

[How to Install NagiosQL in Ubuntu/Debian?](#)

written by sysadmin | 30 August 2025

After you [install the Nagios](#) application on the Ubuntu/Debian server, by default, Nagios Core does not provide a web-based interface to manage Nagios configuration for adding/deleting/changing hosts and services. Therefore, some developers create a web-based interface so users can manage the hosts and services easily. This article will explain how to install the NagiosQL application to set up the device or service on Nagios.

Problem

How to install NagiosQL in Ubuntu/Debian?

Solution

NagiosQL is a professional, web-based configuration tool for Nagios 2.x/3.x/4.x and other Nagios-based monitoring tools. It is designed for large enterprise requirements as well as small environments, and any Nagios functionality is supported. I ran the steps below in Ubuntu 24.04, and I think it will work in Debian too. Here are the steps to install the NagioSQL application, and

A. Install the dependencies

Use the following command to install the dependencies:

```
sudo apt update
sudo apt-get install -y php libmcrypt-dev php-cli php-gd php-curl php-mysql
php-ldap php-zip php-fileinfo php-pear gcc php-dev php zlib1g-dev libssh2-1
libssh2-1-dev php-ssh2 mariadb-server build-essential
sudo pear channel-update pear.php.net
sudo pear install HTML_Template_IT
```

B. Install PHP Modules

After that, install PHP Modules using the following command:

```
sudo pecl install mcrypt
```

C. Configure PHP

Type the following commands to configure PHP:

```
echo "extension=mcrypt.so" >> /etc/php/*/apache2/php.ini
echo "date.timezone=Asia/Singapore" >> /etc/php/*/apache2/php.ini
sudo systemctl restart apache2
```

D. Configure the database

Start MariaDB and give the password using the following commands:

```
sudo systemctl start mariadb
sudo mariadb-secure-installation
```

Access to MariaDB using the following command:

```
mariadb -uroot -p
```

Type your root password and then run the following commands to create a database for NagiosQL:

```
CREATE DATABASE nagiosql;
GRANT ALL PRIVILEGES ON nagiosql.* TO `nagiosql_user`@`%` IDENTIFIED BY
'qwerty';
FLUSH PRIVILEGES;
```

E. Download NagiosQL

Download the latest release of the NagiosQL application, as of this writing (August 2025), has reached version 3.5.0, and configure it by typing the commands below:

```
cd /tmp/
```

```
wget https://sourceforge.net/projects/nagiosql/files/latest/download -O
nagiosql.tar.gz
tar -zxvf nagiosql.tar.gz
sudo cp -vprf nagiosql-*/ /usr/local/nagios/share/nagiosql
```

F. Configure files and folders

Copy the commands below to configure files and folders:

```
sudo mkdir /usr/local/nagios/etc/nagiosql;
sudo mkdir /usr/local/nagios/etc/nagiosql/hosts;
sudo mkdir /usr/local/nagios/etc/nagiosql/services;
sudo mkdir /usr/local/nagios/etc/nagiosql/backup;
sudo mkdir /usr/local/nagios/etc/nagiosql/backup/hosts;
sudo mkdir /usr/local/nagios/etc/nagiosql/backup/services;
sudo chown nagios:nagcmd /usr/local/nagios/var/rw
sudo chown nagios:nagcmd /usr/local/nagios/var/rw/nagios.cmd
sudo chown nagios:www-data /usr/local/nagios/etc/nagios.cfg;
sudo chown nagios:www-data /usr/local/nagios/etc/cgi.cfg;
sudo chown nagios:www-data /usr/local/nagios/etc/resource.cfg;
sudo chown nagios:www-data /usr/local/nagios/var/spool/checkresults;
sudo chown nagios:www-data /usr/local/nagios/bin/nagios;
sudo chmod 775 /usr/local/nagios/etc/
sudo chmod 777 /usr/local/nagios/bin/nagios
sudo chmod -R 777 /usr/local/nagios/share/nagiosql/config
sudo chmod -R 6775 /usr/local/nagios/etc/nagiosql;
sudo chmod 660 /usr/local/nagios/var/rw/nagios.cmd;
sudo chmod 775 /usr/local/nagios/etc/;
sudo chmod 664 /usr/local/nagios/etc/nagios.cfg;
sudo chmod 664 /usr/local/nagios/etc/cgi.cfg;
sudo chmod g+x /usr/local/nagios/var/rw/;
sudo chgrp www-data /usr/local/nagios/etc/;
sudo chgrp www-data /usr/local/nagios/etc/nagios.cfg;
sudo chgrp www-data /usr/local/nagios/etc/cgi.cfg;
sudo sed -i 's/^cfg/#cfg/' /usr/local/nagios/etc/nagios.cfg
echo "" | sudo tee -a /usr/local/nagios/etc/nagios.cfg
echo "cfg_dir=/usr/local/nagios/etc/nagiosql" | sudo tee -a
/usr/local/nagios/etc/nagios.cfg
```

G. Configure NagiosQL in the browser

Next, configure the application in the browser by typing the command in the browser:

```
http://your_ip_server/nagios/nagiosql
```

If the browser asks to insert the username and password, insert your Nagios username and password.

http://192.168.56.12

This site is asking you to sign in.

Username

Password

Cancel Sign in

Insert username and password

After you insert the password, there will be a display like this:

The screenshot shows the NagiosQL installation wizard. At the top, there is a header with the NagiosQL logo, 'Online Documentation', and a language dropdown menu set to 'English'. The main heading is 'Welcome to the NagiosQL installation wizard'. Below this, it states: 'This wizard will help you to install and configure NagiosQL. For questions please visit: NagiosQL @ Sourceforge'. The version is 'NagiosQL version 3.5.0'. The first step is to check the local environment. It lists basic requirements: PHP 7.2.0 or above (PHP 8 is recommended) including PHP database module (supported types are **mysqli**), PHP module: **session**, PHP module: **gettext**, PHP module: **filter**, PHP module: **FTP** (optional), and PECL extension: **SSH** (optional). It also lists php.ini options: file_uploads on (for upload features), session.auto_start needs to be off, and date.timezone should be set to your local timezone. Additionally, it requires a database server and Nagios 2.x/3.x/4.x. A red error message states: 'Settings file not found or not readable (config/settings.php). Upgrade not available!'. At the bottom, there are two buttons: 'START INSTALLATION' (highlighted with a red box) and 'START UPDATE'. There is also a link for 'Online documentation'. The footer contains the NagiosQL logo and a stylized 'S' logo.

