

4. Web Services

Apache HTTP Server

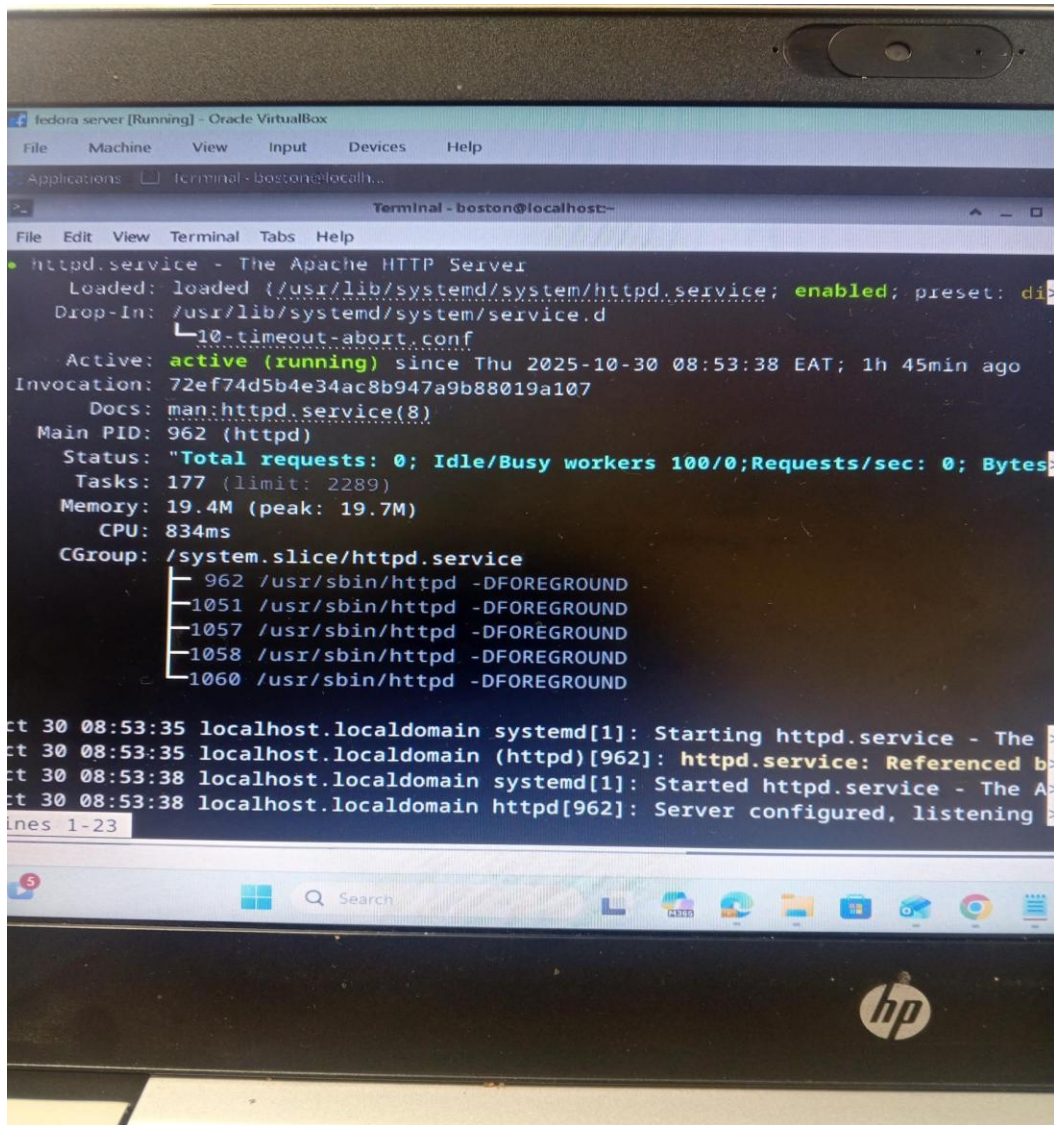
Install

```
sudo dnf install httpd -y
```

```
sudo systemctl start httpd
```

