Jenkins SSL Configuration:

<https://www.baeldung.com/ops/jenkins-enable-https>

Using Certbot generate necessary public & private pem keys.

snap install --classic certbot

certbot certonly --manual --preferred-challenges=dns --key-type rsa --email mavrick202@gmail.com \

--server https://acme-v02.api.letsencrypt.org/directory --agree-tos -d \*.awsb49.xyz

Copy both keys to Jenkins Server as:

key.pem

certificate.pem

Convert in to p12 certificate:

openssl pkcs12 -inkey privkey.pem -in cert.pem -export -out certificate.p12

Convert in to jks certificate:

keytool -importkeystore -srckeystore ./certificate.p12 -srcstoretype pkcs12 -destkeystore jenkinsserver.jks -deststoretype JKS

After installing Jenkins, perform following steps:

sudo cp jenkinsserver.jks /var/lib/jenkins/

sudo chown jenkins:jenkins /var/lib/jenkins/jenkinsserver.jks

*nano /lib/systemd/system/jenkins.service* and add the following.

Environment="JENKINS\_PORT=-1"

Environment="JENKINS\_HTTPS\_PORT=443"

Environment="JENKINS\_HTTPS\_KEYSTORE=/var/lib/jenkins/jenkinsserver.jks"

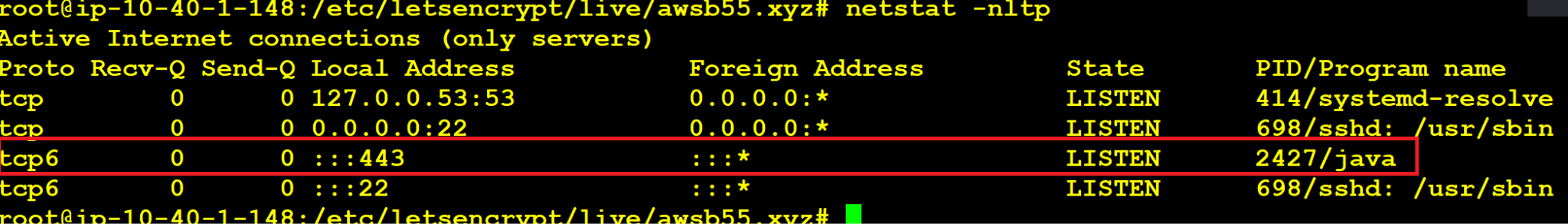
Environment="JENKINS\_HTTPS\_KEYSTORE\_PASSWORD=India@123"

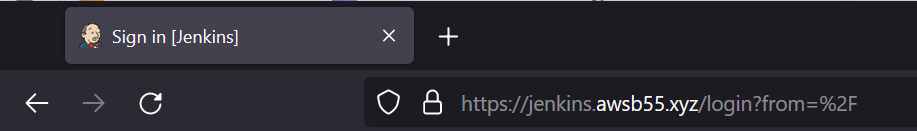
AmbientCapabilities=CAP\_NET\_BIND\_SERVICE

sudo systemctl daemon-reload

sudo systemctl restart jenkins

sudo systemctl status jenkins





echo 'JENKINS\_ARGS=" $JENKINS\_ARGS --httpsPort=8443 --httpPort=-1 --httpsPrivateKey=/etc/letsencrypt/live/awsb49.xyz/privkey.pem --httpsCertificate=/etc/letsencrypt/live/awsb49.xyz/fullchain.pem"' >> /etc/default/jenkins

usermod -a -G docker jenkins

usermod -a -G root jenkins

Add DNS record in Route53 and access URL as below after 5 min: