

How to Install Nagios on Ubuntu?

written by sysadmin | 12 February 2025

Nagios is an event monitoring system created by Ethan Galstad and first released in 2002, which offers monitoring and alerting services for servers, switches, applications, and services. It alerts users when things go wrong and alerts them again when the problem has been resolved. There are [2 types of Nagios](#): Nagios XI for the enterprise version and Nagios Core for the free version. This article will explain how to install Nagios Core on Ubuntu.

Problem

How to install Nagios on Ubuntu?

Solution

Here are the steps to install Nagios on Ubuntu, and these steps work on Ubuntu 24.04 and below and I think it should also work on Debian.

1. Download the packages

Install the packages needed to install Nagios using the command below:

```
sudo apt-get install autoconf gcc libc6 make wget unzip apache2 php  
libapache2-mod-php libgd-dev libssl-dev
```

2. Create a user and a group

After that, create a user and group for Nagios using the commands:

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

3. Download Nagios

Use the commands below to download Nagios, where at the time of this writing (February 2025), the latest version of Nagios is version 4.5.9:

```
cd /tmp
wget
https://github.com/NagiosEnterprises/nagioscore/archive/refs/heads/master.zip
-O nagios.zip
unzip nagios.zip
cd nagioscore-master/
```

4. Install Nagios

By default, Linux will create a Nagios folder in the /usr/local folder to save Nagios configuration files. So, use the following commands to install Nagios:

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

Info

If you want to save all Nagios files in a non-default folder, for example, in the /data folder, then use the following command: **sudo ./configure --prefix=/data/nagios --with-command-group=nagcmd --with-httpd-conf=/etc/apache2/sites-enabled**

After that, run the following commands:

```
sudo make all
sudo make install
sudo make install-init
sudo make install-daemoninit
sudo make install-config
sudo make install-commandmode
sudo make install-webconf
sudo a2enmod rewrite
sudo a2enmod cgi
```

5. Create the password

Create a password for the user Nagios to access the Nagios application. Nagiosadmin is usually a popular username for Nagios, but you can create another.

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

```
sysadmin@ubuntu2404:/tmp/nagioscore-master$ sudo htpasswd -c /usr/local/nagios/etc/htpasswd.users nagiosadmin
New password:
Re-type new password:
Adding password for user nagiosadmin
sysadmin@ubuntu2404:/tmp/nagioscore-master$
```

Create the password

Info

If you installed Nagios in a non-default folder, for example, in the /data folder, execute the below command: **sudo htpasswd -c /data/nagios/etc/htpasswd.users nagiosadmin**

6. Download Nagios Plugins

Plugins are compiled executables or scripts (Perl, shell, Python, PHP, Ruby, etc.) that can be run from a command line to check the status of a host or service. Nagios Core uses the results from plugins to determine the current status of hosts and services on your network. As of this writing (February 2025), the latest version of Nagios plugins is version 2.4.12. You can check the latest version of Nagios plugins on this site. Run the following commands to download Nagios plugins:

```
cd /tmp
wget
https://github.com/nagios-plugins/nagios-plugins/archive/refs/heads/master.zip
p -O nagios-plugins.zip
unzip nagios-plugins.zip
cd nagios-plugins-master/
```

7. Install Nagios Plugins

After that, install Nagios plugins using the following commands:

```
./tools/setup
sudo ./configure --with-nagios-user=nagios --with-nagios-group=nagios
sudo make
sudo make install
```

8. Check the configuration

After installing Nagios and Nagios plugins, run the following command to check the configuration of Nagios:

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

Info

If you installed Nagios in a non-default folder, for example, in the /data folder, execute the below command: **sudo /data/nagios/bin/nagios -v /data/nagios/etc/nagios.cfg**

and make sure there is no error like in the image below:

```
sysadmin@ubuntu2404:/tmp/nagios-plugins-master$ sudo /usr/local/nagios/bin/nagios -v /usr/local/nagios/etc/nagios.cfg

Nagios Core 4.5.9
Copyright (c) 2009-present Nagios Core Development Team and Community Contributors
Copyright (c) 1999-2009 Ethan Galstad
Last Modified: 2024-12-19
License: GPL

Website: https://www.nagios.org
Reading configuration data...
  Read main config file okay...
  Read object config files okay...

Running pre-flight check on configuration data...

Checking objects...
  Checked 8 services.
  Checked 1 hosts.
  Checked 1 host groups.
  Checked 0 service groups.
  Checked 1 contacts.
  Checked 1 contact groups.
  Checked 24 commands.
  Checked 5 time periods.
  Checked 0 host escalations.
  Checked 0 service escalations.
Checking for circular paths...
  Checked 1 hosts
  Checked 0 service dependencies
  Checked 0 host dependencies
  Checked 5 timeperiods
Checking global event handlers...
Checking obsessive compulsive processor commands...
Checking misc settings...

Total Warnings: 0
Total Errors: 0

Things look okay - No serious problems were detected during the pre-flight check
sysadmin@ubuntu2404:/tmp/nagios-plugins-master$
```

