How To Install the Apache Web Server on Centos

Step 1 — Installing Apache

Apache is available within CentOS's default software repositories, which means you can install it with the `dnf` package manager.

As the non-root sudo user configured in the prerequisites, install the Apache package:

```
sudo dnf install httpd
```

After confirming the installation, `dnf` will install Apache and all required dependencies.

By completing Step 4 of the Initial Server Setup with CentOS 8 guide mentioned in the prerequisites section, you will have already installed `firewalld` on your server to serve requests over HTTP.

If you also plan to configure Apache to serve content over HTTPS, you will also want to open up port `443` by enabling the `https` service:

```
sudo firewall-cmd --permanent --add-service=https
```

Next, reload the firewall to put these new rules into effect:

```
sudo firewall-cmd --reload
```

After the firewall reloads, you are ready to start the service and check the web server.

Step 2 — Checking your Web Server

Apache does not automatically start on CentOS once the installation completes, so you will need to start the Apache process manually:

```
sudo systemctl start httpd
```

Verify that the service is running with the following command:

```
sudo systemctl status httpd
```

You will receive an `active` status when the service is running:

```
Output httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; disabled;
vendor preset: disa>
   Active: active (running) since Thu 2020-04-23 22:25:33 UTC; 11s ago
     Docs: man:httpd.service(8)
 Main PID: 14219 (httpd)
   Status: "Running, listening on: port 80"
    Tasks: 213 (limit: 5059)
   Memory: 24.9M
   CGroup: /system.slice/httpd.service
           14219 /usr/sbin/httpd -DFOREGROUND
           14220 /usr/sbin/httpd -DFOREGROUND
           14221 /usr/sbin/httpd -DFOREGROUND
           14222 /usr/sbin/httpd -DFOREGROUND
           14223 /usr/sbin/httpd -DFOREGROUND

...
```

As this output indicates, the service has started successfully. However, the best way to test this is to request a page from Apache.

You can access the default Apache landing page to confirm that the software is running properly through your IP address. If you do not know your server's IP address, you can get it a few different ways from the command line.

Type q to return to the command prompt and then type:

```
hostname -I
```

This command will display all of the host's network addresses, so you will get back a few IP addresses separated by spaces. You can try each in your web browser to determine whether they work.

Alternatively, you can use curl to request your IP from icanhazip.com, which will give you your public IPv4 address as read from another location on the internet:

```
curl -4 icanhazip.com
```

When you have your server's IP address, enter it into your browser's address bar:

```
http://your_server_ip
```

You'll see the default CentOS 8 Apache web page:

APACHE HTTP SERVER

Test Page

This page is used to test the proper operation of the Apache HTTP server after it has been installed. If you can read this page it means that this site is working properly. This server is powered by CentOS.

Just visiting?

The website you just visited is either experiencing problems or is undergoing routine maintenance.

If you would like to let the administrators of this website know that you've seen this page instead of the page you expected, you should send them e-mail. In general, mail sent to the name "webmaster" and directed to the website's domain should reach the appropriate person.

For example, if you experienced problems while visiting www.example.com, you should send e-mail to "webmaster@example.com".

Important note:

The CentOS Project has nothing to do with this website or its content, it just provides the software that makes the website run.

If you have issues with the content of this site, contact the owner of the domain, not the CentOS project. Unless you intended to visit CentOS.org,

Are you the Administrator?

You should add your website content to the directory `/var/www/html/`.

To prevent this page from ever being used, follow the instructions in the file `/etc/httpd/conf.d/welcome.conf`.

Promoting Apache and CentOS

You are free to use the images below on Apache and CentOS Linux powered HTTP servers. Thanks for using Apache and CentOS!

The CentOS Project

The CentOS Linux distribution is a stable, predictable, manageable and

This page indicates that Apache is working correctly. It also includes some basic information about important Apache files and directory locations.

Step 3 — Managing the Apache Process

Now that the service is installed and running, you can now use different systemctl commands to manage the service.

To stop your web server, type:

```
sudo systemctl stop httpd
```

To start the web server when it is stopped, type:

```
sudo systemctl start httpd
```

To stop and then start the service again, type:

```
sudo systemctl restart httpd
```

If you are simply making configuration changes, Apache can often reload without dropping connections. To do this, use this command:

```
sudo systemctl reload httpd
```

By default, Apache is configured to start automatically when the server boots. If this is not what you want, disable this behavior by typing:

```
sudo systemctl disable httpd
```

To re-enable the service to start up at boot, type:

```
sudo systemctl enable httpd
```

Apache will now start automatically when the server boots again.

The default configuration for Apache will allow your server to host a single website. If you plan on hosting multiple domains on your server, you will need to configure virtual hosts on your Apache web server.