Configure the NagiosQL button

Click the **START INSTALLATION** button, and there is a display like the image below:

NagiosQL

Requirements

Installation

Finish

NagiosQL Installation: Checking requirements

Checking Client

- ✔ Javascript: **ENABLED**

Checking PHP version

- ✔ Version : **OK** (PHP 8.3.6 detected)

Checking PHP extensions

The following modules/extensions are *required* to run NagiosQL:

- ✔ PEAR: **OK**
- ✔ Session: **OK**
- ✔ Gettext: **OK**
- ✔ Filter: **OK**

The next couple of extensions are *optional* but recommended:

- ✔ FTP: **OK**
- ✔ SSH2: **OK**

Checking available database interfaces

Check which of the supported extensions are installed. At least one of them is required.:

- ✔ MySQLi: **OK**

Checking php.ini/.htaccess settings

The following settings are *required* to run NagiosQL:

- ✔ file_uploads: **OK**
- ✔ session.auto_start: **OK**
- ✔ suhosin.session.encrypt: **OK**
- ✔ date.timezone: **OK**

Checking System Permission

- ⚠ Settings file does not exists (config/settings.php): **will be created**
- ✔ Write test on settings directory (config/): **OK**
- ✔ Read test on one class file (functions/NagVisualClass.php): **OK**
- ✔ Read test on home page file (admin.php): **OK**
- ✔ Read test on one template file (templates/index.tpl.htm): **OK**
- ✔ Read test on one admin template file (templates/admin/datalist.htm.tpl): **OK**
- ✔ Read test on one file template (templates/files/contacts.tpl.dat): **OK**
- ✔ Read test on one image file (images/pixel.gif): **OK**

Environment test completed successfully

Next

NagiosQL

Checking requirements

Make sure there is no error like in the image above. Click the **Next** button, and it will be an image like this:



NagiosQL Installation: Setup

Please complete the form below. Mandatory fields marked *:

Database Configuration	
Database Type *	mysql
Database Server *	localhost
Local hostname or IP address *	localhost
Database Server Port *	3306
Database name *	nagiosql
NagiosQL DB User *	nagiosql_user
NagiosQL DB Password *
Administrative Database User *	root
Administrative Database Password *
Drop database if already exists?	<input checked="" type="checkbox"/>
NagiosQL User Setup	
Initial NagiosQL User *	admin
Initial NagiosQL Password *
Please repeat the password *
Nagios Configuration	
Import Nagios sample config?	<input checked="" type="checkbox"/>
NagiosQL path values	
Create NagiosQL config paths?	<input checked="" type="checkbox"/>
NagiosQL config path	/usr/local/nagios/etc/nagiosql
Nagios config path	/usr/local/nagios/etc
<small>Both path values were stored in your configuration target settings for localhost. If you select the create path option, be sure that the NagiosQL base path exist and the webserver demon has write access to it. So the installer will create the required subdirectories in your localhost's filesystem (hosts, services, backup etc.)</small>	



NagiosQL

Setup NagiosQL

You must fill in the configuration columns, and I fill in like in this image above. After you fill it out, press the Next button, and there is a display like the image below:



NagiosQL Installation: Finishing Setup

Create new NagiosQL database

Database server connection (privileged user)	passed (mysqli)
Database server version	10.11.13-MariaDB-0ubuntu0.24.04.1
Database server support	supported
Delete existing NagiosQL database	done (nagiosql)
Creating new database	done (nagiosql)
Installing NagiosQL database tables	done
Create NagiosQL database user	done
Set initial NagiosQL Administrator	done (Only added rights to existing user: nagiosql_user)
Database server connection (NagiosQL user)	done
	passed

Deploy NagiosQL settings

Writing global settings to database	done
Writing database configuration to settings.php	done
Import Nagios sample data	done
Create and/or store NagiosQL path settings	done

Please delete the install directory to continue!



NagiosQL

The finishing setup

Before you click the **Finish** button, use the command below to delete the install directory:

```
rm -rf /usr/local/nagios/share/nagiosql/install/
```

After that, click the Finish button, and it should display an image like the image below:



Welcome

Username:

Password:

Please enter your username and password to access NagiosQL.
If you forgot one of them, please contact your Administrator.

NagiosQL 3.5.0



The NagiosQL login

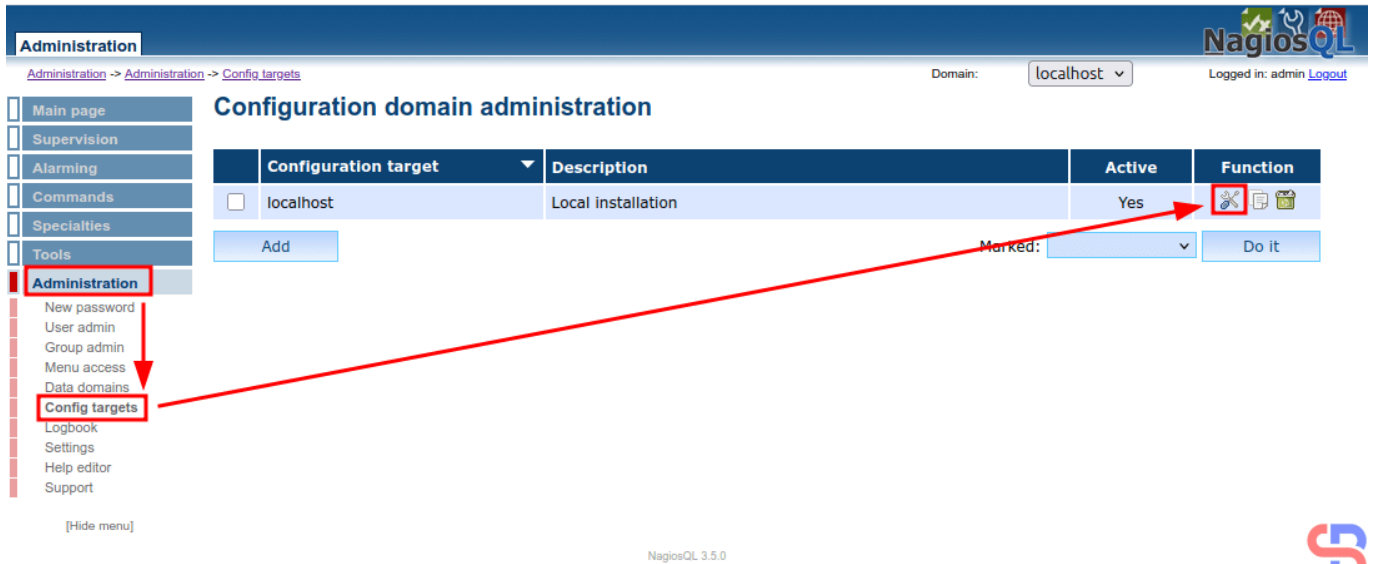
Enter the username (**admin**) and password, and if nothing is wrong, the NagiosQL application will appear like the image below:

A screenshot of the NagiosQL Administration web interface. The page has a dark blue header with the NagiosQL logo on the right. Below the header, there is a navigation menu on the left with items like 'Main page', 'Supervision', 'Alarming', 'Commands', 'Specialties', 'Tools', and 'Administration'. The main content area is titled 'NagiosQL Administration' and contains a welcome message: 'Welcome to NagiosQL, the administration module that can be used to easily create, modify and delete configuration files for Nagios. The data is stored in a database and can be written directly to the standard files at any time you want.' The page also shows the domain 'localhost' and the user 'admin' logged in.

The page of NagioQL administration

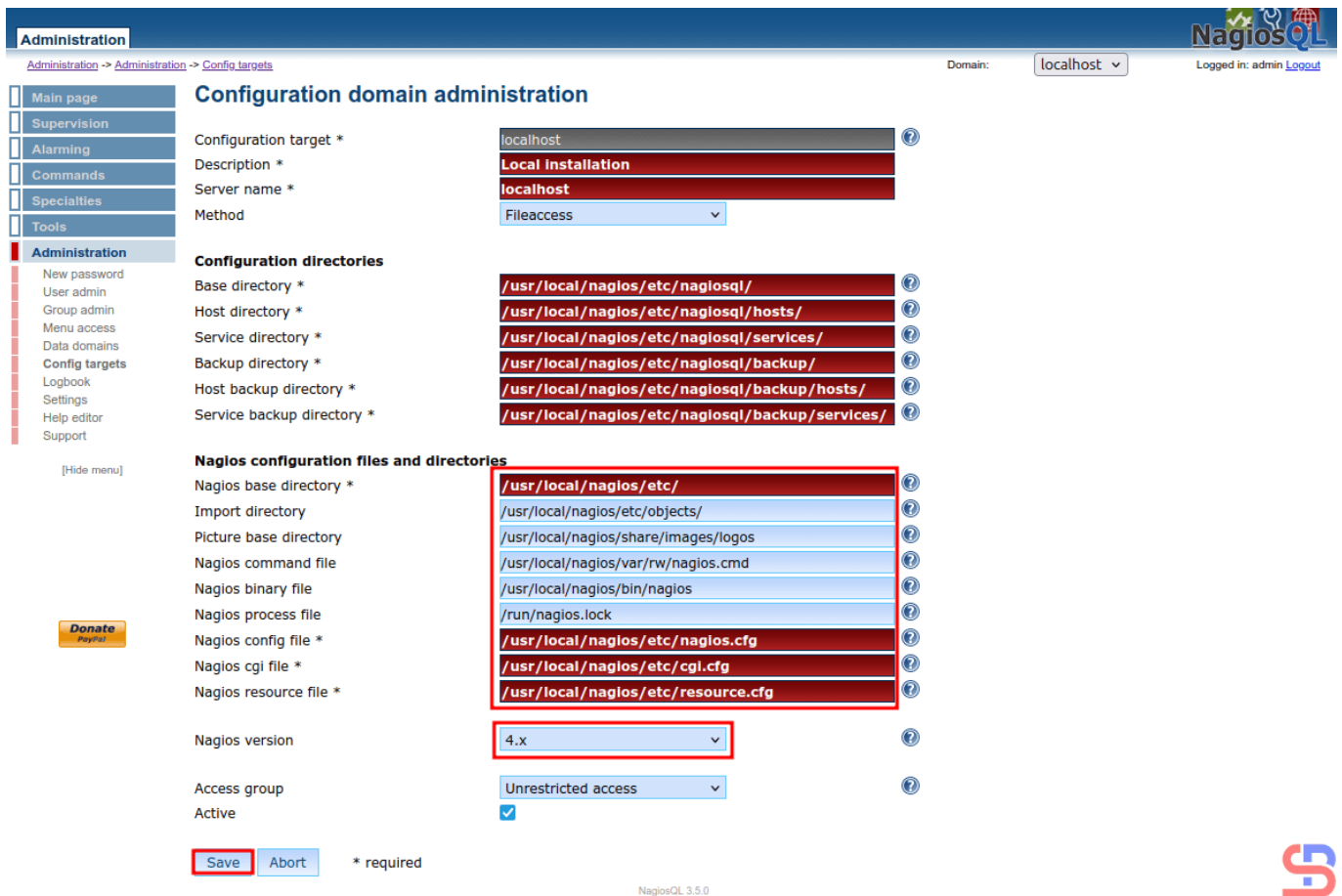
Now, configure the NagiosQL application to integrate it with Nagios. Click **Administration > Config targets > Modify**, like in the image below:





Configure domain administration

And there will be a display like the image below:



Configure the NagiosQL

Configure in the red box like my configuration in the image above, and click the **Save** button. After that, go to **Tools >**

Nagios control and click all the buttons like the image below, and make sure there is no error:

The image displays four screenshots of the Nagios control interface, arranged in a 2x2 grid. Each screenshot shows a 'Check written configuration files' section with several 'Do it' buttons. In the top-left and top-right screenshots, the 'Do it' buttons for 'Write monitoring data' and 'Write additional data' are highlighted with red boxes. The bottom-left screenshot shows the 'Do it' button for 'Check configuration files' highlighted with a red box. The bottom-right screenshot shows the 'Do it' button for 'Restart Nagios' highlighted with a red box. Below the 'Restart Nagios' button in the bottom-right screenshot, there is a green message: 'Restart command successfully send to Nagios'. At the bottom right of the bottom-right screenshot, there is a red and blue logo consisting of a stylized 'S' and 'D'.

