

SSL설정

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기본적으로 openssl 설치되어 있어야한다.
 # CA 인증서 생성 (CA-서버의 개인키 생성)자가 서명
 openssl genrsa -des3 -out server.key 2048
devops@devops-jenkins:/etc/apache2/ssl$ sudo openssl genrsa -des3 -out server.key 2048
Generating RSA private key, 2048 bit long modulus (2 primes)
.....++++
.....
e is 65537 (0x010001)
Enter pass phrase for server.key:
Verifying - Enter pass phrase for server.key:
devops@devops-jenkins:/etc/apache2/ssl$
 # 서버 인증서 발급을 위한 요청 파일 CSR (Certificate Sinning Request-인증서 서명 요청)
 openssl req -new -days 365 -key server.key -out server.csr
devops@devops-jenkins:/etc/apache2/ssl$ sudo openssl req -new -days 365 -key server.key -
out server.csr
Ignoring -days; not generating a certificate
Enter pass phrase for server.key:
```

```
devops@devops-jenkins:/etc/apache2/ssl$ sudo openssl req -new -days 365 -key server.key
out server.csr
Ignoring -days; not generating a certificate
Enter pass phrase for server.key:
You are about to be asked to enter information that will be incorporated
into your certificate request.
What you are about to enter is what is called a Distinguished Name or a DN.
There are quite a few fields but you can leave some blank
For some fields there will be a default value,
If you enter '.', the field will be left blank.
Country Name (2 letter code) [AU]:kr
State or Province Name (full name) [Some-State]:Seoul
Locality Name (eg, city) []:Seoul
Organization Name (eg, company) [Internet Widgits Pty Ltd]:LDS
Organizational Unit Name (eg, section) []:Linux
Common Name (e.g. server FQDN or YOUR name) []:
Email Address []:
Please enter the following 'extra' attributes to be sent with your certificate request
A challenge password []:hunbin21^H^H^H^H^H^H^H^H^H^H^H
An optional company name []:
devops@devops-jenkins:/etc/apache2/ssl$
```

```
# 편의를 위해 개인키 암호 제거

cp server.key server.key.org

openssl rsa -in server.key.org -out server.key
```

```
devops@devops-jenkins:/etc/apache2/ssl$ sudo cp server.key server.key.org
devops@devops-jenkins:/etc/apache2/ssl$ sudo openssl rsa -in server.key.org -out server.k
ey
Enter pass phrase for server.key.org:
writing RSA key
devops@devops-jenkins:/etc/apache2/ssl$
```

```
# 자가 서명 인증서 생성
openssl x509 -req -days 365 -in server.csr -signkey server.key -out server.crt
```

```
devops@devops-jenkins:/etc/apache2/ssl$ sudo openssl x509 -req -days 365 -in server.csr -
signkey server.key -out server.crt
Signature ok
subject=C = kr, ST = Seoul, L = Seoul, 0 = LDS, OU = Linux
Getting Private key
devops@devops-jenkins:/etc/apache2/ssl$
```

```
# 인증서 인코딩 포멧 변경
openssl이 생성하는 인증서의 인코딩은 발급 시 옵션을 주지 않으면 디폴트가 PEM(base64)
```

```
java등에서 사용하기 위한 DER 포맷(바이너리)로 변경
 openssl x509 -in server.crt -out server.der -outform DER
 # 인증서 내용 보기
 # PEM
 openssl x509 -in server.crt -text
 # DER
 openssl x509 -in server.der -inform DER -text
 apache 적용
 # 모듈 활성화 (우분투)
 sudo a2enmod ssl
 sudo mkdir /etc/apache2/ssl
 SSLCertificateFile
                          /etc/apache2/ssl/server.crt
 SSLCertificateKeyFile /etc/apache2/ssl/server.key
 sudo chown -R root:root /etc/apache2/ssl
 sudo chmod 600 /etc/apache2/ssl/*.*
 sudo chmod 700 /etc/apache2/ssl
  sudo a2ensite default-ssl.conf
devops@devops-jenkins:/etc/apache2/sites-available$ sudo a2ensite default-ssl.conf
Enabling site default-ssl.
To activate the new configuration, you need to run:
  systemctl reload apache2
devops@devops-jenkins:/etc/apache2/sites-available$ sudo a2enmod ssl
Considering dependency setenvif for ssl:
Module setenvif already enabled
Considering dependency mime for ssl:
Module mime already enabled
Considering dependency socache_shmcb for ssl:
Enabling module socache_shmcb.
Enabling module ssl.
See /usr/share/doc/apache2/README.Debian.gz on how to configure SSL and create self-signe
```

```
devops@devops-jenkins:/etc/apache2/sites-available$ sudo systemctl restart apache2
devops@devops-jenkins:/etc/apache2/sites-available$
```

d certificates.

systemctl restart apache2

To activate the new configuration, you need to run:

```
Nttp -> https

<VirtualHost *:80>
RewriteEngine On
RewriteCond %{HTTPS} off
RewriteRule ^(.*)$ https://%{HTTP_HOST}%{REQUEST_URI} [R,L]

</VirtualHost>

<VirtualHost *:80>에 있던 proxypass를 <VirtualHost _default_:443>에 넣어준다.

<VirtualHost _default_:443>
ServerName 10.3.0.5
ProxyPass / http://10.3.0.5:8080/ acquire=3000 timeout=600 Keepalive=On
ProxyPassReverse / http://10.3.0.5:8080/

</VirtualHost>
```

```
RewriteEngine On할시
모듈을 활성화 시켜줘야한다.
우분투 sudo a2enmod rewrite
```

```
devops@devops-jenkins:/etc/apache2/sites-available$ sudo a2enmod rewrite
Enabling module rewrite.
To activate the new configuration, you need to run:
   systemctl restart apache2
devops@devops-jenkins:/etc/apache2/sites-available$ sudo systemctl restart apache2.servic
e
devops@devops-jenkins:/etc/apache2/sites-available$
```



Welcome to Jenkins!

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