

Nagios

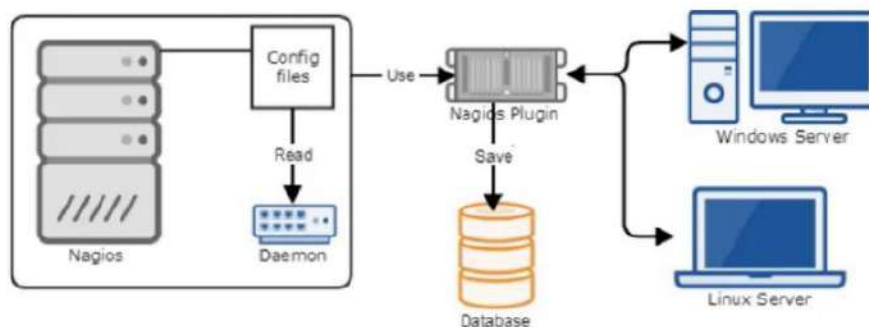
NAGIOS

- Nagios is a tool to monitor entire IT Infrastructure.
- It includes applications, services, and process to monitor.
- Nagios can send alert notifications in email, SMS etc.
- It can monitor "private" services and attributes of Windows, MacOS, Linux/UNIX servers, such as:
 - Memory usage
 - CPU load
 - Disk usage
 - Service states
 - Running processes
 - Logged in users... etc.

WHY NEED NAGIOS:

- Check to see server is up & running
- Check to see services (http, ssh, vsftpd, docker, mail etc) are responding
- To check process are running or not
- Able to have custom plugins to monitor

HOW ITS WORK:



NAGIOS INSTALLATION

```
root@tecmint:~# yum install -y httpd httpd-tools php gcc glibc glibc-common gd gd-devel make net-snmp
Last metadata expiration check: 0:27:31 ago on Monday 03 December 2024 03:28:11 PM IST.
Package httpd-2.4.37-47.module+el8.6.0+981+b8f6398.2.x86_64 is already installed.
Package httpd-tools-2.4.37-47.module+el8.6.0+981+b8f6398.2.x86_64 is already installed.
Package php-8.0.24-1.el8.remi.x86_64 is already installed.
Package gcc-8.5.0-10.1.el8.x86_64 is already installed.
Package glibc-2.28-189.5.el8.x86_64 is already installed.
Package glibc-common-2.28-189.5.el8.x86_64 is already installed.
Package gd-2.2.3-7.el8.x86_64 is already installed.
Package make-1:4.2.1-11.el8.x86_64 is already installed.
Dependencies resolved.
=====
Installing:
Package Architecture Version
-----
gd-devel x86_64 2.2.5-7.el8
net-snmp x86_64 1:5.8-25.el8
Upgrading:
Package Architecture Version
-----
cyrus x86_64 0.5.0-15.el8
expat x86_64 2.2.5-10.el8
fonttype x86_64 2.8.1-9.el8
gcc x86_64 0.5.0-15.el8
gcc-c++ x86_64 0.5.0-15.el8
gcc-gdb-plugin x86_64 0.5.0-15.el8
glibc x86_64 2.28-189.5.el8
```

SYSTEM REQUIREMENTS:

- **Server OS (only 64-bit supported):**
 - CentOS Stream
 - RHEL/CentOS 7.x
 - RHEL/CentOS 8.x
 - Debian 9.x/10.x
 - Ubuntu 16/18/20
- **Minimum System Specs:**
 - Single Core Processor
 - 2 GB RAM
 - 40 GB HD
- **RECOMMENDED SYSTEM SPECS:**
 - Quad Core Processor
 - 8+ GB RAM
 - 1+ TB HD

DIRECTORY STRUCTURE:

- **/usr/local/nagios/bin** : Binary Files
- **/usr/local/nagios/sbin** : CGI Files
- **/usr/local/nagios/share** : PHP Files
- **/usr/local/nagios/libexec** : Plugins Files
- **/usr/local/nagios/etc** : Configuration Files
- **/usr/local/nagios/var** : Log Files

NAGIOS INSTALLATION ON CENTOS / RHEL 9

STEP 1: Security-Enhanced Linux: SELinux being disabled or in permissive mode.

```
#sed -i 's/SELINUX=.*/SELINUX=disabled/g' /etc/selinux/config  
#setenforce 0
```

STEP 2: Installing Packages

```
#yum install -y gcc glibc glibc-common wget unzip httpd php gd gd-devel perl  
postfix openssl-devel
```

STEP 3: Create Nagios user and group

```
#useradd nagios  
#passwd nagios  
#groupadd nagcmd
```

Adding users in to the group

```
#usermod -a -G nagcmd nagios  
#usermod -a -G nagcmd apache
```

STEP 4: Download Nagios Source file

```
#mkdir /root/nagios  
#cd /root/nagios  
#wget https://sourceforge.net/projects/nagios/files/nagios-4.x/nagios-4.4.11/nagios-4.4.11.tar.gz  
#tar -xzf nagios-4.4.11.tar.gz  
#ls
```

STEP5: Compile the code

```
#cd nagios-4.4.11  
#./configure --with-command-group=nagcmd  
#make all
```

STEP6: Install Binaries

```
#make install
```

Install Service / Daemon

```
#make install-init
```

Install Command mode

```
#make install-commandmode
```

Install Configuration Files

```
#make install-config
```

Install Apache Config Files

```
#make install-webconf
```

STEP 7: Create nagiosadmin User Account

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

Start Apache Web Server

```
#systemctl restart httpd  
#systemctl enable httpd  
#systemctl status httpd
```


INSTALLING THE NAGIOS PLUGINS:

STEP 8: Downloading the Source

```
#cd /root/nagios  
#wget https://nagios-plugins.org/download/nagios-plugins-2.4.4.tar.gz  
#tar -xzvf nagios-plugins-2.4.4.tar.gz  
#ls
```

STEP 9: Compile + Install

```
#cd nagios-plugins-2.4.4  
#./configure --with-nagios-group=nagioscmd  
#make  
#make install  
#/usr/local/nagios/bin/nagios -v /usr/local/nagios/etc/nagios.cfg
```

STEP10: Start Nagios service

```
#systemctl start nagios  
#systemctl enable nagios  
#systemctl status nagios
```

Test Nagios:

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

<http://IP-Address/nagios>