

STEPS TO INSTALL APACHE WEB SERVER IN LINUX

Step1: Check Linux Distribution

```
root@9a4a8a5799315e0:~# grep -E '^((VERSION|NAME)=)' /etc/os-release
NAME="Ubuntu"
VERSION="24.04.1 LTS (Noble Numbat)"
```

Step2: Update the System

```
root@9a4a8a5799315e0:~# sudo apt update
Hit:1 http://archive.ubuntu.com/ubuntu noble InRelease
Get:2 http://archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Get:3 http://security.ubuntu.com/ubuntu noble-security InRelease [126 kB]
Get:4 http://archive.ubuntu.com/ubuntu noble-backports InRelease [126 kB]
Get:5 http://security.ubuntu.com/ubuntu noble-security/main amd64 Components [7224 B]
Get:6 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Components [52.0 kB]
Get:7 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 Packages [781 kB]
Get:8 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 Components [212 B]
Get:9 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Components [212 B]
Get:10 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 Components [151 kB]
Get:11 http://archive.ubuntu.com/ubuntu noble-updates/universe amd64 Packages [976 kB]
Get:12 http://archive.ubuntu.com/ubuntu noble-updates/universe amd64 Components [309 kB]
Get:13 http://archive.ubuntu.com/ubuntu noble-updates/restricted amd64 Components [212 B]
Get:14 http://archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Components [340 B]
Get:15 http://archive.ubuntu.com/ubuntu noble-backports/main amd64 Components [208 B]
Get:16 http://archive.ubuntu.com/ubuntu noble-backports/universe amd64 Components [11.7 kB]
Get:17 http://archive.ubuntu.com/ubuntu noble-backports/restricted amd64 Components [216 B]
Get:18 http://archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 Components [212 B]
Fetched 2670 kB in 5s (552 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
3 packages can be upgraded. Run 'apt list --upgradable' to see them.
```

Step3: Upgrade the System

```
root@9a4a8a5799315e0:~# sudo apt upgrade
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Calculating upgrade... Done
The following packages will be upgraded:
  libpolkit-agent-1-0 libpolkit-gobject-1-0 polkitd
3 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
Need to get 162 kB of archives.
After this operation, 0 B of additional disk space will be used.
Do you want to continue? [Y/n] Y
Get:1 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 polkitd amd64 124-2ubuntu1.24.04.2 [95.2 kB]
Get:2 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 libpolkit-agent-1-0 amd64 124-2ubuntu1.24.04.2 [17.4 kB]
Get:3 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 libpolkit-gobject-1-0 amd64 124-2ubuntu1.24.04.2 [49.1 kB]
```

Step4: Install Apache Web Server

```
root@9a4a8a5799315e0:~# sudo apt install apache2 -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
apache2 is already the newest version (2.4.58-1ubuntu0.5).
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
```

Step5: Enable the Services

```
root@9a4a8a5799315e0:~# sudo systemctl enable apache2
Synchronizing state of apache2.service with SysV service script with /usr/lib/systemd/systemd-sysv-install.
Executing: /usr/lib/systemd/systemd-sysv-install enable apache2
```

Step6: Test the server by hosting simple website

```
root@9a4a8a5799315e0:~# sudo mkdir /var/www/html/test_website1
```

Step7: Website Code

```
root@9a4a8a5799315e0:~# echo "<VirtualHost *:80>
ServerName web.testingserver.com
DocumentRoot /var/www/html/website
DirectoryIndex index.html
ErrorLog /var/log/httpd/example.com_requests.log
combined
</VirtualHost>" /etc/httpd/conf.d/web.conf
<VirtualHost *:80>
ServerName web.testingserver.com
DocumentRoot /var/www/html/website
DirectoryIndex index.html
ErrorLog /var/log/httpd/example.com_requests.log
combined
</VirtualHost>" /etc/httpd/conf.d/web.conf
root@9a4a8a5799315e0:~#
root@9a4a8a5799315e0:~# echo "<html>
<head>
<title>Example</title>
</head>
<body>
<h1 style='color:green'>GFG</h1>
<p>This is a Apache Test Server for Ubuntu and Debian</p>
</body>
</html>" | sudo tee /var/www/html/test_website1/index.html
<html>
<head>
<title>Example</title>
</head>
<body>
<h1 style='color:green'>GFG</h1>
<p>This is a Apache Test Server for Ubuntu and Debian</p>
</body>
</html>
root@9a4a8a5799315e0:~#
```

Step8: Run the command to test the website

```
root@9a4a8a5799315e0:~# sudo chmod -R 755 /var/www/html/test_website1
root@9a4a8a5799315e0:~#
```

Step9: Now we can see locally hosted website on localhost

