



SSL설정

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 Signing 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:
```


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-signed certificates.
To activate the new configuration, you need to run:
  systemctl restart apache2
```

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

http -> 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!

로그인

☐ 로그인 상태 유지