

Step-by-Step Installation of Apache on Windows

Step 1: Download Apache Binaries for Windows

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](#)

[Info & Changelog](#)

- Go to: <https://www.apachelounge.com/download/>
- Download the **latest version** of Apache HTTP Server (usually named like `httpd-2.4.xx-win64-VS17.zip` for 64-bit systems).
- Make sure you match your system architecture (32-bit or 64-bit).

Step 2: Extract the ZIP File

- Unzip the downloaded file to a directory (e.g., `C:\Apache24`)
- Avoid putting it in a path with spaces (like `Program Files`).

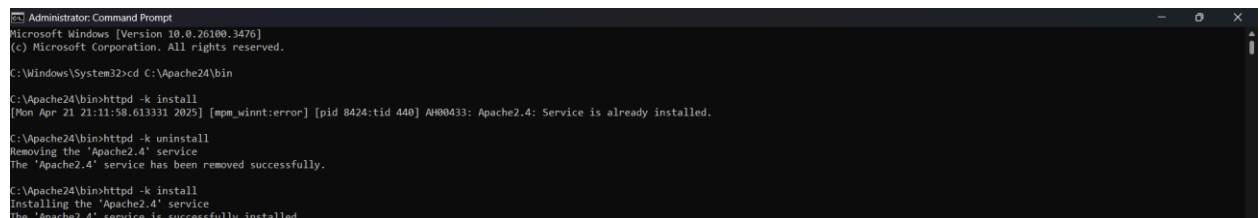
Step 3: Install the Apache Service

1. Open **Command Prompt as Administrator**
2. Navigate to Apache's `bin` folder:

```
cmd
cd C:\Apache24\bin
```

3. Install Apache as a service:

```
cmd
httpd -k install
```



```
Administrator: Command Prompt
Microsoft Windows [Version 10.0.26100.3476]
(c) Microsoft Corporation. All rights reserved.

C:\Windows\System32>cd C:\Apache24\bin

C:\Apache24\bin>httpd -k install
[Mon Apr 21 21:11:58.613331 2025] [mpm_winnt:error] [pid 8424;tid 440] AH00433: Apache2.4: Service is already installed.

C:\Apache24\bin>httpd -k uninstall
Removing the 'Apache2.4' service
The 'Apache2.4' service has been removed successfully.

C:\Apache24\bin>httpd -k install
Installing the 'Apache2.4' service
The 'Apache2.4' service is successfully installed.
```

Step 4: Start Apache

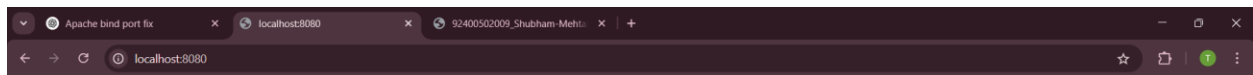
```
C:\Apache24\bin>httpd -k start
```

- In the same Command Prompt window:

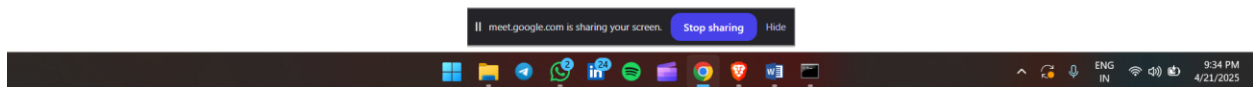
```
cmd
httpd -k start
```

- Or use the Windows **Services** panel to start the service named **Apache2.4**

Step 5: Verify Installation



It works!



- Open a browser and go to:

```
http://localhost/
```

- If it works, you'll see an **“It works!”** page.

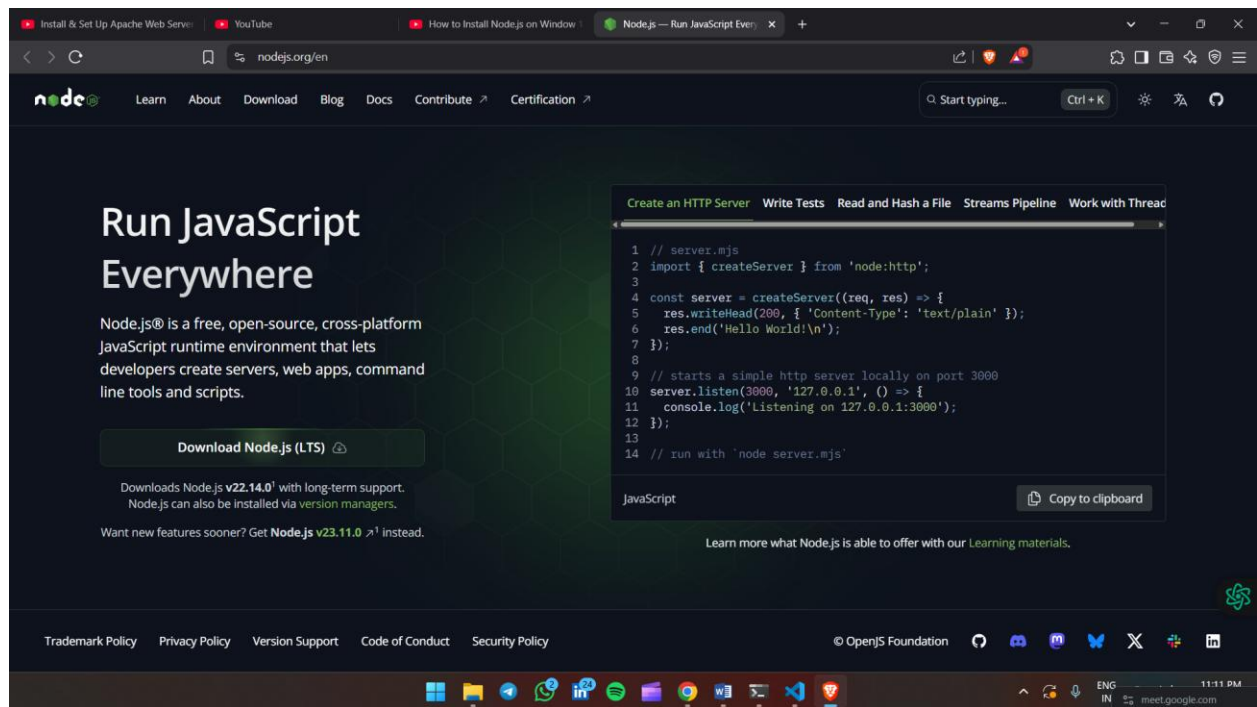
Step 6: Configure Apache (Optional)

