

How to Display the Total Size of the Entire MariaDB Database in the CLI?

written by sysadmin | 10 September 2025

I want to know the total size of the entire MariaDB database.

Problem

How to display the total size of the entire MariaDB database in the CLI?

Solution

There are two methods for displaying the total size of the entire MariaDB database in the CLI:

1. Using a query

If you have entered the MariaDB database, you can use the command below to display the total size of a MariaDB database:


```
SELECT table_schema AS "Database",  
ROUND(SUM(data_length + index_length) / 1024 / 1024, 2) AS "Size (MB)"  
FROM information_schema.TABLES  
GROUP BY table_schema;
```

The above query will display the total size of the entire MariaDB database in MegaBytes (MB) as shown in the image below:

```
MariaDB [(none)]> SELECT table_schema AS "Database",
-> ROUND(SUM(data_length + index_length) / 1024 / 1024, 2) AS "Size (MB)"
-> FROM information_schema.TABLES
-> GROUP BY table_schema;
```

| Database | Size (MB) |
|--------------------|-----------|
| information_schema | 0.20 |
| instances | 488.72 |
| mysql | 3.33 |
| nodes | 540.02 |
| performance_schema | 0.00 |
| sys | 0.03 |

6 rows in set (0.013 sec)



Display the total size of the databases using the query in Megabytes

If you want to display in Gigabytes (GB), use the command below:


```
SELECT table_schema AS "Database",
ROUND(SUM(data_length + index_length) / 1024 / 1024 / 1024, 2) AS "Size (GB)"
FROM information_schema.TABLES
GROUP BY table_schema;
```

so that it will display as shown in the image below:

```
MariaDB [(none)]> SELECT table_schema AS "Database",
-> ROUND(SUM(data_length + index_length) / 1024 / 1024 / 1024, 2) AS "Size (GB)"
-> FROM information_schema.TABLES
-> GROUP BY table_schema;
```

| Database | Size (GB) |
|--------------------|-----------|
| information_schema | 0.00 |
| instances | 0.48 |
| mysql | 0.00 |
| nodes | 0.53 |
| performance_schema | 0.00 |
| sys | 0.00 |

6 rows in set (0.012 sec)



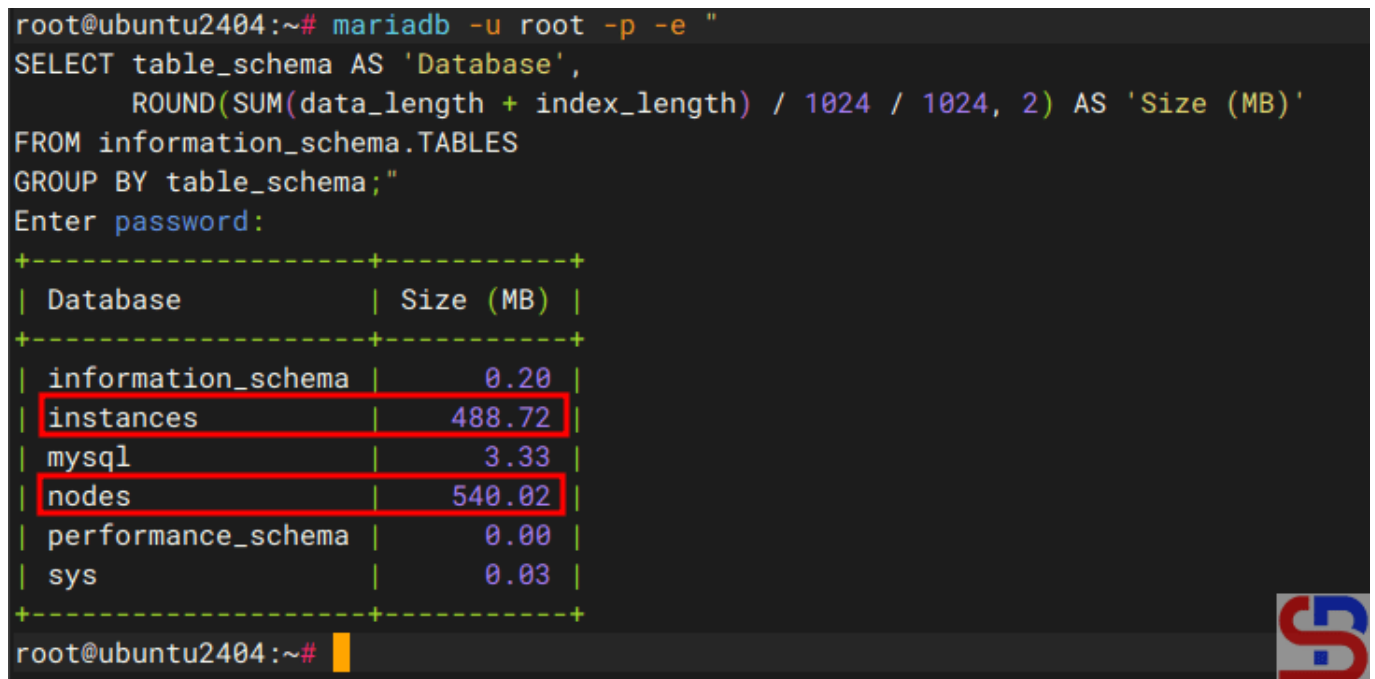
Display the total size of the databases using the query in GigaBytes