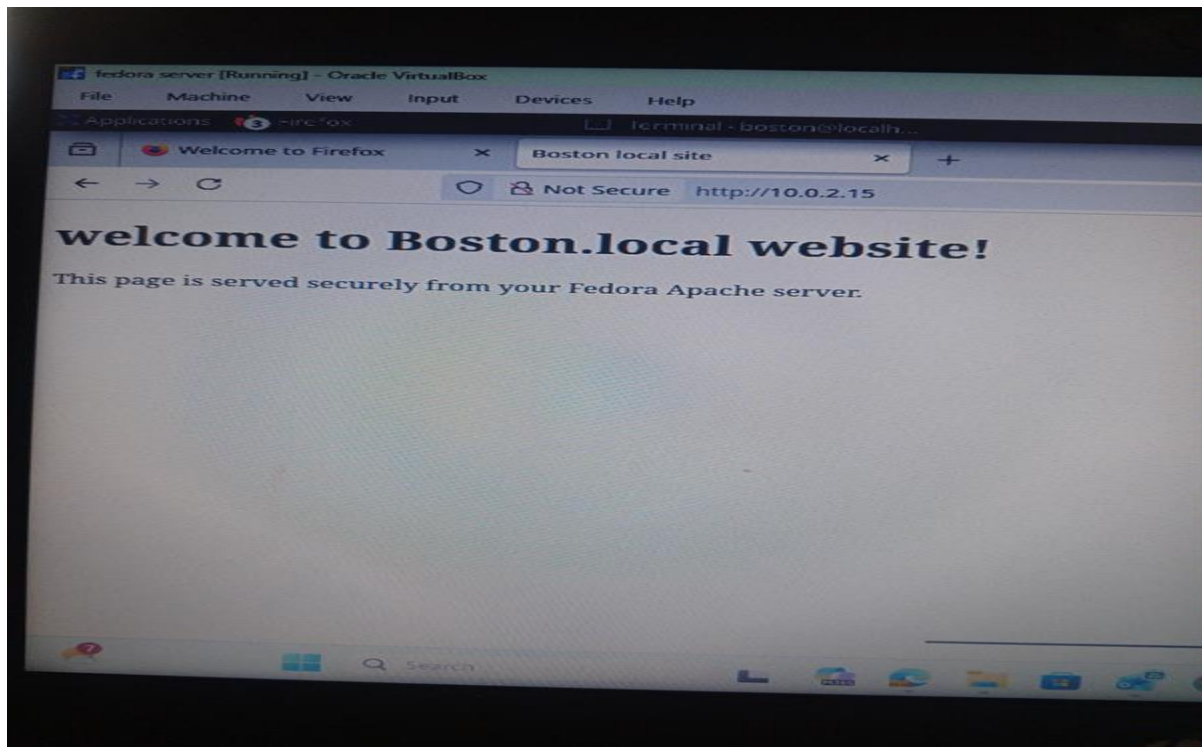
```
sudo systemctl enable httpd
```

```
systemctl status httpd
```



Open your fedora browser

Test 10.0.2.15 for me this is my server ip



SSL / HTTPS

```
sudo dnf install mod_ssl -y
```

```
sudo openssl req -newkey rsa:2048 -nodes -keyout /etc/pki/tls/private/server.key -x509 -  
days 365 -out /etc/pki/tls/certs/server.crt
```

Enable SSL

```
sudo systemctl restart httpd
```

```
sudo nano /etc/httpd/conf.d/ssl.conf
```

Security

```
sudo systemctl status firewalld
```

```
allow http
```

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

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

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

Allow custom port (e.g. 8080):

```
sudo firewall-cmd --permanent --add-port=8080/tcp
```

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

View rules

```
sudo firewall-cmd --list-all
```

OpenVPN

```
sudo dnf install openvpn -y
```

start

```
sudo systemctl start openvpn-server@server
```

```
sudo systemctl enable openvpn-server@server
```

```
sudo systemctl status openvpn-server@server
```

```
fedora server [Running] - Oracle VirtualBox
File Machine View Input Devices Help
Applications Terminal - boston@localhost~
Terminal - boston@localhost~
File Edit View Terminal Tabs Help
Drop-In: /usr/lib/systemd/system/service.d
└─10-timeout-abort.conf
Active: active (running) since Thu 2025-10-30 08:53:36 EAT; 3h 11min ago
Invocation: c29e6a7744a5488a97af484a2d9b606e
Docs: man:openvpn(8)
      https://openvpn.net/community-resources/reference-manual-for-openv>
      https://community.openvpn.net/openvpn/wiki/HOWTO
Main PID: 971 (openvpn)
Status: "Initialization Sequence Completed"
Tasks: 1 (limit: 2289)
Memory: 3.1M (peak: 3.3M)
CPU: 393ms
CGroup: /system.slice/system-openvpn\x2dservice.slice/openvpn-server@server>
└─971 /usr/bin/openvpn --status /run/openvpn-server/status-server.>
Oct 30 08:53:36 localhost.localdomain openvpn[971]: Socket Buffers: R=[212992->
Oct 30 08:53:36 localhost.localdomain openvpn[971]: UDPv4 link local (bound): [>
Oct 30 08:53:36 localhost.localdomain openvpn[971]: UDPv4 link remote: [AF_UNSP>
Oct 30 08:53:36 localhost.localdomain openvpn[971]: UID set to nobody
Oct 30 08:53:36 localhost.localdomain openvpn[971]: GID set to nobody
Oct 30 08:53:36 localhost.localdomain openvpn[971]: Capabilities retained: CAP_>
boston@localhost:~$ sudo nano /etc/openvpn/server/server.conf
```

On your fedora browser test ssl https

Test https:// 10.0.2.15 for me this is my server ip

