**Nginx & Varnish**

This documentation is for forwarding the traffic only through Varnish and Nginx to WAF. Using the below configuration file, we can omit the hitch for SSL termination. Varnish is unable to forward receive and forward traffic to the 443 port. Hence this conf file helps achieve that. We need to disable the default file in Nginx as this conf file takes care of the entire traffic.

Create a file ending with .conf in /etc/nginx/conf.d directory.

vi /etc/nginx/conf.d/redirect.conf

upstream redirect {

server 127.0.0.1:80;

}

server {

listen 443 ssl default\_server;

listen [::]:443 ssl default\_server;

ssl\_certificate /etc/letsencrypt/live/sagar.kubewaf.com/fullchain.pem;

ssl\_certificate\_key /etc/letsencrypt/live/sagar.kubewaf.com/privkey.pem;

server\_name sagar.kubewaf.com;

location / {

proxy\_pass http://redirect/;

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

proxy\_set\_header X-Forwarded-For $proxy\_add\_x\_forwarded\_for;

proxy\_set\_header X-Forwarded-Proto https;

proxy\_set\_header X-Forwarded-Port 443;

proxy\_set\_header Host $host;

}

}

upstream backend {

server 20.118.157.215:443;

}

server {

listen 8080 ;

server\_name sagar.kubewaf.com;

location / {

proxy\_pass https://backend/;

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

proxy\_set\_header X-Forwarded-For $proxy\_add\_x\_forwarded\_for;

proxy\_set\_header X-Forwarded-Proto https;

proxy\_set\_header X-Forwarded-Port 443;

proxy\_set\_header Host $host;

}

}

There are no changes to be made in the Varnish file. Also, no need to have any redirection of http to https in the varnish file as we can take care of this redirection at the WAF level. The Varnish file has to be simple.

If the redirection at WAF level is not working, then the required configuration in varnish file has been added.  
The backend has to be pointed to nginx running on 8080 in this case. Varnish is running on 80 port.  
Also, make sure to comment out the entire default file in nginx.

# The first redirect ensures that the 443 traffic hitting nginx will pass through Varnish and then again come to nginx at port 8080.  
# The second redirect ensures that the traffic is being forwarded to WAF.

# The headers are used to make sure HTTPS traffic flows through the WAF.

**Important Note**

Each domain needs to have its separate file in conf.d directory. Hence we can create multiple files with unique names ending with “.conf”. This will allow us to customize the files as per the domain requirements.