2. Using Linux Command

If you want to display the total size of the entire MariaDB database using Linux commands, use the command below:

```
mariadb -u root -p -e "  
SELECT table_schema AS 'Database',  
ROUND(SUM(data_length + index_length) / 1024 / 1024, 2) AS 'Size (MB)'  
FROM information_schema.TABLES  
GROUP BY table_schema;"
```

If you run the above command, it will display like the image below:



```
root@ubuntu2404:~# mariadb -u root -p -e "  
SELECT table_schema AS 'Database',  
ROUND(SUM(data_length + index_length) / 1024 / 1024, 2) AS 'Size (MB)'  
FROM information_schema.TABLES  
GROUP BY table_schema;"  
Enter password:  
+-----+-----+  
| Database          | Size (MB) |  
+-----+-----+  
| information_schema | 0.20      |  
| instances          | 488.72    |  
| mysql              | 3.33      |  
| nodes              | 540.02    |  
| performance_schema | 0.00      |  
| sys                | 0.03      |  
+-----+-----+  
root@ubuntu2404:~#
```

Display the total size of the databases using the Linux command in Megabytes

If you want to display it in GigaBytes, use the command below:

```
mariadb -u root -p -e "  
SELECT table_schema AS 'Database',  
ROUND(SUM(data_length + index_length) / 1024 / 1024 / 1024, 2) AS 'Size (GB)'  
FROM information_schema.TABLES  
GROUP BY table_schema;"
```

and it will display like the image below:

```
root@ubuntu2404:~# mariadb -u root -p -e "
SELECT table_schema AS 'Database',
       ROUND(SUM(data_length + index_length) / 1024 / 1024 / 1024, 2) AS 'Size (GB)'
FROM information_schema.TABLES
GROUP BY table_schema;"
Enter password:
+-----+-----+
| Database          | Size (GB) |
+-----+-----+
| information_schema | 0.00      |
| instances         | 0.48      |
| mysql             | 0.00      |
| nodes             | 0.53      |
| performance_schema | 0.00      |
| sys               | 0.00      |
+-----+-----+
root@ubuntu2404:~#
```

