

Securing Your Docker Registry



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Demo



Using CA certificates

Using self-signed certificates

Configure login authentication

Demo



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Applying a CA-provided Certificate

Copy CA-provided Certificates:

```
mkdir ~/certs  
cp stuff.* certs
```

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[if you received an intermediary certificate:]

```
cat stuff.crt intermediate-stuff.pem > ~/certs/stuff.crt
```

Adding Certs at Run-time:

```
docker run -d -p 5000:5000 --restart=always --name registry \
-v `pwd`/certs:/certs \
-e REGISTRY_HTTP_TLS_CERTIFICATE=/certs/stuff.crt \
-e REGISTRY_HTTP_TLS_KEY=/certs/stuff.key \
registry
```


Adding Certs to a Dockerfile:

```
FROM registry
```

```
ADD /certs/ /home/
```

```
ENV REGISTRY_HTTP_TLS_CERTIFICATE=/certs/stuff.crt
```

```
REGISTRY_HTTP_TLS_KEY=/certs/stuff.key
```

```
EXPOSE 5000
```

Add config.yml file to container:

```
docker run -d -p 5000:5000 --restart=always --name registry \
-v `pwd`/config.yml:/etc/docker/registry/config.yml \
registry
```

Applying a Self-signed Certificate

Demo



Create local domain

Generate self-signed cert

Copy cert file to the Docker client

Demo



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User Authentication

Demo



Create a user account

Enforce password login for Docker Registry

Demo



Create a user account

Enforce password login for Docker Registry

Summary



(error message:) "http: server gave HTTP response to HTTPS client"

```
-e REGISTRY_HTTP_TLS_KEY=/certs/stuff.key \
```

```
ENV REGISTRY_HTTP_TLS_CERTIFICATE=/  
certs/stuff.crt REGISTRY_HTTP_TLS_KEY=/  
certs/stuff.key
```

http:

tls:

certificate: /home/ubuntu/certs/stuff.crt

key: /home/ubuntu/certs/stuff.key

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http:

tls:

certificate: /home/ubuntu/certs/stuff.crt

key: /home/ubuntu/certs/stuff.key

Summary



```
-v `pwd`/config.yml:/etc/docker/registry/  
config.yml \
```

```
cp ca.crt /etc/docker/certs.d/stuff.com:5000/
```

```
auth:
```

```
  httpasswd:
```

```
    realm: basic-realm
```

```
    path: /home/ubuntu/auth/httpasswd
```

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