



Node.js & Git Installation Guide

Windows | macOS | Linux

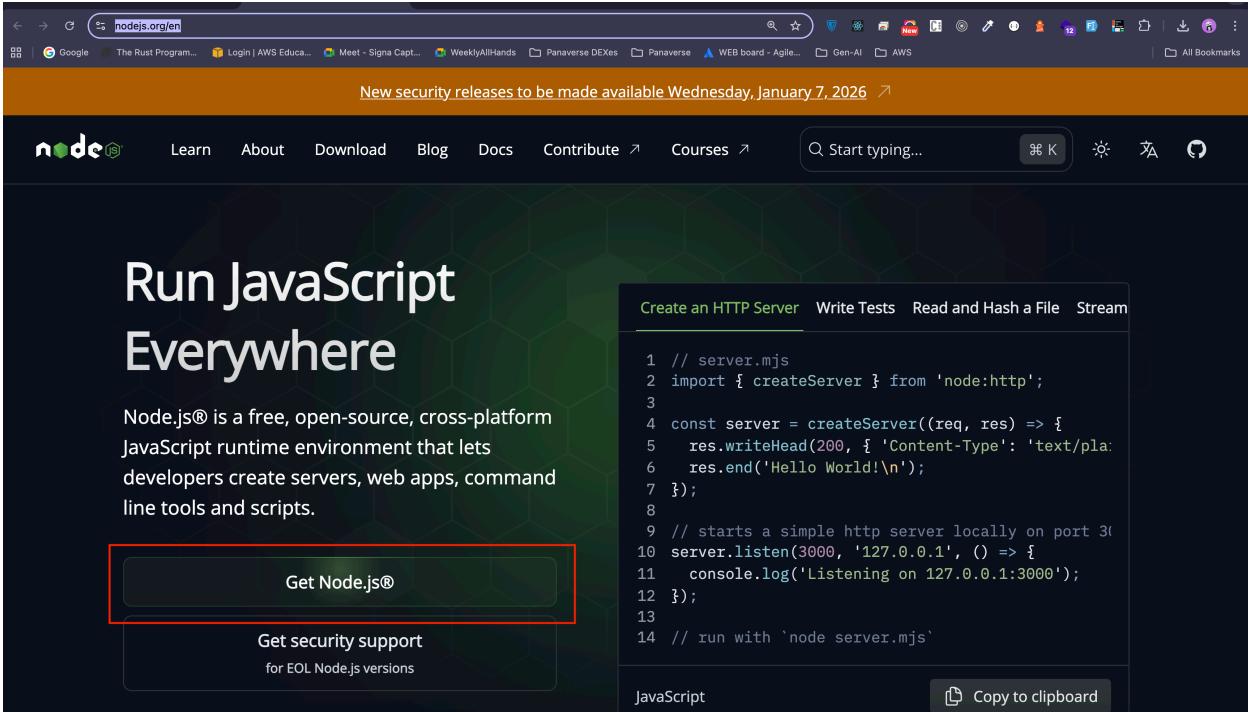
Purpose

This guide helps students **install and verify Node.js and Git** on **Windows, macOS, and Linux**.

Follow the steps carefully. No prior experience required.

Official Download Source

👉 <https://nodejs.org/en>



The screenshot shows the official Node.js website at nodejs.org/en. The page features a dark background with a hexagonal pattern. At the top, there's a navigation bar with links for Learn, About, Download, Blog, Docs, Contribute, Courses, and a search bar. A prominent orange banner at the top states "New security releases to be made available Wednesday, January 7, 2026". Below the banner, the main heading reads "Run JavaScript Everywhere". A paragraph describes Node.js as a free, open-source, cross-platform JavaScript runtime environment. Two buttons are visible: "Get Node.js®" (highlighted with a red box) and "Get security support for EOL Node.js versions". On the right side, there's a code editor window displaying a simple HTTP server example in JavaScript, with a "Copy to clipboard" button at the bottom.

```
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`
```

Click on Get Node.js

12
34

Current Node.js Versions (as shown on official site)

- **Latest LTS:** v24.x
- **Current Release:** v25.x



Students should install the LTS version for stability and compatibility.



Windows Installation

◆ Install Node.js

Step 1: Download

1. Open <https://nodejs.org/en>
2. Click **LTS (v24.x)**
3. Download the `.msi` installer

"nvm" is a cross-platform Node.js version manager. If you encounter any issues please visit [nvm's website](#).

Or get a prebuilt Node.js® for Windows running a ARM64 architecture.

[Windows Installer \(.msi\)](#) [Standalone Binary \(.zip\)](#)

Read the [changelog](#) or [blog post](#) for this version.
Learn more about [Node.js releases](#), including the release schedule and LTS status.
Learn how to [verify](#) signed SHASUMS.
Looking for Node.js source? Download a signed [Node.js source tarball](#).
Check out our [nightly](#) binaries or all [previous releases](#) or the [unofficial](#) binaries for other platforms.