Click all the Do it buttons

Now go to the Nagios application in the **Hosts** page and make sure that on the page, 3 default hosts appear in Nagios (**hplj2605dn**, **linksys-srw224p**, and **winserver**) besides localhost, like in the image below:

Current Network Status
 Last Updated: Tue Aug 19 14:57:40 UTC 2025
 Updated every 90 seconds
 Nagios® Core™ 4.5.9 - www.nagios.org
 Logged in as nagiosadmin

Host Status Totals

Up	Down	Unreachable	Pending
1	3	0	0

Service Status Totals

Ok	Warning	Unknown	Critical	Pending
7	1	1	12	0

Host Status Details For All Host Groups

Host	Status	Last Check	Duration	Status Information
hplj2605dn	DOWN	08-19-2025 14:55:59	0d 0h 10m 41s	PING CRITICAL - Packet loss = 100%
linksys-srw224p	DOWN	08-19-2025 14:55:44	0d 0h 9m 26s	PING CRITICAL - Packet loss = 100%
localhost	UP	08-19-2025 14:56:24	0d 3h 14m 21s	PING OK - Packet loss = 0%, RTA = 0.08 ms
winserver	DOWN	08-19-2025 14:56:31	0d 0h 8m 39s	PING CRITICAL - Packet loss = 100%

3 new hosts in the Hosts page on Nagios

Now go to the **Services** section, and there should be services that appear on the 3 new default hosts:

Current Network Status
 Last Updated: Tue Aug 19 14:58:48 UTC 2025
 Updated every 90 seconds
 Nagios® Core™ 4.5.9 - www.nagios.org
 Logged in as nagiosadmin

Host Status Totals

Up	Down	Unreachable	Pending
1	3	0	0

Service Status Totals

Ok	Warning	Unknown	Critical	Pending
7	1	1	12	0

Service Status Details For All Hosts

Host	Service	Status	Last Check	Duration	Attempt	Status Information
hplj2605dn	PING	CRITICAL	08-19-2025 14:48:28	0d 0h 10m 20s	1/3	PING CRITICAL - Packet loss = 100%
	Printer Status	CRITICAL	08-19-2025 14:49:58	0d 0h 8m 50s	1/3	(No output on stdout) stderr: execvp(/usr/local/nagios/libexec/check_hjpd, ...) failed. errno is 2: No such file or directory
	Port 1 Bandwidth Usage	UNKNOWN	08-19-2025 14:52:58	0d 0h 5m 50s	1/3	check_mrtgtraf: Unable to open MRTG log file
	Port 1 Link Status	CRITICAL	08-19-2025 14:54:27	0d 0h 4m 21s	1/3	(No output on stdout) stderr: execvp(/usr/local/nagios/libexec/check_snmp, ...) failed. errno is 2: No such file or directory
linksys-srw224p	Uptime	CRITICAL	08-19-2025 14:55:57	0d 0h 2m 51s	1/3	(No output on stdout) stderr: execvp(/usr/local/nagios/libexec/check_snmp, ...) failed. errno is 2: No such file or directory
	Current Load	OK	08-19-2025 14:53:54	0d 3h 14m 54s	1/4	OK - load average: 0.00, 0.00, 0.00
	Current Users	OK	08-19-2025 14:54:32	0d 3h 14m 16s	1/4	USERS OK - 1 users currently logged in
	HTTP	OK	08-19-2025 14:55:09	0d 3h 13m 39s	1/4	HTTP OK: HTTP/1.1 200 OK - 10945 bytes in 0.001 second response time
	PING	OK	08-19-2025 14:55:47	0d 3h 13m 1s	1/4	PING OK - Packet loss = 0%, RTA = 0.06 ms
	Root Partition	WARNING	08-19-2025 14:54:24	0d 1h 49m 24s	4/4	DISK WARNING - free space: / 1583 MiB (16.75% inode=78%):
	SSH	OK	08-19-2025 14:57:03	0d 3h 11m 46s	1/4	SSH OK - OpenSSH_9.6p1 Ubuntu-3ubuntu13.11 (protocol 2.0)
Swap Usage	OK	08-19-2025 14:57:39	0d 3h 11m 9s	1/4	SWAP OK - 100% free (1952 MB out of 1967 MB)	
Total Processes	OK	08-19-2025 14:58:17	0d 3h 10m 31s	1/4	PROCS OK: 43 processes with STATE = RSZDT	
winserver	C:\ Drive Space	CRITICAL	08-19-2025 14:51:01	0d 0h 7m 47s	3/3	CRITICAL - Socket timeout
	CPU Load	CRITICAL	08-19-2025 14:50:21	0d 0h 8m 27s	1/3	CRITICAL - Socket timeout
	Explorer	CRITICAL	08-19-2025 14:51:50	0d 0h 6m 58s	1/3	CRITICAL - Socket timeout
	Memory Usage	CRITICAL	08-19-2025 14:53:20	0d 0h 5m 28s	1/3	CRITICAL - Socket timeout
	NSClient++ Version	CRITICAL	08-19-2025 14:54:50	0d 0h 3m 58s	1/3	CRITICAL - Socket timeout
	Uptime	CRITICAL	08-19-2025 14:56:20	0d 0h 2m 28s	1/3	CRITICAL - Socket timeout
W3SVC	CRITICAL	08-19-2025 14:51:23	0d 0h 7m 25s	3/3	CRITICAL - Socket timeout	

Services in the 3 new hosts

If there are 3 additional hosts in the Hosts and Services

section in Nagios, you have successfully integrated the Nagios application with the NagiosQL application.

Note

You have to be careful when filling in the Configuration domain administration section, because if it is wrong in this section, then the NagiosQL application will not run properly

References

sourceforge.net
tecadmin.net

[How to Install Nagios on RockyLinux?](#)

written by sysadmin | 30 August 2025

[The previous article](#) explained how to install the Nagios application on Ubuntu. This article will explain how to install the Nagios application on RockyLinux.

Problem

How to install Nagios on RockyLinux?

Solution

Below are the steps to install Nagios on RockyLinux and work on RockyLinux 9.5 and below. But I think these steps should apply to installing Nagios on RHEL and its derivatives, such as CentOS, AlmaLinux, and so on.