Check the Nagios configuration

9. Turn on the services

Turn on the services using the commands below:

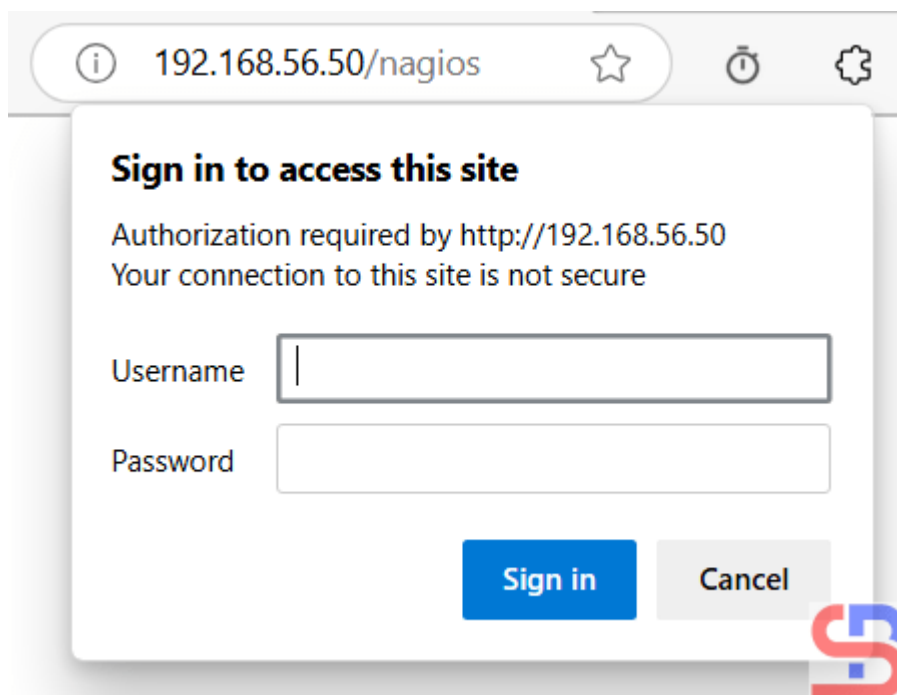
```
sudo systemctl start nagios.service
sudo systemctl enable nagios
sudo systemctl restart apache2.service
```

10. Check the application

Open your browser, and type in your browser:

`http://your_ip_address_server/nagios`

And there should be a display like the image below:

