**Create a Nginx Web Server to Host a React Application (hello-react)**

**Revision History**:

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| --- | --- | --- | --- |
| Author | Description | Date | Version |
| Robert Chin | Initial Document Creation | 3/11/20 | V0.1 |

**Prerequisites**:

1. Virtual Machine or Physical Server running Ubuntu 16.04

**Procedures**:

1. Install NodeJS Runtime Environment

cd ~

curl -sL https://deb.nodesource.com/setup\_10.x -o nodesource\_setup.sh

sudo bash nodesource\_setup.sh

sudo apt-get install nodejs -y

NOTE: To test to see if it’s been installed

node -v

npm -v

1. Install ReactJS (hello-react)

npm install -g create-react-app

create-react-app --version

create-react-app hello-react

1. Configure React Dev to be Exposed on Public Interface (package.json)

"scripts": {

"start": "HTTPS=true HOST=192.168.1.6 PORT=443 react-scripts start",

"build": "react-scripts build",

"test": "react-scripts test",

"eject": "react-scripts eject"

},

NOTE: The above configuration allows the development (npm run start) to use HTTPS and use the default HTTPS port 443

NOTE: To use specific certificates you’ve created:

HTTPS=true SSL\_CRT\_FILE=cert.crt SSL\_KEY\_FILE=cert.key npm start

1. Install Nginx

apt-get install nginx

cd /etc/nginx

1. Create Self Signed Certificate

openssl req -x509 -nodes -days 365 -newkey rsa:2048 -keyout server.key -out server.crt

1. Compile / Build the React (for the build folder, in your React app)

npm run build

1. Configure Nginx to Host the React Production App (modify the default file similar to this below)

root@bob-fe-react:/etc/nginx/sites-enabled# cat default

server {

listen 443;

server\_name 12.132.231.221;

ssl on;

ssl\_certificate /etc/nginx/ssl/example/server.crt;

ssl\_certificate\_key /etc/nginx/ssl/example/server.key;

root /home/ubuntu/hello-react/build;

index index.html index.htm;

location / {

try\_files $uri /index.html =404;

}

}

NOTE: For listen 443 (i.e. all interfaces for port 443), if you specify 12.132.231.221:443, it will only LISTEN on that interface, if you want to restrict to your private interface later, update this (i.e. 192.168.1.6:443)

1. Restart Nginx

service nginx restart

1. Navigate with your browser to <https://12.132.231.221> to view your React application.