Display the total size of the databases using the Linux command in Gigabytes

Or in a short time, you can use the Linux command below to see the total size of the entire database in MariaDB:

```
cd /var/lib/mysql/
du -sh *
```

```
root@ubuntu2404:~# cd /var/lib/mysql/
root@ubuntu2404:/var/lib/mysql#
root@ubuntu2404:/var/lib/mysql# du -sh *
412K  aria_log.00000001
4.0K  aria_log_control
16K   ddl_recovery.log
0     debian-10.11.flag
4.0K  ib_buffer_pool
76M   ibdata1
96M   ib_logfile0
12M   ibtmp1
543M  instances
0     multi-master.info
3.7M  mysql
4.0K  mysql_upgrade_info
610M  nodes
8.0K  performance_schema
600K  sys
root@ubuntu2404:/var/lib/mysql#
```

Display the total size of the databases using the Linux command

Note

If you want to display the total size of the entire MariaDB database in KiloBytes, then in the **ROUND(SUM(data_length + index_length)** section, simply divide it by 1024 so that it becomes as follows:

```
mariadb -u root -p -e "  
SELECT table_schema AS "Database",  
ROUND(SUM(data_length + index_length) / 1024 , 2) AS "Size (KB)"  
FROM information_schema.TABLES  
GROUP BY table_schema;"
```

And if you want to display in TeraBytes size, then in the **ROUND(SUM(data_length + index_length)** section, divide by 1024 4 times, so that the command is as follows:

```
mariadb -u root -p -e "  
SELECT table_schema AS 'Database',  
ROUND(SUM(data_length + index_length) / 1024 / 1024 / 1024 / 1024 , 2) AS  
'Size (KB)'  
FROM information_schema.TABLES  
GROUP BY table_schema;"
```

References

a2hosting.com
database.guide
tecmint.com

[How to Reset MariaDB Root Password?](#)

written by sysadmin | 10 September 2025

I want to access the MariaDB database using the root user, but I forgot the password of the root user.

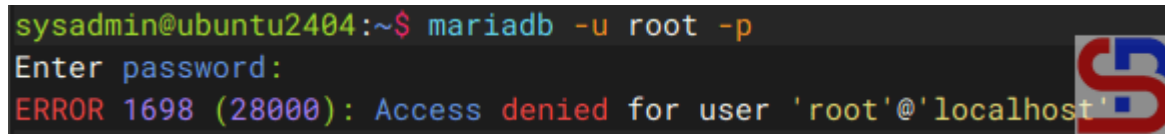
Problem

How to reset MariaDB root password?

Solution

When I insert my password root to access MariaDB, here is the error:

```
sysadmin@ubuntu2404:~$ mariadb -u root -p
Enter password:
ERROR 1698 (28000): Access denied for user 'root'@'localhost'
```



Error when accessing MariaDB

Here are the steps to reset the root password in MariaDB:

1. Stop the service

Use the command below to stop MariaDB's service:

```
sudo systemctl stop mariadb
```

2. Running Mariadb in Safe Mode

Run the command below to run the MariaDB service without access rights and networks:

```
sudo mysqld_safe --skip-grant-tables --skip-networking &
```

3. Change the password

Enter MariaDB using the command:

```
sudo mariadb -uroot -p
```

Press the **Enter** button and after that, type the commands below, and I use the **qwerty** password as my new password:

```
FLUSH PRIVILEGES;
ALTER USER root@localhost IDENTIFIED BY 'qwerty';
```

```
FLUSH PRIVILEGES;  
exit
```

4. Stop MariaDB

Use the command below to stop MariaDB's service:

```
sudo mysqladmin -u root -p shutdown
```

Enter the password you just created if you are asked to enter a password.

