**Apache Webserver installation, Configuration, Reverse proxy with Apps server and SSL setup**

**Installation:**

* Sudo yum install httpd -y
* Sudo systemctl start httpd
* Sudo systemctl enable httpd ( To start the httpd service automatically while reboot the server)

Create domain on freenom and register domain with Route53:

Open Route53 -🡪

Create Record set 🡪 create hosted zones 🡪 name filed enter domain which you registered.

Copy all the name servers and update in the domain provider settings.

Create record set 🡪 name field enter the domain and Select A record value and update and EC2 IP which you installed the Apache web server.

Restart httpd service:

* yum restart httpd

SSL Certificate update:

Using sslforfree website:

Update the website on route53 with TXT value with sslforfree website provided value.

Verify the link

Copy the Certificate and CA Bundle:

Create file and paste both on the /etc/httpd/conf.d/certs/cert.cert

Copy the key:

Create file and paste the key on /etc/httpd/conf.d/certs/key.key

**SSL Configuration:**

<*File name: /etc/httpd/conf.d/virt.conf ( personal verification)*

<VirtualHost \*:443>

DocumentRoot /var/www/html

ServerName kandu069.tk

SSLEngine on

SSLCertificateFile /etc/httpd/conf.d/certs/cert.cert

SSLCertificateKeyFile /etc/httpd/conf.d/certs/key.key

</VirtualHost>

**HTTP to HTTPS redirection:**

**<VirtualHost \*:443>**

**DocumentRoot /var/www/html**

**ServerName kandu069.tk**

**SSLEngine on**

**SSLCertificateFile /etc/httpd/conf.d/certs/cert.cert**

**SSLCertificateKeyFile /etc/httpd/conf.d/certs/key.key**

**</VirtualHost>**

**#Added below lines for redirection**

**<VirtualHost \*:80>**

**ServerName kandu069.tk**

**Redirect /** [**https://kandu069.tk**](https://kandu069.tk)

**</VirtualHost>**

**Reference link:**

<https://www.tecmint.com/redirect-http-to-https-on-apache/>

**Reverse Proxy to App server:**

<https://httpd.apache.org/docs/2.4/howto/reverse_proxy.html>

**<VirtualHost \*:443>**

**DocumentRoot /var/www/html**

**ServerName kandu069.tk**

**SSLEngine on**

**SSLCertificateFile /etc/httpd/conf.d/certs/cert.cert**

**SSLCertificateKeyFile /etc/httpd/conf.d/certs/key.key**

**ProxyPass "/" "http://54.173.60.244:8080/sample/"**

**ProxyPassReverse "/"** [**http://54.173.60.244:8080/sample/**](http://54.173.60.244:8080/sample/)

**Added above two lines for Proxying the webserver to App server**

**</VirtualHost>**

**<VirtualHost \*:80>**

**ServerName kandu069.tk**

**Redirect / https://kandu069.tk**

**</VirtualHost>**