

Nagios

- Debian machine
- Configure hostname → `sudo nano /etc/hostname [debian]`
- Configure static IP → `192.168.56.127 [/etc/network/interfaces]`
- Configure APT → It means `apt-get` command should work `[/etc/apt/sources.list]`

INSTALL DEPENDENCIES

```
sudo apt install -y apache2 apache2-utils autoconf gcc libc6 libgd-dev make php  
libssl-dev python3 tree unzip wget
```

```
mkdir nagios
```

```
cd nagios
```

DOWNLOAD NAGIOS SOURCE CODE

```
wget -q https://go.nagios.org/downloads/nagioscore/releases/nagios-4.5.10.tar.gz
```

```
ls -l
```

```
tar -zxf nagios-4.5.10.tar.gz
```

```
ls -l
```

```
cd nagios-4.5.10
```

Nagios does not have a user interface. So we need help of apache for user interface

```
sudo ./configure --with-httpd-conf=/etc/apache2/sites-enabled
```

- This command means we are taking help of apache and the configuration file will be created in `apache2/sites-enabled`

BUILD CORE NAGIOS

```
sudo make all
```

CREATE NAGIOS USER AND GROUP

```
sudo make install-groups-users
```

```
sudo passwd nagios
```

- → New password (admin@123)

ADD the user www-data to the nagios group

```
sudo usermod -a -G nagios www-data
```

- → www-data is apache user. By this command we are adding this user into nagios group

install binaries

```
sudo make install
```

```
ls -l /usr/local
```

- → you can see nagios directory has been created

install service / Daemon

```
sudo make install-daemoninit
```

- → it enables the service which automatically starts after when you restart the system.

INSTALL COMMAND MODE

```
sudo make install-commandmode
```

INSTALL CONFIGURATION FILE

```
sudo make install-config
```

```
ls -l /usr/local/nagios
```

```
sudo ls -l /etc/apache2/sites-*
```

 → you can't see nagios.conf file

```
sudo make install-webconf
```

```
sudo ls -l /etc/apache2/sites-*
```

 → you can see nagios.conf file

ENABLE APACHE REWRITE AND CGI MODULES

```
sudo a2enmod rewrite
```

```
sudo a2enmod cgi
```

Rewrite → change in url. for example, if you write amazon.com, it will be amazon.in → re-write is done by web server

CGI → Common gateway interface → help program to run on another platform

CREATE nagiosadmin user account

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

 → Password

[admin@123]

```
sudo /usr/local/nagios/bin/nagios -v /usr/local/nagios/etc/nagios.cfg
```

- Verify all the files ...(No errors till now) (verify mode yntax errors, Missing object files,Invalid commands,Plugin paths,Permissions issues)

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

```
sudo systemctl restart nagios.service
```

Go to base machine web browser →

<http://192.168.56.127/nagios>

You should see nagios page (which should say- Daemon running with PID)

At least this should be working → (Hosts → status- down)

Nagios is useless without plugins. It Plugin is a file which contains commands.

INSTALL DEPENDENCIES FOR NAGIOS PLUGINS

```
sudo apt-get install -y automake autotools-dev bc build-essential dc gawk gettext  
libmcrypt-dev libnet-snmp-perl libssl-dev snmp
```

DOWNLOAD NAGIOS PLUGINS SOURCE CODE

```
cd ~/nagios
```

```
wget -q https://nagios-plugins.org/download/nagios-plugins-2.4.11.tar.gz
```

```
tar -zxvf nagios-plugins-release-2.4.11.tar.gz
```

```
cd nagios-plugins-release-2.4.11
```

```
sudo ls /usr/local/nagios/libexec → you cannot see any files
```

```
sudo ./configure
```

```
sudo make
```

```
sudo make install
```

```
sudo ls /usr/local/nagios/libexec → you should see list of files here
```

In base machine browser → Hosts → You can see the status is up

Hosts → click on localhost under 'host'. → in right-side, click on, Schedule a check of all services on this host' (white clock) → tick on force check and commit

Go to services → each status should be 'ok'

Default users:

The user that web servers (Apache, nginx etc) use by default for normal operation is www-data. The way to find out default users for other services are-

```
ps -aux | grep apache2 → you can see the users
```

NCPA- Nagios Cross Platform Agent (for windows)

We will monitor windows machine on nagios using apache2.

Debian is a server machine → we have configured nagios here.

Windows is a client machine → We will monitor it.

In windows machine:

Install ncpa

- It will ask for token in installation process: password1234 → remember the token name
- Installation complete.
- Base machine browser → https://192.168.56.window_ip:5693
- Enter token- password1234
- See live stats
- You should be able to see data with oscillation. This proves that ncpa is successfully installed