5. Running the Service

Run the command below to turn on MariaDB's service:


```
sudo systemctl start mariadb
```


6. Try a new password

Enter MariaDB by using the password that you created previously using the command below:

```
sudo mariadb -u root -p
```

Insert your new password, and if you type the correct password, then you should be able to enter Mariadb as in the image below:

```
sysadmin@ubuntu2404:~$ sudo mariadb -u root -p  
Enter password:  
Welcome to the MariaDB monitor.  Commands end with ; or \g.  
Your MariaDB connection id is 5  
Server version: 10.11.13-MariaDB-0ubuntu0.24.04.1 Ubuntu 24.04  
  
Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.  
  
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.  
MariaDB [(none)]> 
```



Test your new password to access MariaDB

Note

Maybe as an alternative to storing passwords for the root user in MariaDB, you can store the password in a file, but using [an encrypted Vim editor](#).

References

musaamin.web.id
serverspace.io
vexxhost.com
stackoverflow.com

[How to Fix the Hard Disk Size After Deleting Large Files?](#)

written by sysadmin | 10 September 2025

I once deleted large files on my Linux server, but when I saw the disk size using the `df -h` command, it turned out that the hard disk size on the server had not changed.

Problem

How to fix the hard disk size after deleting large files?

Solution

I have a Linux server that has a hard disk size as shown below:

| Filesystem | Size | Used | Avail | Use% | Mounted on |
|------------|------|------|-------|------|---------------------------|
| /dev/root | 33G | 27G | 5.9G | 83% | / |
| tmpfs | 983M | 0 | 983M | 0% | /dev/shm |
| tmpfs | 393M | 1.2M | 392M | 1% | /run |
| tmpfs | 5.0M | 0 | 5.0M | 0% | /run/lock |
| efivarfs | 56K | 24K | 27K | 48% | /sys/firmware/efi/efivars |
| /dev/sda16 | 881M | 63M | 757M | 8% | /boot |
| /dev/sda15 | 105M | 6.2M | 99M | 6% | /boot/efi |
| tmpfs | 197M | 12K | 197M | 1% | /run/user/1017 |
| tmpfs | 197M | 12K | 197M | 1% | /run/user/1002 |

Initial Harddisk size

And you see the partition / only 17 percent left, and I want to delete large files on the server. After seeing in various partitions, I saw a large file in the log folder, as shown below:

| | |
|------|---------------------|
| 12K | zabbix_agentd.log |
| 12K | zabbix_agentd.log.1 |
| 15G | zabbix_server.log |
| 6.8G | zabbix_server.log.1 |

The big file

And I did the command to delete the file. But after deletion, the size of the hard drive on the server is still the same as in the image above. After I find out the reason why the hard disk size has not changed, it turns out this is due to the deleted files still held open by a process commonly known as the zombie file. As a result, the system cannot release the disk space occupied by these files. Because these files are marked as deleted, the df and du commands cannot account for their space usage. So, to see files that are still open by a process, use the lsof command. If on your Linux server, there is no lsof package, use the commands below to install the lsof package:

RockyLinux/AlmaLinux/CentOS

```
dnf install lsof
```

Ubuntu/Debian

```
sudo apt update
sudo apt install lsof
```

Use the command below to see the deleted files still held open by a process:

```
lsof +L1
```

And in my case, it will look like in the image below:

