Install and Configure Apache Web Server

Apache http server

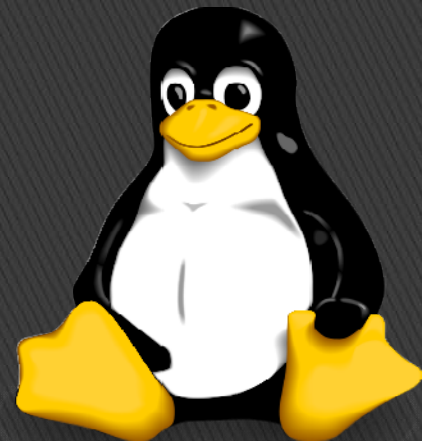
The Apache HTTP Server or simply Apache, is free and open-source cross-platform web server software developed and maintained by Apache Software Foundation.

Apache is a easy to learn and configure web server providing an ability to host websites mainly via HTTP or HTTPS protocols. Under RHEL 8 / CentOS 8 system Apache webserver is know under name httpd.

It use following port number and service:

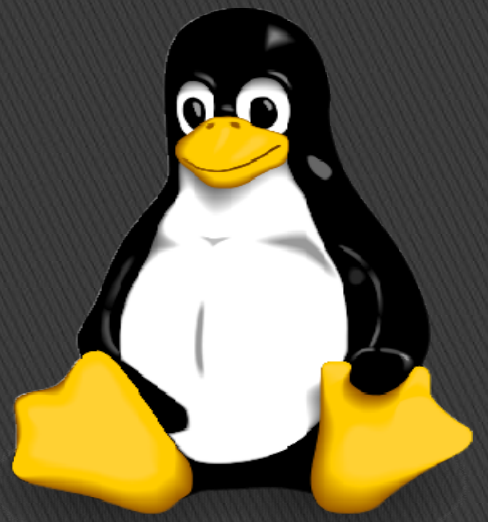
http = 80

https = 443



Create https website

The mod_ssl module provides SSL v3 and TLS v1.x support for the Apache HTTP Server.



Install package

#vim httpd* openssl mod_ssl

Add record in host file

#vim /etc/hosts

192.168.1.10 server1.example.com

Start & enable Apache webserver

```
# systemctl enable httpd
# systemctl start httpd
```

Firewall Setup

```
#firewall-cmd --permanent --add-service=http
#firewall-cmd --permanent --add-service=https
#firewall-cmd --reload
```

Insert your website files

By default the Apache web server will greet you with a default welcome page.

To disable the default Apache welcome page insert your index.html into /var/www/html/ directory

Generate SSL Certificate

```
#openssl req -x509 -nodes -days 365 -newkey rsa:2048 -
  keyout server.key -out server.crt
```

```
#ls
```

Copy generated key and crt at default location

```
#cp -rvf server.crt /etc/pki/tls/certs/
#cp -rvf server.key /etc/pki/tls/private
```

Create default ssl.conf file

#vim /ets/httpd/conf.d/ssl.conf

SSLCertificateFile /etc/pki/tls/certs/server.crt
SSLCertificateKeyFile /etc/pki/tls/private/server.key

wq

Create Configuration File

#vim /etc/httpd/conf.d/httpd.conf

<VirtualHost *:443>
SSLEngin on
SSLCertificateFile /etc/pki/tls/certs/server.crt
SSLCertificateKeyFile /etc/pki/tls/private/server.key
ServerName server1.redhat.com
Documentroot /var/www/html
</VirtualHost>

:wq

Verify and restart service

#httpd -t

#systemctl restart httpd

Open Firefox and Verify

https://192.168.1.10

https://server1.redhat.com