1. Download the packages

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

```
yum install -y httpd php php-devel gcc glibc glibc-common gd gd-devel make net-snmp-* wget zip unzip php-mysqlnd php-mysql*
```

2. Create a user and a group

Create a user and group for Nagios using the commands:

```
useradd nagios
groupadd nagcmd
usermod -G nagcmd nagios
usermod -G nagcmd apache
```

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:

```
./configure
```

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: **./configure**

-prefix=/data/nagios

After that, run the following commands:


```
make all
make install
make install-init
make install-commandmode
make install-config
make install-webconf
```

5. Create the password

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

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

```
[root@RockyLinux9 nagioscore-master]# htpasswd -c /usr/local/nagios/etc/htpasswd.users nagiosadmin
New password:
Re-type new password:
Adding password for user nagiosadmin
[root@RockyLinux9 nagioscore-master]#
```



Create a password for the nagiosadmin user

Info

If you installed Nagios in a non-default folder, for example, in the /data folder, execute the below command: **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
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:

```
/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: /data/nagios/bin/nagios -v /data/nagios/etc/nagios.cfg

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

```
[root@RockyLinux9 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
[root@RockyLinux9 nagios-plugins-master]#
```



Check the Nagios configuration

9. Turn on the services

Turn on the services using the commands below:

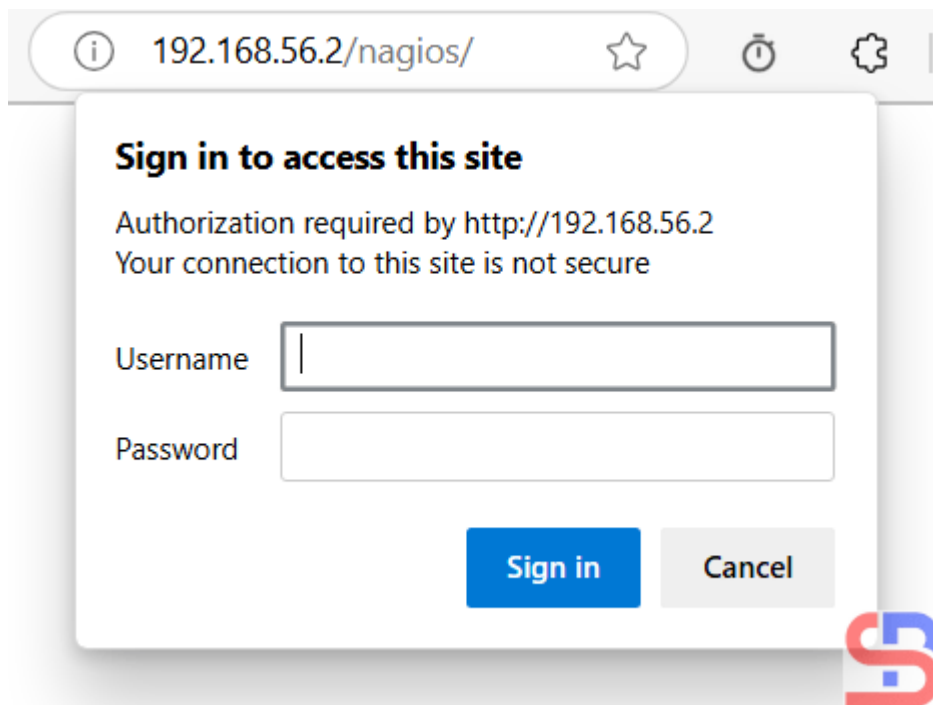
```
cp /lib/systemd/system/nagios.service /etc/systemd/system/
systemctl start httpd
systemctl start nagios
systemctl enable httpd
systemctl enable nagios
```

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:

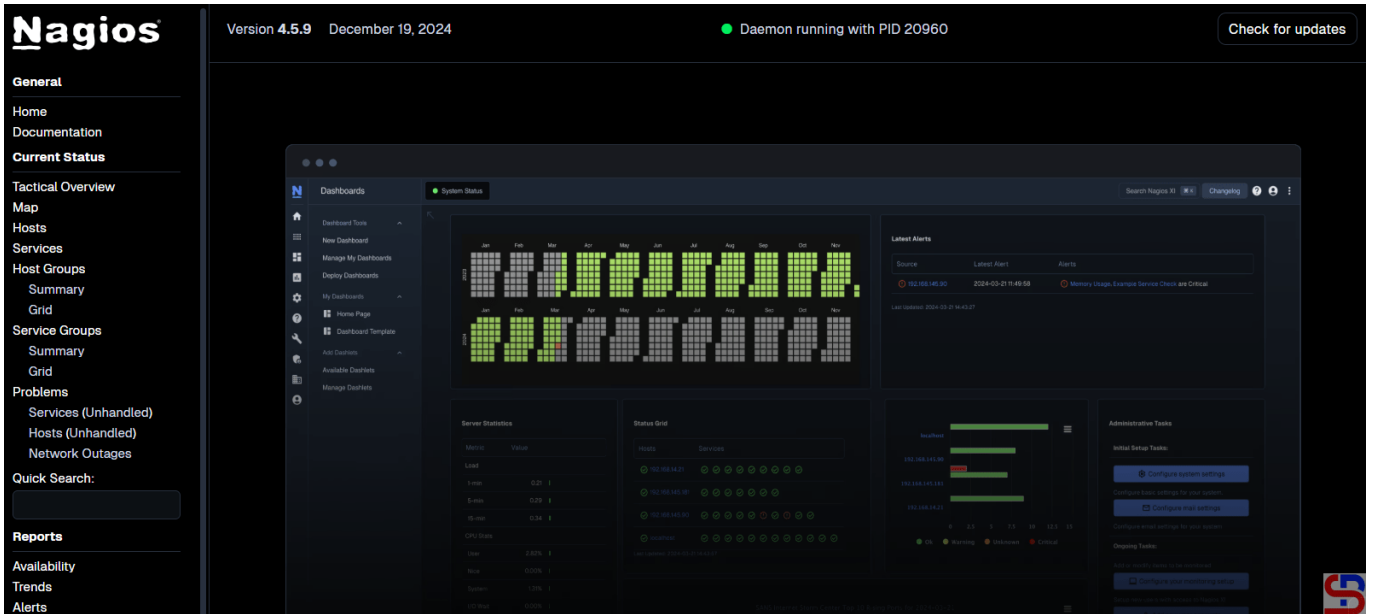


Open the Nagios application

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