| COMMAND | PID | USER | FD | TYPE | DEVICE | SIZE/OFF | NLINK | NODE | NAME |
|------------|--------|----------|-----|------|--------|------------|-------|--------|---|
| networkd- | 693 | root | txt | REG | 8,1 | 8021824 | 0 | 2163 | /usr/bin/python3.12 (deleted) |
| unattended | 777 | root | txt | REG | 8,1 | 8021824 | 0 | 2163 | /usr/bin/python3.12 (deleted) |
| mariadb | 21897 | mysql | 7u | REG | 8,1 | 0 | 0 | 33890 | /tmp/#33890 (deleted) |
| mariadb | 21897 | mysql | 8u | REG | 8,1 | 0 | 0 | 33891 | /tmp/#33891 (deleted) |
| mariadb | 21897 | mysql | 13u | REG | 8,1 | 0 | 0 | 33892 | /tmp/#33892 (deleted) |
| mariadb | 21897 | mysql | 16u | REG | 8,1 | 0 | 0 | 33893 | /tmp/#33893 (deleted) |
| sudo | 111117 | root | 0u | CHR | 136,0 | 0t0 | 0 | 3 | /dev/pts/0 (deleted) |
| sudo | 111117 | root | 1u | CHR | 136,0 | 0t0 | 0 | 3 | /dev/pts/0 (deleted) |
| sudo | 111117 | root | 2u | CHR | 136,0 | 0t0 | 0 | 3 | /dev/pts/0 (deleted) |
| sudo | 111118 | root | 0u | CHR | 136,0 | 0t0 | 0 | 3 | /dev/pts/0 (deleted) |
| sudo | 111118 | root | 1u | CHR | 136,0 | 0t0 | 0 | 3 | /dev/pts/0 (deleted) |
| sudo | 111118 | root | 2u | CHR | 136,0 | 0t0 | 0 | 3 | /dev/pts/0 (deleted) |
| tail | 111119 | root | 3r | REG | 8,1 | 10819 | 0 | 528809 | /var/log/zabbix/zabbix_agentd.log.1 (deleted) |
| zabbix_se | 119254 | zabbix | 1w | REG | 8,1 | 7207503973 | 0 | 530161 | /var/log/zabbix/zabbix_server.log.1 (deleted) |
| zabbix_se | 119254 | zabbix | 2w | REG | 8,1 | 7207503973 | 0 | 530161 | /var/log/zabbix/zabbix_server.log.1 (deleted) |
| zabbix_se | 119255 | zabbix | 1w | REG | 8,1 | 7207503973 | 0 | 530161 | /var/log/zabbix/zabbix_server.log.1 (deleted) |
| zabbix_se | 119255 | zabbix | 2w | REG | 8,1 | 7207503973 | 0 | 530161 | /var/log/zabbix/zabbix_server.log.1 (deleted) |
| zabbix_se | 119256 | zabbix | 1w | REG | 8,1 | 7207503973 | 0 | 530161 | /var/log/zabbix/zabbix_server.log.1 (deleted) |
| zabbix_se | 119256 | zabbix | 2w | REG | 8,1 | 7207503973 | 0 | 530161 | /var/log/zabbix/zabbix_server.log.1 (deleted) |
| apache2 | 119443 | root | 9u | REG | 0,1 | 0 | 0 | 7876 | /memfd:opcache_lock (deleted) |
| apache2 | 917760 | www-data | 9u | REG | 0,1 | 0 | 0 | 7876 | /memfd:opcache_lock (deleted) |
| apache2 | 918511 | www-data | 9u | REG | 0,1 | 0 | 0 | 7876 | /memfd:opcache_lock (deleted) |
| apache2 | 920526 | www-data | 9u | REG | 0,1 | 0 | 0 | 7876 | /memfd:opcache_lock (deleted) |
| apache2 | 920527 | www-data | 9u | REG | 0,1 | 0 | 0 | 7876 | /memfd:opcache_lock (deleted) |
| apache2 | 920528 | www-data | 9u | REG | 0,1 | 0 | 0 | 7876 | /memfd:opcache_lock (deleted) |
| apache2 | 920540 | www-data | 9u | REG | 0,1 | 0 | 0 | 7876 | /memfd:opcache_lock (deleted) |
| apache2 | 920676 | www-data | 9u | REG | 0,1 | 0 | 0 | 7876 | /memfd:opcache_lock (deleted) |
| apache2 | 921995 | www-data | 9u | REG | 0,1 | 0 | 0 | 7876 | /memfd:opcache_lock (deleted) |
| apache2 | 922015 | www-data | 9u | REG | 0,1 | 0 | 0 | 7876 | /memfd:opcache_lock (deleted) |
| apache2 | 925199 | www-data | 9u | REG | 0,1 | 0 | 0 | 7876 | /memfd:opcache_lock (deleted) |

