

Report on Web Manual 1 - Apache Web Server Installation & Maintenance

Since I have a Windows PC, running Ubuntu on Windows Subsystem for Linux sounded like a good idea but i am using WSL as it is a compatibility layer, developed by Microsoft, which enables to have a Linux environment run straight from Windows without having to use a virtual machine or dual-boot configuration.

Task-1: Setting up an Apache web server

[How To Install the Apache Web Server on Ubuntu 18.04 | DigitalOcean](#) link and Install the Apache Web Server.

Step 1 — Installing Apache

```
hasin@DESKTOP-CMDF731:~$ sudo apt update
[sudo] password for hasin:
Get:1 http://security.ubuntu.com/ubuntu noble-security InRelease [126 kB]
Hit:2 http://archive.ubuntu.com/ubuntu noble InRelease
Get:3 http://archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Get:4 http://security.ubuntu.com/ubuntu noble-security/main amd64 Components [21.5 kB]
Get:5 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Components [52.3 kB]
Get:6 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 Components [212 B]
Get:7 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Components [212 B]
Get:8 http://archive.ubuntu.com/ubuntu noble-backports InRelease [126 kB]
Get:9 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 Components [175 kB]
Get:10 http://archive.ubuntu.com/ubuntu noble-updates/universe amd64 Components [377 kB]
Get:11 http://archive.ubuntu.com/ubuntu noble-updates/restricted amd64 Components [212 B]
Get:12 http://archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Components [940 B]
Get:13 http://archive.ubuntu.com/ubuntu noble-backports/main amd64 Components [7140 B]
Get:14 http://archive.ubuntu.com/ubuntu noble-backports/universe amd64 Components [11.0 kB]
Get:15 http://archive.ubuntu.com/ubuntu noble-backports/restricted amd64 Components [216 B]
Get:16 http://archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 Components [212 B]
Fetched 1025 kB in 3s (346 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
193 packages can be upgraded. Run 'apt list --upgradable' to see them.
```

```
hasin@DESKTOP-CMDF731:~$ sudo apt install apache2
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
apache2 is already the newest version (2.4.58-1ubuntu8.8).
0 upgraded, 0 newly installed, 0 to remove and 193 not upgraded.
```

Step 2 — Adjusting the Firewall

```
hasin@DESKTOP-CMDF731:~$ sudo ufw app list
Available applications:
  Apache
  Apache Full
  Apache Secure
```

```
hasin@DESKTOP-CMDF731:~$ sudo ufw status
Status: active

To Action From
--
Apache ALLOW Anywhere
Apache (v6) ALLOW Anywhere (v6)
```

Step 3 — Checking Web Server

```
hasin@DESKTOP-CMDF731:~$ sudo systemctl status apache2
● apache2.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/apache2.service; enabled; preset: enabled)
   Active: active (running) since Sun 2025-11-09 06:03:13 +06; 5min ago
     Docs: https://httpd.apache.org/docs/2.4/
   Process: 217 ExecStart=/usr/sbin/apachectl start (code=exited, status=0/SUCCESS)
  Main PID: 332 (apache2)
    Tasks: 55 (limit: 19074)
   Memory: 8.2M (peak: 10.0M)
      CPU: 50ms
   CGroup: /system.slice/apache2.service
           └─332 /usr/sbin/apache2 -k start
             └─336 /usr/sbin/apache2 -k start
               └─337 /usr/sbin/apache2 -k start

Nov 09 06:03:13 DESKTOP-CMDF731 systemd[1]: Starting apache2.service - The Apache HTTP Server...
Nov 09 06:03:13 DESKTOP-CMDF731 systemd[1]: Started apache2.service - The Apache HTTP Server.
```

After that, my Ubuntu Default Page works successfully but it is not showing after that.

Task-2: Setting up virtual hosts

Step 1 — Managing the Apache Process

```
hasin@DESKTOP-CMDF731:~$ sudo systemctl restart apache2
hasin@DESKTOP-CMDF731:~$ sudo systemctl reload apache2
hasin@DESKTOP-CMDF731:~$ sudo systemctl disable apache2
Synchronizing state of apache2.service with SysV service script with /usr/lib/systemd/systemd-sysv-install.
Executing: /usr/lib/systemd/systemd-sysv-install disable apache2
Removed "/etc/systemd/system/multi-user.target.wants/apache2.service".
hasin@DESKTOP-CMDF731:~$ 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
Created symlink /etc/systemd/system/multi-user.target.wants/apache2.service → /usr/lib/systemd/system/apache2.service.
```

Step 2 — Setting up a single virtual host

```
hasin@DESKTOP-CMDF731:~$ curl http://sawon.com
sudo nano /etc/apache2/sites-available/example.com.conf<html>
<head>
<title>Welcome to Example.com!</title>
</head>
<body>
<h1>Success! The example.com server block is working!</h1>
</body>
</html>
```