Step 2: Install

1. Double-click the downloaded file
2. Click **Next**
3. Accept the license agreement

4. Keep default settings

- npm package manager
- Add Node.js to PATH

5. Click **Install** → **Finish**

Step 3: Verify

Open **Command Prompt** or **Git Bash** and run:

```
node -v  
npm -v
```

Versions displayed → Node.js installed successfully

◆ Install Git (Git Bash)

Step 1: Download

👉 <https://git-scm.com/install/windows>

The screenshot shows a web browser displaying the official Git website at git-scm.com. The user is on the 'Install' page for Windows. The page features a dark theme with orange text highlights. At the top, there's a navigation bar with links like 'About', 'Learn', 'Tools', 'Reference', 'Install' (which is highlighted in orange), and 'Community'. Below the navigation, there's a sidebar with a note about the 'Pro Git book'. The main content area has a large heading 'Install' and a sub-section 'Windows' which is also highlighted in orange. It contains a call-to-action button 'Click here to download' followed by detailed text about the latest version (2.52.0) and download links for 'Standalone Installer', 'Git for Windows/x64 Setup.', 'Git for Windows/ARM64 Setup.', 'Portable ("thumbdrive edition")', 'Git for Windows/x64 Portable.', and 'Git for Windows/ARM64 Portable.'. There's also a section for 'Using winget tool' with a command-line example. The top right corner of the page shows the 'Latest version: 2.52.0 (Release Notes)'.

Step 2: Install

1. Run the installer
 2. Keep default options
 3. Make sure **Git Bash** is selected
-

Step 3: Verify

Open **Git Bash** and run:

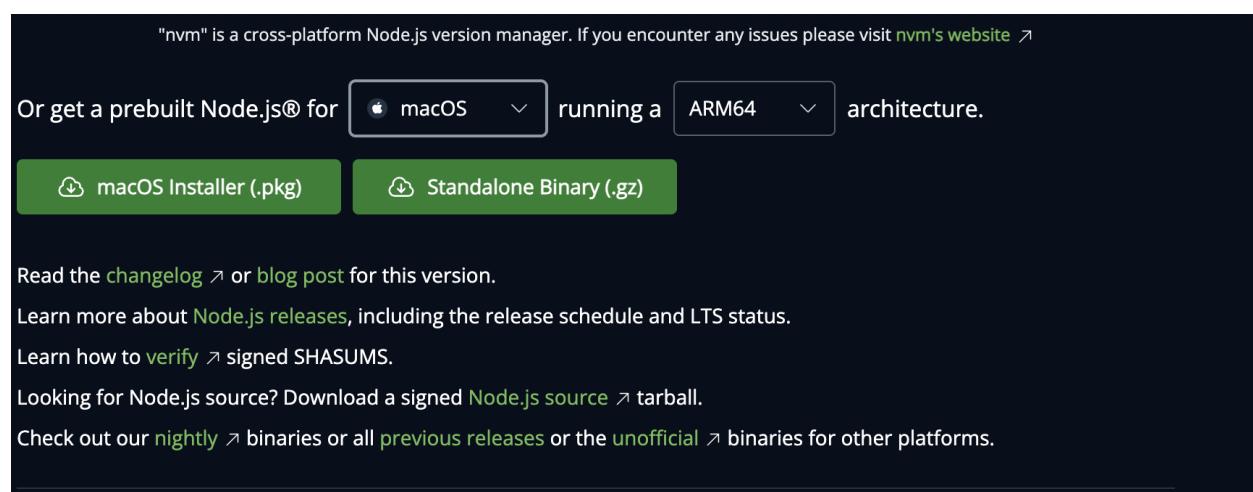
```
git --version
```

macOS Installation

◆ Install Node.js

Option 1: Official Installer

1. Visit <https://nodejs.org/en>
2. Download **LTS (.pkg)**



"nvm" is a cross-platform Node.js version manager. If you encounter any issues please visit [nvm's website](#).

Or get a prebuilt Node.js® for running a architecture.

[!\[\]\(808a3033393daf184f9d12352d62d4be_img.jpg\) macOS Installer \(.pkg\)](#) [!\[\]\(24220adb4649a62c6f807b338e2466c1_img.jpg\) Standalone Binary \(.gz\)](#)

Read the [changelog](#) or [blog post](#) for this version.
Learn more about [Node.js releases](#), including the release schedule and LTS status.
Learn how to [verify](#) signed SHASUMS.
Looking for Node.js source? Download a signed [Node.js source tarball](#).
Check out our [nightly](#) binaries or all [previous releases](#) or the [unofficial](#) binaries for other platforms.

1. Open the installer

2. Follow on-screen instructions

Verify

Open **Terminal** and run:

```
node -v  
npm -v
```

◆ Install Git

Run in Terminal:

```
git --version
```

If Git is not installed, macOS will prompt to install **Xcode Command Line Tools**.



Linux Installation (Ubuntu / Debian)

◆ Install Node.js (LTS)

Run the following commands:

```
sudo apt update  
sudo apt install -y curl  
curl -fsSL https://deb.nodesource.com/setup_24.x | sudo -E bash -  
sudo apt install -y nodejs
```

Verify

```
node -v  
npm -v
```

◆ Install Git

```
sudo apt install -y git
```

Verify:

```
git --version
```

✓ Final Verification (All Operating Systems)

Run:

```
node -v  
npm -v  
git --version
```

✓ If all commands return version numbers, the installation is complete.

● Installation Checklist (Notion-friendly)

- Node.js installed
- npm installed
- Git installed
- Versions verified

⚠ Common Issues

✗ `node` or `npm` not recognized

- Restart the system
- Reinstall Node.js

- Ensure **Add to PATH** was checked
-

✖ Permission errors (macOS / Linux)

Use `sudo` before commands.

🎉 You're Ready!

You can now proceed with:

- JavaScript programming
 - Frontend frameworks (React, Angular, Next.js)
 - Backend development
 - GitHub collaboration
-