The file(s) are still open by a process

After that, use the command to delete the files using the kill command based on the pid number, as shown in the image below:

```
kill -9 111119 119254 119255 119256
```

And the above command should delete the process that uses

the PID number, as shown in the image below:

| COMMAND | PID | USER | FD | TYPE | DEVICE | SIZE/OFF | NLINK | NODE | NAME |
|-----------|--------|----------|-----|------|--------|----------|-------|-------|-------------------------------|
| networkd- | 693 | root | txt | REG | 8,1 | 8021824 | 0 | 2163 | /usr/bin/python3.12 (deleted) |
| unattende | 777 | root | txt | REG | 8,1 | 8021824 | 0 | 2163 | /usr/bin/python3.12 (deleted) |
| mariadb | 21897 | mysql | 7u | REG | 8,1 | 0 | 0 | 33890 | /tmp/#33890 (deleted) |
| mariadb | 21897 | mysql | 8u | REG | 8,1 | 0 | 0 | 33891 | /tmp/#33891 (deleted) |
| mariadb | 21897 | mysql | 13u | REG | 8,1 | 0 | 0 | 33892 | /tmp/#33892 (deleted) |
| mariadb | 21897 | mysql | 16u | REG | 8,1 | 0 | 0 | 33893 | /tmp/#33893 (deleted) |
| apache2 | 119443 | root | 9u | REG | 0,1 | 0 | 0 | 7876 | /memfd:opcache_lock (deleted) |
| apache2 | 917760 | www-data | 9u | REG | 0,1 | 0 | 0 | 7876 | /memfd:opcache_lock (deleted) |
| apache2 | 918511 | www-data | 9u | REG | 0,1 | 0 | 0 | 7876 | /memfd:opcache_lock (deleted) |
| apache2 | 920526 | www-data | 9u | REG | 0,1 | 0 | 0 | 7876 | /memfd:opcache_lock (deleted) |
| apache2 | 920527 | www-data | 9u | REG | 0,1 | 0 | 0 | 7876 | /memfd:opcache_lock (deleted) |
| apache2 | 920528 | www-data | 9u | REG | 0,1 | 0 | 0 | 7876 | /memfd:opcache_lock (deleted) |
| apache2 | 920540 | www-data | 9u | REG | 0,1 | 0 | 0 | 7876 | /memfd:opcache_lock (deleted) |
| apache2 | 920676 | www-data | 9u | REG | 0,1 | 0 | 0 | 7876 | /memfd:opcache_lock (deleted) |
| apache2 | 921995 | www-data | 9u | REG | 0,1 | 0 | 0 | 7876 | /memfd:opcache_lock (deleted) |
| apache2 | 922015 | www-data | 9u | REG | 0,1 | 0 | 0 | 7876 | /memfd:opcache_lock (deleted) |
| apache2 | 925199 | www-data | 9u | REG | 0,1 | 0 | 0 | 7876 | /memfd:opcache_lock (deleted) |

The files that we have deleted are no longer on the list

And if you run the `df -h` command, the size of the hard disk on the Linux server should be reduced according to the size of the files that we deleted earlier, like in the image below:

| Filesystem | Size | Used | Avail | Use% | Mounted on |
|------------|------|------|-------|------|---------------------------|
| /dev/root | 33G | 21G | 13G | 62% | / |
| tmpfs | 983M | 0 | 983M | 0% | /dev/shm |
| tmpfs | 393M | 1.2M | 392M | 1% | /run |
| tmpfs | 5.0M | 0 | 5.0M | 0% | /run/lock |
| efivarfs | 56K | 24K | 27K | 48% | /sys/firmware/efi/efivars |
| /dev/sda16 | 881M | 63M | 757M | 8% | /boot |
| /dev/sda15 | 105M | 6.2M | 99M | 6% | /boot/efi |
| tmpfs | 197M | 12K | 197M | 1% | /run/user/1017 |
| tmpfs | 197M | 12K | 197M | 1% | /run/user/1002 |

The final hard disk size

Note

If, after you delete using a kill based on the PID number, but the size of the hard disk on the Linux server still hasn't changed, then the server must be restarted, and after you restart the server, the size of the hard disk will correspond to the number of files you deleted earlier.