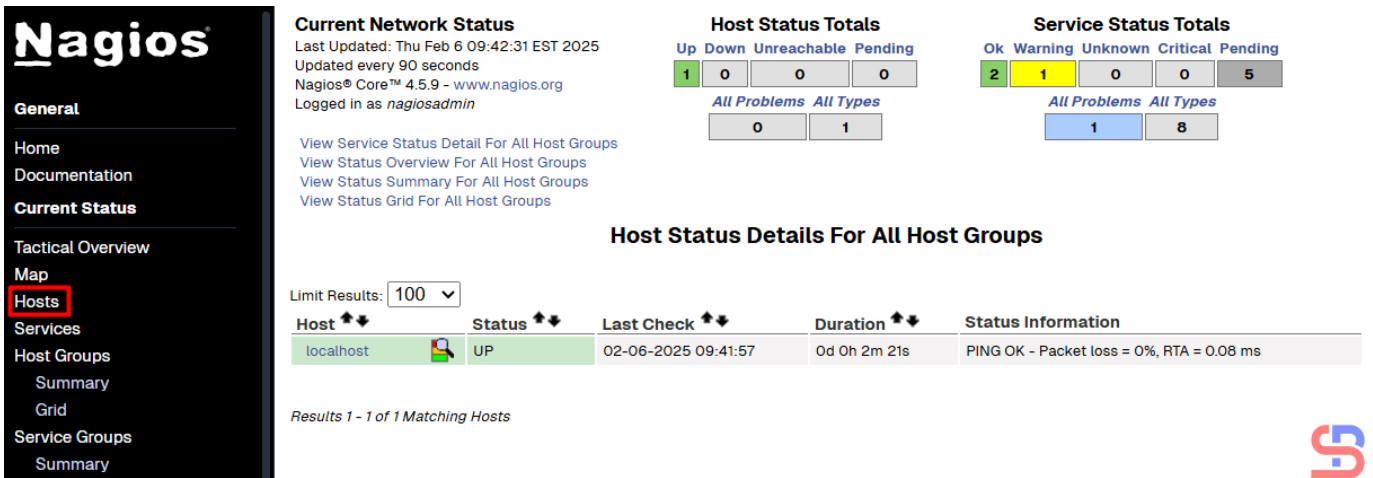
```
firewall-cmd --zone=public --add-port=80/tcp --permanent
firewall-cmd --reload
sed -i 's/SELINUX=.* /SELINUX=disabled/g' /etc/selinux/config
setenforce 0
```

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:



Open the Nagios application

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



Hosts monitored by Nagios

From the picture above, it can be seen that currently, Nagios is only monitoring the Nagios server or localhost. If you want to know which services are being monitored by Nagios, click **Services**. Nagios will display the services that are being monitored:

Current Network Status
 Last Updated: Thu Feb 6 09:46:10 EST 2025
 Updated every 90 seconds
 Nagios® Core™ 4.5.9 - www.nagios.org
 Logged in as nagiosadmin

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

Service Status Totals
 Ok: 7, Warning: 1, Unknown: 0, Critical: 0, Pending: 0
 All Problems: 1, All Types: 8

Service Status Details For All Hosts

Limit Results: 100

Host	Service	Status	Last Check	Duration	Attempt	Status Information
localhost	Current Load	OK	02-06-2025 09:45:42	0d 0h 5m 28s	1/4	OK - load average: 0.00, 0.26, 0.35
	Current Users	OK	02-06-2025 09:41:20	0d 0h 6m 6s+	1/4	USERS OK - 1 users currently logged in
	HTTP	WARNING	02-06-2025 09:44:57	0d 0h 1m 13s	4/4	HTTP WARNING: HTTP/1.1 403 Forbidden - 7897 bytes in 0.001 second response time
	PING	OK	02-06-2025 09:42:35	0d 0h 6m 6s+	1/4	PING OK - Packet loss = 0%, RTA = 0.11 ms
	Root Partition	OK	02-06-2025 09:43:12	0d 0h 6m 6s+	1/4	DISK OK - free space: / 15158 MiB (87.15% inode=99%):
	SSH	OK	02-06-2025 09:43:50	0d 0h 6m 6s+	1/4	SSH OK - OpenSSH_8.7 (protocol 2.0)
	Swap Usage	OK	02-06-2025 09:44:27	0d 0h 6m 6s+	1/4	SWAP OK - 100% free (2047 MB out of 2047 MB)
	Total Processes	OK	02-06-2025 09:45:05	0d 0h 6m 6s+	1/4	PROCS OK: 35 processes with STATE = RSZDT

Results 1 - 8 of 8 Matching Services

Services monitored by Nagios

From the picture above, you can see that Nagios monitored 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

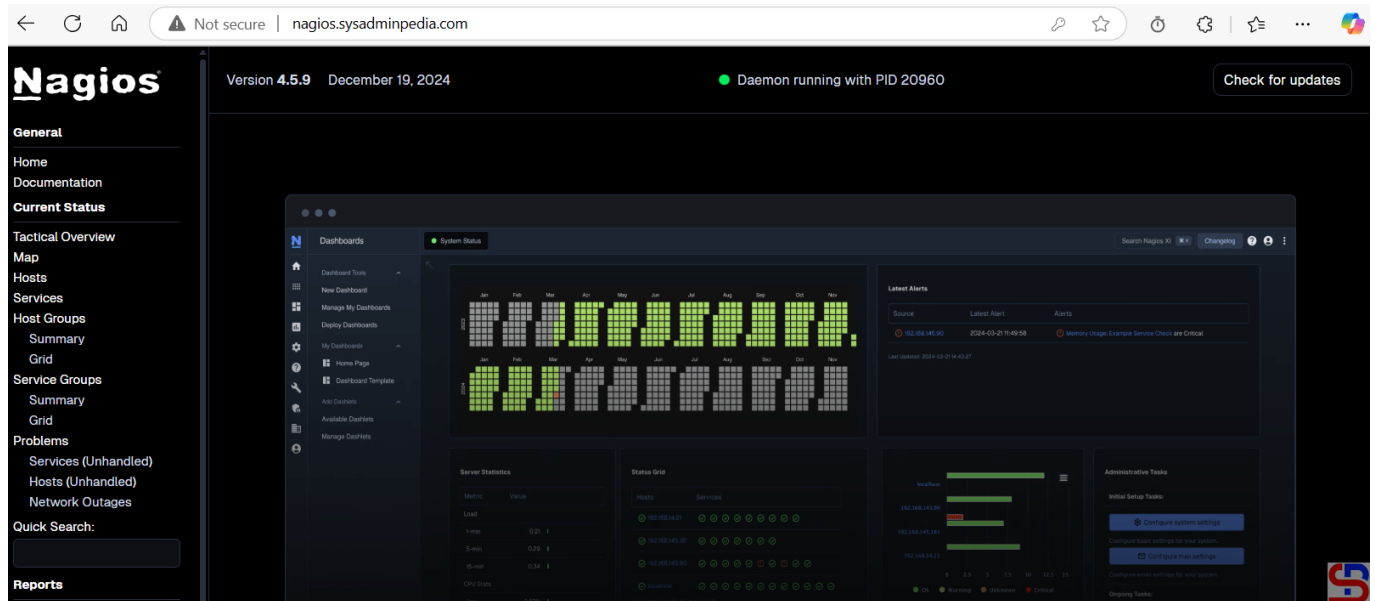
/etc/httpd/conf.d/nagios.sysadminpedia.com.conf:

```
<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/httpd/nagios.sysadminpedia.com-error.log
  CustomLog /var/log/httpd/nagios.sysadminpedia.com-access.log combined
</VirtualHost>
```

Restart the web server, open your browser, and type your domain/subdomain for Nagios, and it should be like the image

below:



Using a domain or a 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

support.nagios.com
tecmint.com
statusengine.org

[How to Install Nagios on Ubuntu?](#)

written by sysadmin | 30 August 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:

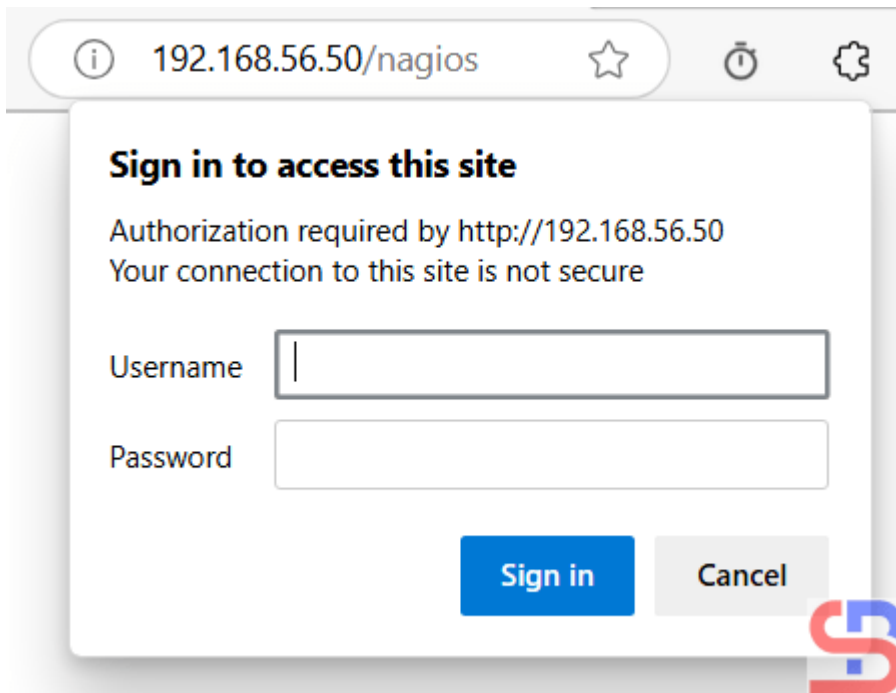
```
sudo systemctl start nagios.service
sudo systemctl enable nagios
sudo systemctl restart apache2.service
```

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:

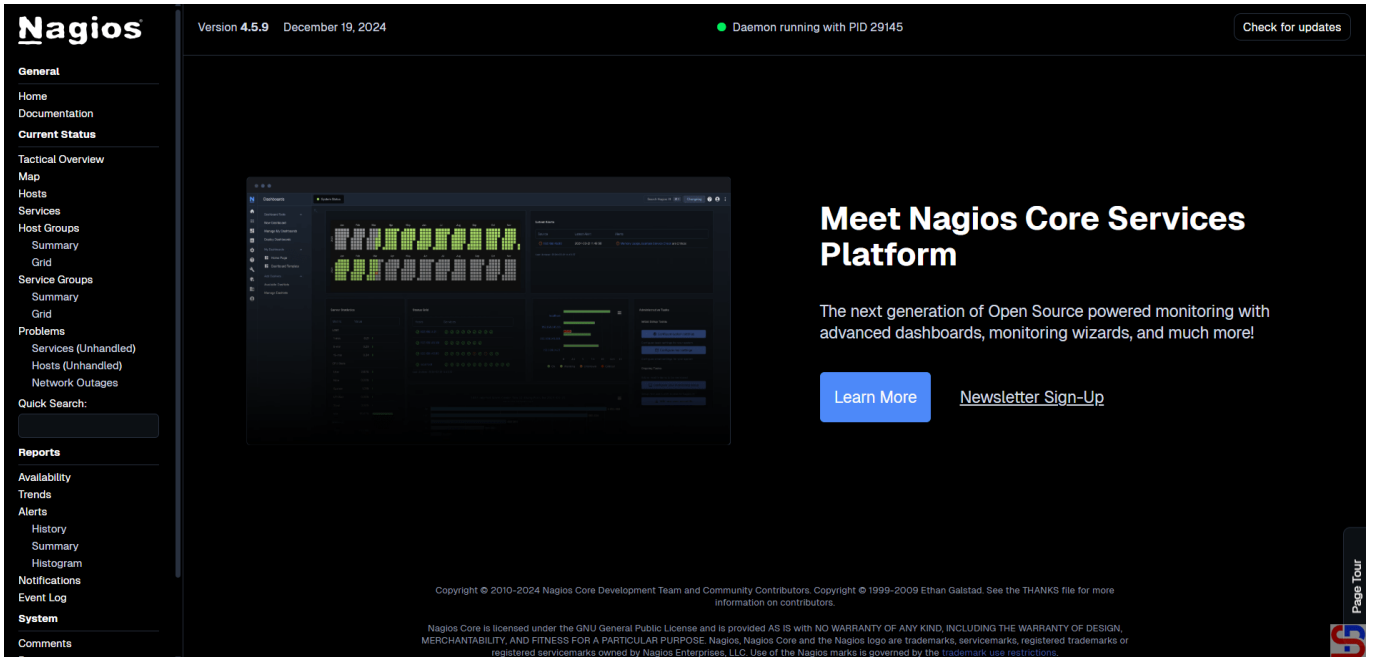


Open Nagios in the browser

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:

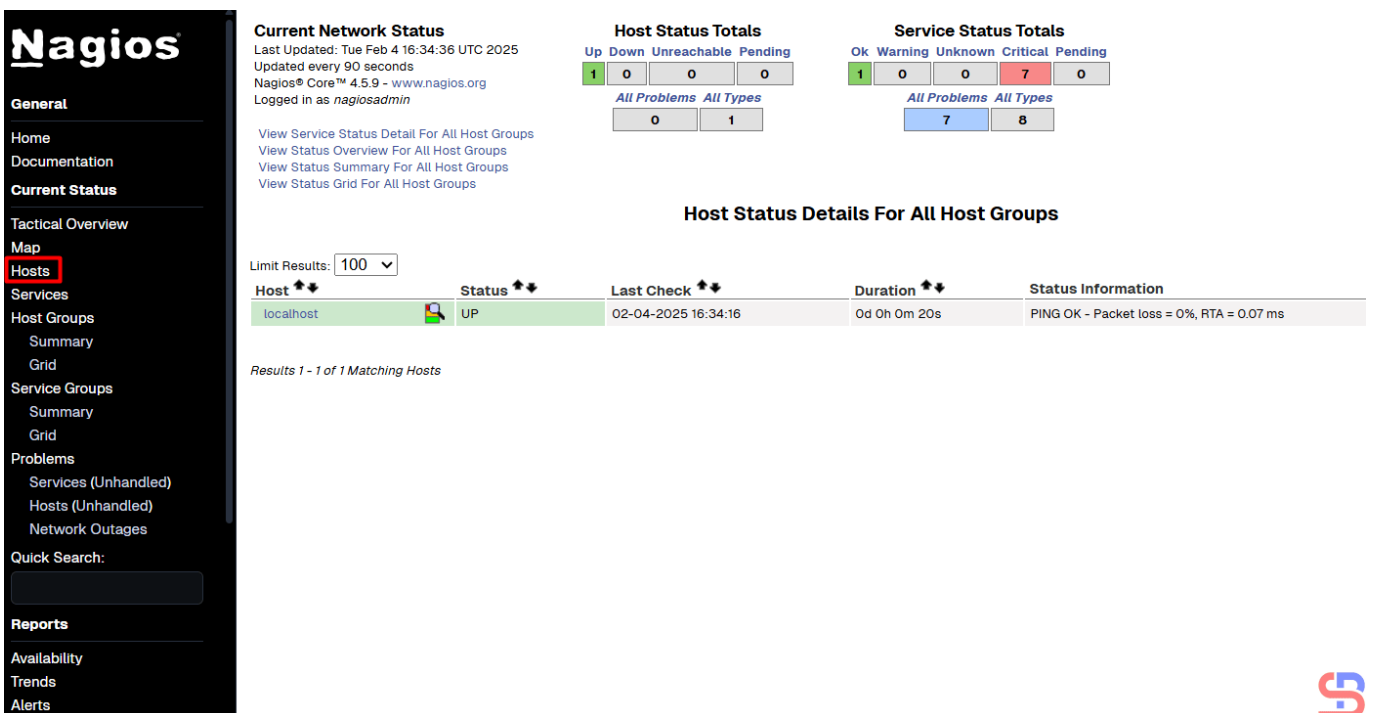
```
sudo ufw allow Apache
sudo ufw reload
```

