* **Install and configure apache/httpd**

**Solution :** Successfully installed apache on Centos using command

cd /etc/httpd/conf

vim httpd.conf

search ---> /none

Replace none here by all

sudo yum install httpd

systemctl enable httpd

systemctl start httpd

systemctl status httpd

firewall-cmd --permanent --add-port=80/tcp

firewall-cmd --permanent --add-port=80/udp

firewall-cmd --reload

systemctl restart httpd

vi /var/ww/html/sms2/index.html

type here = i am devops ninja



**Solution :Significance to configure nginx as reverse proxy to apache :** Both webserver Nginx and apache are popular . apache’s is famous for power and nginx’s speed are well known. However, both servers do have drawbacks—apache is hard on server memory, while nginx (great at static files) needs the help of php-fpm or similar modules for dynamic content.

However, one can combine the two web servers to great effect, with nginx as static web server front and apache processing the back end.

Configured webpage in apache “Index.html” and webpage says ‘Hi! I am devops ninja’

After configuring apache server

Make listen port 8080 from 80

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

firewall-cmd --reload

systemctl restart httpd

Then open nginx.conf

--------> Paste this

server {

listen 80;

root /usr/share/nginx/html/;

index index.php index.html index.htm;

server\_name \_;

location / {

try\_files $uri $uri/ /index.php;

}

location ~ \.php$ {

proxy\_set\_header X-Real-IP $remote\_addr;

proxy\_set\_header X-Forwarded-For $remote\_addr;

proxy\_set\_header Host $host;

proxy\_pass http://192.168.0.105:80;

}

location ~ /\.ht {

deny all;

}

}

systemctl restart nginx

#####HOW TO CHECK#####

[root@localhost nginx]# curl 192.168.0.105

hi!i am devops ninja

[root@localhost nginx]#

[root@localhost nginx]# systemctl stop nginx

[root@localhost nginx]# curl 192.168.0.105

curl: (7) Failed connect to 192.168.0.105:80; Connection refused

[root@localhost nginx]# curl 192.168.0.105:8080

hi!i am devops ninja

[root@localhost nginx]# curl 192.168.0.105:80

curl: (7) Failed connect to 192.168.0.105:80; Connection refused

[root@localhost nginx]# systemctl restart nginx

[root@localhost nginx]# curl 192.168.0.105:80

hi!i am devops ninja

[root@localhost nginx]# curl 192.168.0.105

hi!i am devops ninja

* **Install and configure 'ntp' - with singapore time zone**

**Solution**: Installed ntp client and configured singapore

Configured **vim /etc/ntp.conf** and defined address

server 0.sg.pool.ntp.com, server 1.sg.pool.ntp.com, server 2.sg.pool.ntp.com, server 3.sg.pool.ntp.com

Systemctl start ntpd

* Install Tomcat version 8 (a brief explanation about the it's directories in doc)

**Solution :** Apache Tomcat is a web server and servlet container that is used to serve Java applications. Tomcat is an open source implementation of the Java Servlet and JavaServer Pages technologies, released by the Apache Software Foundation.

* **Install 'build essentials' (mention in doc that why do we need it)**

**Solution :** Build-essentials is a reference for all packages which are considered essential for building linux packages.

We can install build essentials packages in Centos through this command :

yum install gcc gcc-c++ kernel-devel make

yum groupinstall "Development Tools"

* Install logrotate and rotate tomcat's catalina.out log as:

rotate the log file after 500kb  
keep only last 5 files

**Solution:** Install logrotate and configure job.

**Git** repository hosting service, which offers all of the version control and source code management (SCM) functionality of **Git.**

Every time when developer creates it code and stored on local system. While working on code if something unexpected happens with Computer. Then all the effort and code would lost. For fast saving of code on offsite repository (cloud) came.