- The main configuration file is at: C:\Apache24\conf\httpd.conf
- You can edit this with a text editor to change ports, document root, etc.

Step-by-Step Installation of Node.js on Window

Sure! Here's a **brief version** of how to install and run a Node.js server on Windows:

1. Install Node.js

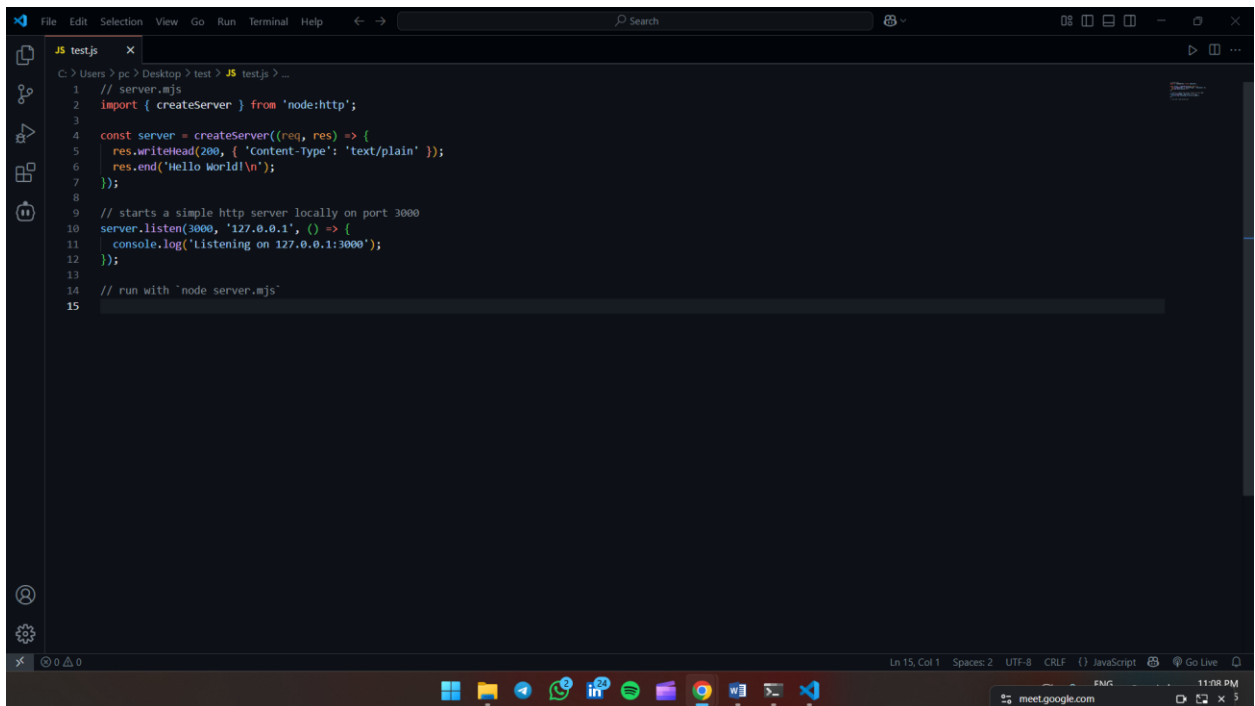


- Go to <https://nodejs.org>
- Download and install the **LTS** version
- Check installation in Command Prompt:
 - `node -v`
 - `npm -v`

2. Set Up Project

- Create a project folder (e.g., `C:\test\test`)
- Open Command Prompt in that folder
- Run:
 - `npm init -y`

3.Create js File



The image shows a screenshot of a Visual Studio Code editor window. The editor is open to a file named `test.js`. The code in the file is as follows:

```
1 // server.mjs
2 import { createServer } from 'node:http';
3
4 const server = createServer((req, res) => {
5   res.writeHead(200, { 'Content-Type': 'text/plain' });
6   res.end('Hello World!\n');
7 });
8
9 // starts a simple http server locally on port 3000
10 server.listen(3000, '127.0.0.1', () => {
11   console.log('Listening on 127.0.0.1:3000');
12 });
13
14 // run with 'node server.mjs'
15
```

The editor interface includes a sidebar on the left with icons for Explorer, Search, and Run and Debug. The bottom status bar shows the current line and column (Ln 15, Col 1), the encoding (UTF-8), the line ending (CRLF), the language (JavaScript), and the Go Live button. The Windows taskbar is visible at the bottom, showing various application icons and the system clock (11:08 PM).

4. Run the Server

In the terminal:

```
node test.js
```

- Visit `http://127.0.0.1:3000/` in your browser.