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:



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:

The screenshot displays the Nagios web interface. On the left is a navigation menu with 'Services' highlighted. The main content area shows 'Current Network Status' (last updated Tue Feb 4 16:38:40 UTC 2025), 'Host Status Totals' (1 Up, 0 Down, 0 Unreachable, 0 Pending), and 'Service Status Totals' (8 OK, 0 Warning, 0 Unknown, 0 Critical, 0 Pending). Below these is a table titled 'Service Status Details For All Hosts' for the host 'localhost'. The table lists 8 services, all with a status of 'OK'. A sidebar on the right contains a logo with the letters 'G' and 'S' in red and blue.

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-Subuntun13.5 (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

Services monitored by Nagios

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

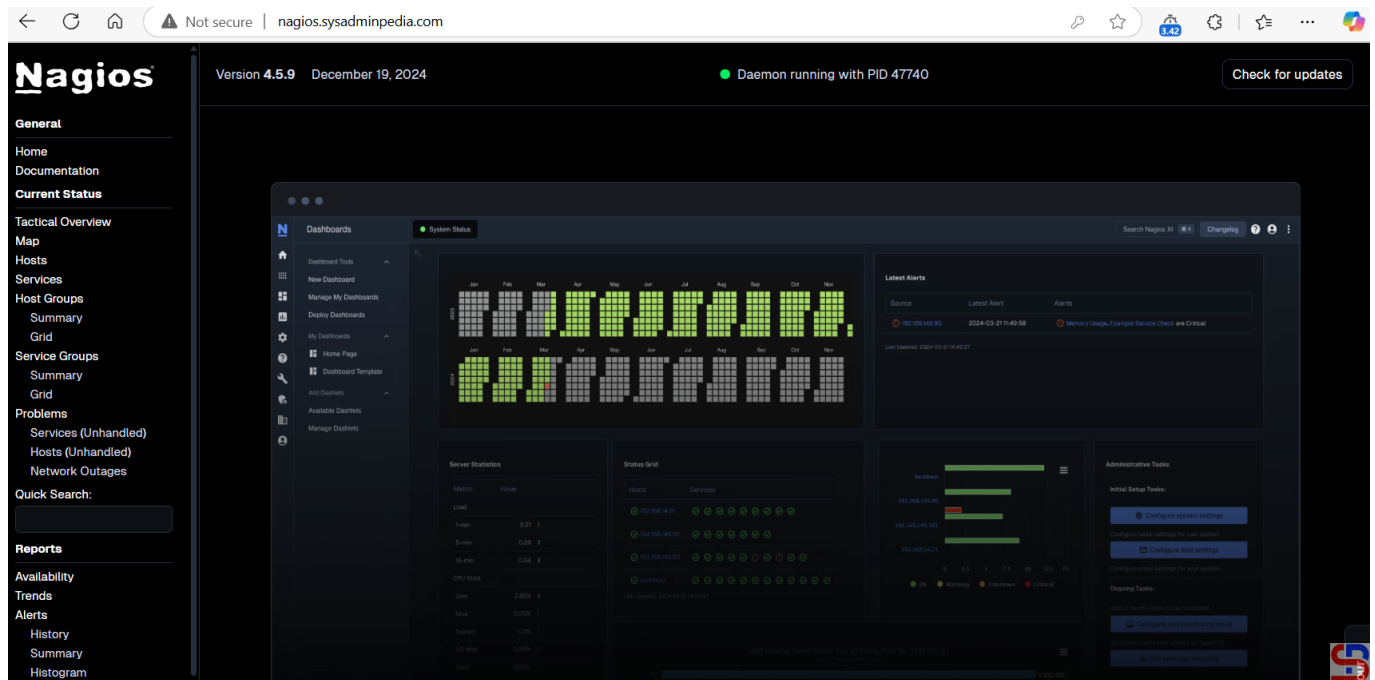
Note

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