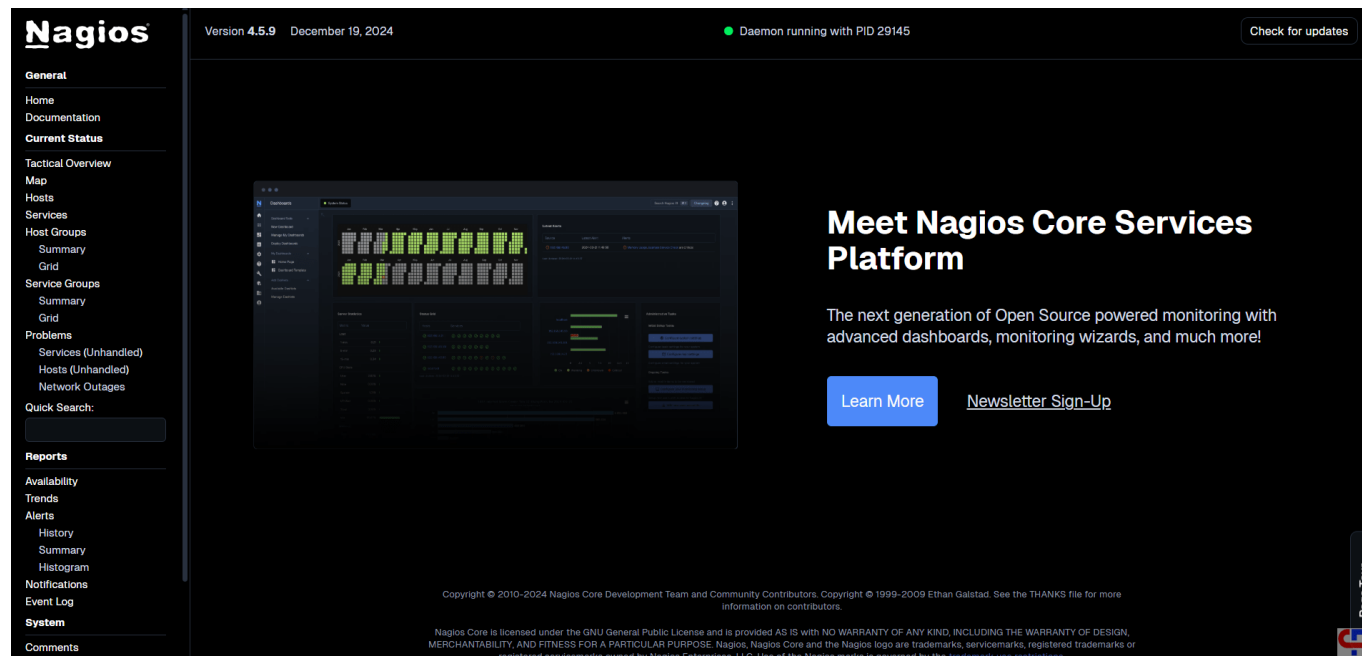


Open Nagios in the browser

If you don't see the image like the above image in your browser, maybe the Firewall/IPTables is still on your server. Run the following commands:

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

Back to your browser again, and it should work now. Insert the username (**nagiosadmin**) and the password for Nagios. If the username and the password are right, the Nagios application will appear like this:



Nagios application

If you want to know which hosts are being monitored by Nagios, click **Hosts**, and Nagios will display the hosts that are being monitored:

The screenshot shows the Nagios 'Hosts' page. The left sidebar is the same as the previous image, but the 'Hosts' link is highlighted with a red box. The main content area is titled 'Current Network Status' and shows the last update time, update frequency, and the user logged in as 'nagiosadmin'. Below this, there are two summary tables: 'Host Status Totals' and 'Service Status Totals'. The 'Host Status Totals' table shows 1 Up, 0 Down, 0 Unreachable, and 0 Pending. The 'Service Status Totals' table shows 1 Ok, 0 Warning, 0 Unknown, 7 Critical, and 0 Pending. Below these tables, there is a section titled 'Host Status Details For All Host Groups' which includes a table with columns for Host, Status, Last Check, Duration, and Status Information. The table shows one host, 'localhost', which is 'UP' and was last checked on 02-04-2025 16:34:16. The status information for 'localhost' is 'PING OK - Packet loss = 0%, RTA = 0.07 ms'. The page also includes a 'Limit Results' dropdown set to 100 and a 'Results 1 - 1 of 1 Matching Hosts' message.

Hosts monitored by Nagios

You can see from the picture above, Nagios only monitors the Nagios server or localhost. If you want to know which services are being monitored by Nagios, click **Services** then Nagios will display the services that are being monitored:

Nagios

General

Home
Documentation
Current Status
Tactical Overview
Map
Hosts
Services
Host Groups
Summary
Grid
Service Groups
Summary
Grid
Problems
Services (Unhandled)
Hosts (Unhandled)
Network Outages
Quick Search:
Reports
Availability
Trends
Alerts

Current Network Status
Last Updated: Tue Feb 4 16:38:40 UTC 2025
Updated every 90 seconds
Nagios® Core™ 4.5.9 - www.nagios.org
Logged in as nagiosadmin
View History For all hosts
View Notifications For All Hosts
View Host Status Detail For All Hosts

Host Status Totals
Up Down Unreachable Pending
1 0 0 0
All Problems All Types
0 1

Service Status Totals
Ok Warning Unknown Critical Pending
8 0 0 0 0
All Problems All Types
0 8

Service Status Details For All Hosts

Limit Results: 100

Host	Service	Status	Last Check	Duration	Attempt	Status Information
localhost	Current Load	OK	02-04-2025 16:37:19	0d 0h 1m 21s	1/4	OK - load average: 0.00, 0.06, 0.36
	Current Users	OK	02-04-2025 16:37:57	0d 0h 0m 43s	1/4	USERS OK - 2 users currently logged in
	HTTP	OK	02-04-2025 16:38:34	0d 0h 0m 6s	1/4	HTTP OK: HTTP/1.1 200 OK - 10945 bytes in 0.013 second response time
	PING	OK	02-04-2025 16:34:12	0d 0h 4m 28s	1/4	PING OK - Packet loss = 0%, RTA = 0.10 ms
	Root Partition	OK	02-04-2025 16:34:49	0d 0h 3m 51s	1/4	DISK OK - free space: / 3195 MiB (33.80% inode=77%):
	SSH	OK	02-04-2025 16:35:27	0d 0h 3m 13s	1/4	SSH OK - OpenSSH_9.6p1 Ubuntu-3ubuntu13.5 (protocol 2.0)
	Swap Usage	OK	02-04-2025 16:36:04	0d 0h 2m 36s	1/4	SWAP OK - 100% free (1961 MB out of 1967 MB)
	Total Processes	OK	02-04-2025 16:36:42	0d 0h 1m 58s	1/4	PROCS OK: 40 processes with STATE = RSZDT

Results 1 - 8 of 8 Matching Services

Services monitored by Nagios

From the picture above, Nagios monitors 8 services for the Nagios server or localhost.

