

Docker????????????IRIS??SSL????

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Docker????????????IRIS??SSL????

Docker????Web????????IRIS????RESTfulAPI????
SSL????

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* <https://one-it-thing.com/63/>

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- Web?????? -> Vue.js (<http://192.168.10.100:3014>)
- REST ful API -> IRIS?Docker???? (<http://192.168.10.100:9092>)

? Vue.js????????????????????

? IRIS????????????Docker????????

???IRIS?Docker????????????

Web????????HTTPS????

Vue.js????????????https????????

```
npm run serve -- --https
```

????????????https????????????????????????????????https??http????????????IRIS?REST????????

Nginx????????

Nginx????????????https????????IRIS????????

<https://192.168.10.100/> -> <http://192.168.10.100:9092/>

Dockerfile

```
FROM nginx
```

```
ENV _NGINX_CONF /etc/nginx
```

```
RUN mkdir -p $_NGINX_CONF/ssl
```

```
RUN apt-get update
```

```
RUN apt-get install openssl
```

? Nginx?????OpenSSL????????????

docker-compose.yml

```
version: '3.7'
services:
  proxy:
    build:
      context: .
    image: proxyiris:latest
    ports:
      - "443:443"
    restart: always
    environment:
      - TZ=Asia/Tokyo
```

Nginx????????????

docker-compose up -d

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docker exec -it proxy_proxy_1 /bin/bash

????????

- ?????????

cd /etc/nginx/ssl

- openssl.cnf???

cp /etc/ssl/openssl.cnf /etc/ssl/openssl.cnf.org

? openssl.cnf??????

openssl.cnf

???

[CA_default]

#dir = ./demoCA # Where everything is kept

dir = . # Where everything is kept

???

????????????????????????????????????

????????????

```
docker cp proxy_proxy_1:/etc/ssl/openssl.cnf {????????}
```

- CA????????????????????????????

```
touch index.txt  
echo 00 > serial
```

CA????????????

CA????????

```
openssl genrsa -aes256 -out cakey.pem 2048
```

????????????

CA????????

```
openssl req -new -key cakey.pem -config /etc/ssl/openssl.cnf -out cacert.csr
```

?Common name (e.g, server FQDN or YOUR name) []:192.168.10.100

x509 v3????????????????????

```
touch cav3.txt  
echo "basicConstraints = critical, CA:true" > cav3.txt  
echo "keyUsage = critical, cRLSign, keyCertSign" >> cav3.txt  
echo "subjectKeyIdentifier=hash" >> cav3.txt
```

CA????????

```
openssl ca -in cacert.csr -selfsign -keyfile cakey.pem -notext -config /etc/ssl/openssl.cnf -outdir . -days 365 -extfile cav3.txt -out cacert.pem
```

? iOS13????????13????????????????1????????

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```
openssl genrsa -aes256 -out server.key 2048
```

????????

????????

```
openssl req -new -key server.key -config /etc/ssl/openssl.cnf -out server.csr
```

??Organization Name??Common Name????????????????????

x509 v3????????????????????

```
touch v3server.txt
echo "[SAN]" > v3server.txt
echo "basicConstraints = CA:false" >> v3server.txt
echo "keyUsage = critical, digitalSignature, keyEncipherment" >> v3server.txt
echo "extendedKeyUsage = serverAuth" >> v3server.txt
echo "authorityKeyIdentifier=keyid,issuer" >> v3server.txt
echo >> v3server.txt
echo "subjectAltName=@alt_names" >> v3server.txt
echo "basicConstraints=CA:FALSE" >> v3server.txt
echo "[alt_names]" >> v3server.txt
echo "DNS.1=localhost" >> v3server.txt
echo "IP.1=192.168.10.100" >> v3server.txt
echo "IP.2=127.0.0.1" >> v3server.txt
```

????????????

```
openssl ca -in server.csr -config /etc/ssl/openssl.cnf -keyfile cakey.pem -outdir . -
extfile v3server.txt -extensions SAN -out server.crt -days 365
```

????????????????????

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

Nginx????????????????????

???????

??????????

```
touch /etc/nginx/conf.d/irisproxy.cnf
```

irisproxy.cnf

```
server {
    listen 443 ssl http2 default_server;
    ssl_certificate      /etc/nginx/ssl/server.crt;
    ssl_certificate_key  /etc/nginx/ssl/nopass_server.key;
    location / {
        proxy_pass http://192.168.10.100:9092;
        proxy_redirect   http:// https://;
        proxy_set_header    Host          $host;
```

Docker????????????IRIS??SSL????

Published on InterSystems Developer Community (<https://community.intersystems.com>)

```
proxy_set_header X-Real-IP $remote_addr;
proxy_set_header X-Forwarded-Proto $scheme;
proxy_set_header X-Forwarded-For $proxy_add_x_forwarded_for;
}
}
```

????????

```
docker restart proxy_proxy_1
```

????????IRIS?HTTPS????????????
Web?????http://...:9092/xxx/????????REST?????????
?https://.../xxx/????????????

[#Docker](#) [#REST API](#) [#SSL](#) [#????](#) [#InterSystems IRIS](#)

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