Create SSL/TLS Certificate for ELK

Assuming this is on Ubuntu 18.04 Linux, first install net-tools:

sudo apt install net-tools

The below script will generate **ELK-Stack.key** and **ELK-Stack.crt** and place them in the correct locations:

# CREATE SSL/TLS Certs if needed

# Only perform this script if you are root

if ! [ $(id -u) = 0 ]; then

echo "This script must be run as root - use: sudo su - to run this command"

exit 1

fi

# Warn user that it will overwrite existing Certificate/Key

echo "WARNING - Each time you run this script it generates new cert/key!!!"

read -p "Are you sure you want to continue ? (Y/N)" -n 1 -r

if [[ $REPLY =~ ^[Nn]$ ]]

then

echo " OK - quitting!"

exit 1

fi

echo ""

echo "Creating SSL Certificate.."

LOGFILE="/tmp/ssl-certificate-install.log"

CERTSDIR="/etc/pki/tls/certs"

TLSPRIVATEDIR="/etc/pki/tls/private"

echo "Logfile = $LOGFILE"

echo "Certs dir = $CERTSDIR"

echo "TLS Private Dir = $TLSPRIVATEDIR"

# modify the default openssl.cnf to have the IP of this machine

HOSTIPADDR=$(ifconfig ens160 | awk '{ print $2}' | grep -E -o "([0-9]{1,3}[\.]){3}[0-9]{1,3}") >> $LOGFILE 2>&1

sed -i '226s/.\*/subjectAltName = IP: '"$HOSTIPADDR"'/' /etc/ssl/openssl.cnf >> $LOGFILE 2>&1

# create CERTS DIR

if [ -d $CERTSDIR ]; then

echo "$CERTSDIR already exits"

else

mkdir -p $CERTSDIR >> $LOGFILE 2>&1

fi

# create TLS Private DIR

if [ -d $TLSPRIVATEDIR ] ; then

echo "$TLSPRIVATEDIR already exits"

else

mkdir $TLSPRIVATEDIR >> $LOGFILE 2>&1

fi

echo "Running openssl command..."

openssl req -config /etc/ssl/openssl.cnf -x509 -days 3650 -batch -nodes -newkey rsa:2048 -keyout $TLSPRIVATEDIR/ELK-Stack.key -out $CERTSDIR/ELK-Stack.crt

echo "Ignore error message: Can't load /root/.rnd into RNG and its related data"

echo "TLS Private Key:"

cat $TLSPRIVATEDIR/ELK-Stack.key

echo "TLS CERT File:"

cat $CERTSDIR/ELK-Stack.crt

Just put this into file called install ssl-install.sh and do the following:

chmod +x ssl-install.sh

sudo su

./ssl-install.sh

Each time you run this it generates new Cert/Key – so be careful and make sure that it what you want done.