Ubuntu

Security-Enhanced Linux

This guide is based on SELinux being disabled or in permissive mode. SELinux is not enabled by default on Ubuntu. If you would like to see if it is installed run the following command:

```
sudo dpkg -l selinux*
```

Prerequisites

Perform these steps to install the pre-requisite packages.

===== Ubuntu 14.x / 15.x =====

```
sudo apt-get update
sudo apt-get install -y autoconf gcc libc6 make wget unzip apache2 apache2-utils php5 libgd2-xpm-dev
```

===== Ubuntu 16.x / 17.x =====

```
sudo apt-get update
sudo apt-get install -y autoconf gcc libc6 make wget unzip apache2 php libapache2-mod-php7.0 libgd2-xpm-dev
```

===== Ubuntu 18.x =====

```
sudo apt-get update
sudo apt-get install -y autoconf gcc libc6 make wget unzip apache2 php libapache2-mod-php7.2 libgd-dev
```

Downloading the Source

```
cd /tmp
wget -O nagioscore.tar.gz https://github.com/NagiosEnterprises/nagioscore/archive/nagios-4.4.5.tar.gz
tar xzf nagioscore.tar.gz
```

Compile

```
cd /tmp/nagioscore-nagios-4.4.5/
sudo ./configure --with-httpd-conf=/etc/apache2/sites-enabled
sudo make all
```

Create User And Group

This creates the nagios user and group. The www-data user is also added to the nagios group.

```
sudo make install-groups-users
sudo usermod -a -G nagios www-data
```

Install Binaries

This step installs the binary files, CGIs, and HTML files.

```
sudo make install
```

Install Service / Daemon

This installs the service or daemon files and also configures them to start on boot.

```
sudo make install-daemoninit
```

Information on starting and stopping services will be explained further on.

Install Command Mode

This installs and configures the external command file.

```
sudo make install-commandmode
```

Install Configuration Files

This installs the *SAMPLE* configuration files. These are required as Nagios needs some configuration files to allow it to start.

```
sudo make install-config
```

Install Apache Config Files

This installs the Apache web server configuration files and configures Apache settings.

```
sudo make install-webconf
sudo a2enmod rewrite
sudo a2enmod cgi
```

Configure Firewall

You need to allow port 80 inbound traffic on the local firewall so you can reach the Nagios Core web interface.

```
sudo ufw allow Apache
sudo ufw reload
```

Create nagiosadmin User Account

You'll need to create an Apache user account to be able to log into Nagios.

The following command will create a user account called nagiosadmin and you will be prompted to provide a password for the account.

```
sudo htpasswd -c /usr/local/nagios/etc/htpasswd.users nagiosadmin
```

> When adding additional users in the future, you need to remove **-c** from the above command otherwise it will replace the existing nagiosadmin user *(and any other users you may have added)*.

Start Apache Web Server

===== Ubuntu 14.x =====

Need to restart it because it is already running.

```
sudo service apache2 restart
```

===== Ubuntu 15.x / 16.x / 17.x /18.x =====

Need to restart it because it is already running.

```
sudo systemctl restart apache2.service
```

Start Service / Daemon

This command starts Nagios Core.

===== Ubuntu 14.x =====

```
sudo start nagios
```

===== Ubuntu 15.x / 16.x / 17.x / 18.x =====

```
sudo systemctl start nagios.service
```

Test Nagios

Nagios is now running, to confirm this you need to log into the Nagios Web Interface.

Point your web browser to the ip address or FQDN of your Nagios Core server, for example:

```
http://10.25.5.143/nagios
```

```
http://core-013.domain.local/nagios
```

You will be prompted for a username and password. The username is `nagiosadmin` (you created it in a previous step) and the password is what you provided earlier.

Once you have logged in you are presented with the Nagios interface. Congratulations you have installed Nagios Core.

BUT WAIT ...

Currently you have only installed the Nagios Core engine. You'll notice some errors under the hosts and services along the lines of:

```
(No output on stdout) stderr: execvp(/usr/local/nagios/libexec/check_load, ...) failed. errno is 2: No such file or directory
```

These errors will be resolved once you install the Nagios Plugins, which is covered in the next step.

Installing The Nagios Plugins

Nagios Core needs plugins to operate properly. The following steps will walk you through installing Nagios Plugins.

> These steps install nagios-plugins 2.2.1. Newer versions will become available in the future and you can use those in the following installation steps. Please see the releases page on GitHub for all available versions.

Please note that the following steps install most of the plugins that come in the Nagios Plugins package. However there are some plugins that require other libraries which are not included in those instructions. Please refer to the following KB article for detailed installation instructions:

Documentation - Installing Nagios Plugins From Source

Prerequisites

Make sure that you have the following packages installed.

```
sudo apt-get install -y autoconf gcc libc6 libmcrypt-dev make libssl-dev wget bc gawk dc build-essential snmp libnet-snmp-perl gettext
```

Downloading The Source

```
cd /tmp
wget --no-check-certificate -O nagios-plugins.tar.gz https://github.com/nagios-plugins/nagios-plugins/archive/release-2.2.1.tar.gz
tar zxf nagios-plugins.tar.gz
```

Compile + Install

```
cd /tmp/nagios-plugins-release-2.2.1/
sudo ./tools/setup
sudo ./configure
sudo make
sudo make install
```

Test Plugins

Point your web browser to the ip address or FQDN of your Nagios Core server, for example:

```
http://10.25.5.143/nagios
```

```
http://core-013.domain.local/nagios
```

Go to a host or service object and "Re-schedule the next check" under the Commands menu. The error you previously saw should now disappear and the correct output will be shown on the screen.

Service / Daemon Commands

Different Linux distributions have different methods of starting / stopping / restarting / status Nagios.

===== Ubuntu 14.x =====

```
sudo start nagios
sudo stop nagios
sudo restart nagios
sudo status nagios
```

===== Ubuntu 15.x / 16.x / 17.x / 18.x =====

```
sudo systemctl start nagios.service
sudo systemctl stop nagios.service
sudo systemctl restart nagios.service
sudo systemctl status nagios.service
```