Nagios Core

- Nagios, now known as Nagios Core, is a free and open-source computer-software application that monitors systems, networks, and infrastructure.
- Nagios offers monitoring and alerting services for servers, switches, applications, and services. It alerts users when things go wrong and alerts them a second time when the problem has been resolved.

NRPE[edit]

Nagios Remote Plugin Executor (NRPE) is a Nagios agent that allows remote system monitoring using scripts that are hosted on the remote systems.[6] It allows for monitoring of resources such as disk usage, system load or the number of users currently logged in. Nagios periodically polls the agent on remote system using the check_nrpe *plugin.*

NRPE allows you to remotely execute Nagios plugins on other Linux/Unix machines. This allows you to monitor remote machine metrics (disk usage, CPU load, etc.). NRPE can also communicate with some of the Windows agent add-ons, so you can execute scripts and check metrics on remote Windows machines, as well.

Below is a step-by-step guide to installing Nagios on Ubuntu:

Step 1: Update Ubuntu

Before starting with the installation, it is a good practice to update your Ubuntu system:

```
sudo apt update && sudo apt upgrade -y
sudo apt install unzip -y
```

Step 2: Install Required Dependencies

Install the necessary packages and dependencies for Nagios:

```
sudo apt install -y wget build-essential apache2 php openssl perl make php-cli php-gd libgd-dev
libapache2-mod-php libperl-dev libssl-dev daemon
```

Step 3: Create Nagios User and Group

Create a new Nagios user and group:

```
sudo useradd nagios
sudo groupadd nagcmd
sudo usermod -a -G nagcmd nagios
sudo usermod -a -G nagcmd www-data
```

Step 4: Download Nagios Core

Navigate to the tmp directory and download the latest Nagios Core source:

Nagios Core

```
cd /tmp
wget https://github.com/NagiosEnterprises/nagioscore/archive/nagios-4.4.6.tar.gz
```

Step 5: Extract and Compile Nagios Core

Extract the downloaded file, compile, and install Nagios Core:

```
tar -zxvf nagios-4.4.6.tar.gz
cd nagioscore-nagios-4.4.6
./configure --with-httpd-conf=/etc/apache2/sites-enabled
make all
sudo make install
sudo make install-init
sudo make install-commandmode
sudo make install-config
sudo make install-webconf
```

Step 6: Install Nagios Plugins

Download and install Nagios Plugins:

```
cd /tmp
wget https://nagios-plugins.org/download/nagios-plugins-2.3.3.tar.gz
tar -zxvf nagios-plugins-2.3.3.tar.gz
cd nagios-plugins-2.3.3
./configure --with-nagios-user=nagios --with-nagios-group=nagios
make
sudo make install
```

Step 7: Configure Apache for Nagios

Enable Apache rewrite and cgi modules, and restart Apache:

```
sudo a2enmod rewrite
sudo a2enmod cgi
sudo systemctl restart apache2
```

Step 8: Set Nagios Admin Password

Set the password for the Nagios admin user:

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

Step 9: Start Nagios Service

Start the Nagios service and enable it to start on boot:

```
sudo systemctl start nagios
sudo systemctl enable nagios
```

Step 10: Access Nagios Web Interface

Open a web browser and navigate to `http://<Your_Server_IP>/nagios` or `http://localhost/nagios` to access the Nagios web interface. Log in with the username `nagiosadmin` and the password you set earlier.

That is, it! You have successfully installed Nagios on Ubuntu. You can now start configuring hosts, services, and notifications through the Nagios web interface.

Troubleshooting:
Note: If you get any Php error use below link and install php modules
https://linuxize.com/post/how-to-install-php-on-ubuntu-18-04/
Solution: sudo apt install php libapache2-mod-php

If you want to add hosts to main servers follow below link:
https://www.linuxhelp.com/how-to-add-host-into-nagios-server

2ⁿᵈ method:
https://www.howtoforge.com/tutorial/ubuntu-nagios/

Follow the above blog from step2:
We must install NRPE plugin in destination server (Nagios Remote Plugin Executor)

After installing the dependencies, Open and add the Nagios server IP address into the configuration file.

```
root@linuxhelp:~# vim /etc/nagios/nrpe.cfg
```

```
server_address=192.168.5.147
```

Now in main server make configuration changes in below path:

```
sudo vi /usr/local/nagios/etc/objects/localhost.cf
```