NGINX Server Hardening steps and commands - Ubuntu

These are the steps, procedures and commands and configuration settings are used to *harden* a default NGINX installation on Ubuntu Linux 19.04 (Debian).

Installing NGINX

1) `sudo apt install nginx`
2) Verify that nginx was install and successfully running
   `systemctl status nginx running`

Installing OpenSSL server

1) `sudo install openssh-server`

Keep system up to date

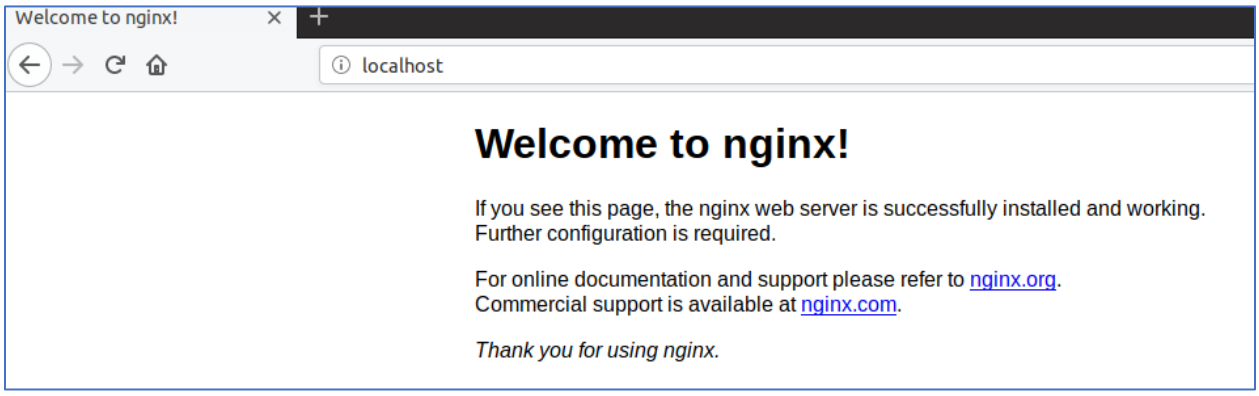
1) `sudo apt update`

Using Host Firewall – using ufw (uncomplicated firewall)

1) See apache server document.

Starting NGINX

1) In web browser, type in localhost. The *default NGINX Default Page* appears (see screen shot).



Nginx default page after installation of NGINX

Connecting to NGINX server

1) Similar to Apache Server Hardening guide.

Remove Default web site

1) remove the default server configuration from sites-enabled
   sudo unlink default

See what ports NGINX is listening

1) sudo lsof -P -n -i :80 -i :443 | grep LISTEN // see what ports NGINX is listening on.

2) sudo netstat -plan | grep nginx

20) see latest 10 lines for all log files in nginx
tail -f /var/logs/nginx/*.logs

1) apt install apache2-utils -y // install this to create a password file

2) htpasswd -c /etc/nginx/passwords admin // create a password admin acct.
// user acct: admin , pass: root1
// user acct: user1, pass: pass1
// user acct: user2, pass: pass2

3) htpasswd -D /etc/nginx/passwords user2 // delete password and user

4) cat /etc/nginx/passwords // see contents of password file

25) chown www-data /etc/nginx/passwords // change perms of password file to 'www-data' user.

26) chmod 600 /etc/nginx/passwords // change permissions of file to 600.

Configure SSL for NGNIX web server

1)Using SSL to configure HTTPS (untrust cert but we need it to encrypt traffic)

2a) openssl req -x509 -nodes -days 365 -newkey rsa:2048 -keyout /etc/ssl/private/nginx.key -out /etc/ssl/certs/nginx.crt

OR this for bypassing cert prompts (-batch):

2b) openssl req -x509 -nodes -days 365 -newkey rsa:2048 -keyout /etc/ssl/private/nginx.key -out /etc/ssl/certs/nginx.crt -batch // skip prompts