Note

If you have a domain/subdomain and want to use that domain/subdomain for the Nagios application, create a virtual host on your web server. For example, I have the domain sysadminpedia.com and want to use the subdomain nagios.sysadminpedia.com for the Nagios application. So, I created the script below in the file `/etc/apache2/sites-enabled/nagios.sysadminpedia.com.conf`:

```
<VirtualHost *:80>
    ServerName nagios.sysadminpedia.com
    ServerAdmin sysadmin@nagios.sysadminpedia.com
    DocumentRoot /usr/local/nagios/share
    <Directory /usr/local/nagios/share>
        Options -Indexes +FollowSymLinks
```

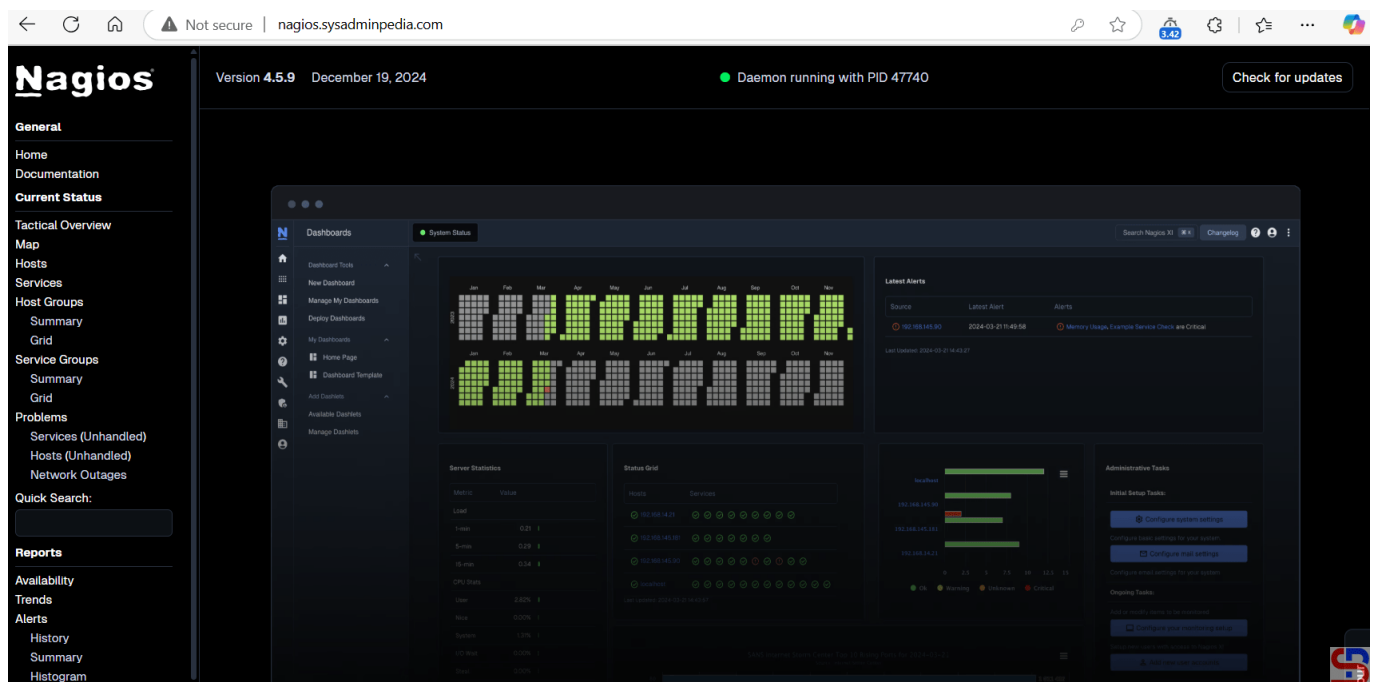
```

        AllowOverride All
    </Directory>

    ErrorLog /var/log/apache2/nagios.sysadminpedia.com-error.log
    CustomLog /var/log/apache2/nagios.sysadminpedia.com-access.log combined
</VirtualHost>

```

Restart the webserver, open your browser, and type your domain/subdomain for Nagios, and it should be like the image below:



Using a domain/subdomain for the Nagios application

Info

If you installed Nagios in a non-default folder, for example, in the /data folder, you can copy the script above, but you must change the word /usr/local to /data

References

en.wikipedia.org
assets.nagios.com
techoverflow.net