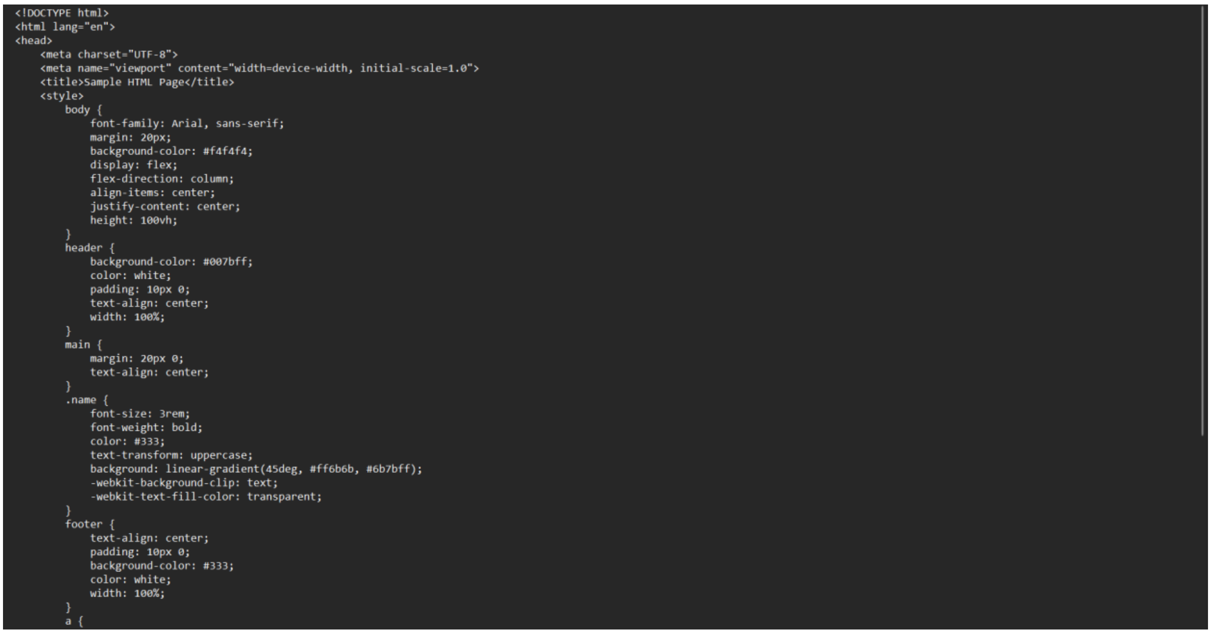


Downloads > poc1 > httpd-2.4.63-250122-win64-VS17 > Apache24 > htdocs

Name	Date modified	Type	Size
Earlier this week			
index	06-02-2025 07:56 PM	Brave HTML Docu...	1 KB

Step 11:

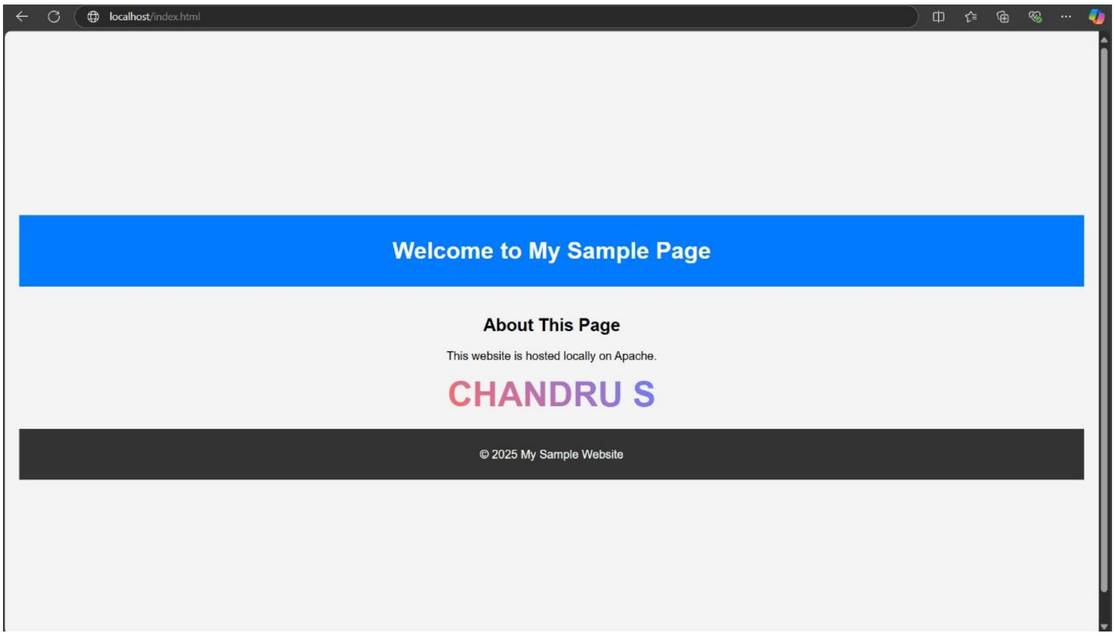
- Create a basic HTML page to display your name.
- Optionally, add **CSS** for styling.



```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Sample HTML Page</title>
    <style>
        body {
            font-family: Arial, sans-serif;
            margin: 20px;
            background-color: #f4f4f4;
            display: flex;
            flex-direction: column;
            align-items: center;
            justify-content: center;
            height: 100vh;
        }
        header {
            background-color: #007bff;
            color: white;
            padding: 10px 0;
            text-align: center;
            width: 100%;
        }
        main {
            margin: 20px 0;
            text-align: center;
        }
        .name {
            font-size: 3rem;
            font-weight: bold;
            color: #333;
            text-transform: uppercase;
            background: linear-gradient(45deg, #ff6b6b, #6b7bff);
            -webkit-background-clip: text;
            -webkit-text-fill-color: transparent;
        }
        footer {
            text-align: center;
            padding: 10px 0;
            background-color: #333;
            color: white;
            width: 100%;
        }
        a {
```

Step 12:

- Open **Google Chrome** and type: **localhost/index.html**
- You should now see your website hosted successfully.



Welcome to My Sample Page

About This Page

This website is hosted locally on Apache.

CHANDRU S

© 2025 My Sample Website

Expected Outcome

By completing this proof of concept (POC), you will:

1. Successfully set up and configure an Apache server on your local machine.
2. Host a static HTML webpage that displays your name.
3. Gain a foundational understanding of web server configuration and file hosting.