References

pietervogelaar.nl
howtoforge.com
access.redhat.com
alibabacloud.com

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

written by sysadmin | 10 September 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
```

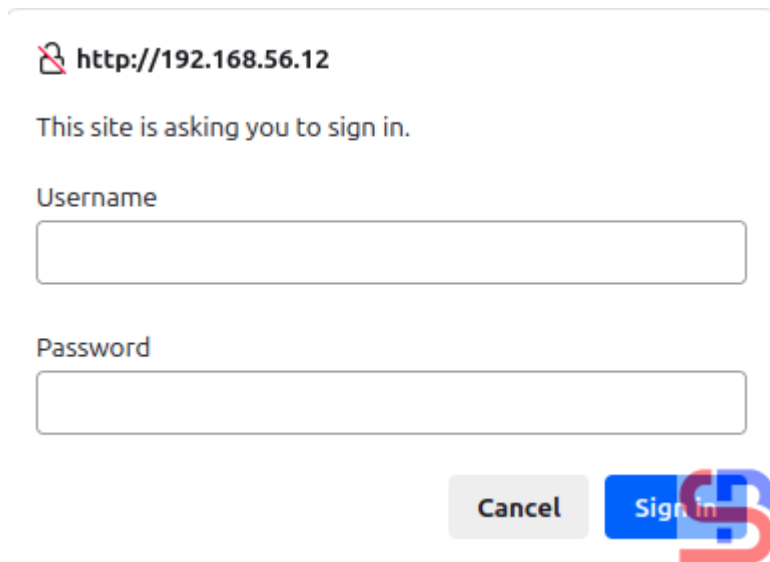
```
echo "cfg_dir=/usr/local/nagios/etc/nagiosql" | sudo tee -a /usr/local/nagios/etc/nagios.cfg
```

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.



The screenshot shows a browser sign-in dialog for the URL `http://192.168.56.12`. The dialog contains the text "This site is asking you to sign in." followed by two input fields: "Username" and "Password". At the bottom, there are two buttons: "Cancel" and "Sign in". A red and blue logo is partially visible on the right side of the "Sign in" button.

Insert username and password

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

Welcome to the NagiosQL installation wizard

This wizard will help you to install and configure NagiosQL.
For questions please visit: [NagiosQL @ Sourceforge](#)

NagiosQL version 3.5.0

First let's check your local environment and find out if everything NagiosQL needs is available.

The basic requirements are:

- 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)
 - PECL extension: **SSH** (optional)
- php.ini options:
 - file_uploads on (for upload features)
 - session.auto_start needs to be off
 - date.timezone should be set to your local timezone
- A database server
- Nagios 2.x/3.x/4.x

Settings file not found or not readable (config/settings.php). Upgrade not available!

START INSTALLATION

START UPDATE

[Online documentation](#)

NagiosQL



Configure the NagiosQL button

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

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

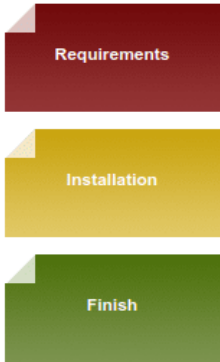
- ⚠ Settings file does not exists (config/settings.php): **will be created**
- ✔ Write test on settings directory (config/): **OK**
- ✔ Read test on one class file (functions/NagVisualClass.php): **OK**
- ✔ Read test on home page file (admin.php): **OK**
- ✔ Read test on one template file (templates/index.tpl.htm):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



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 |

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.)



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) | 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

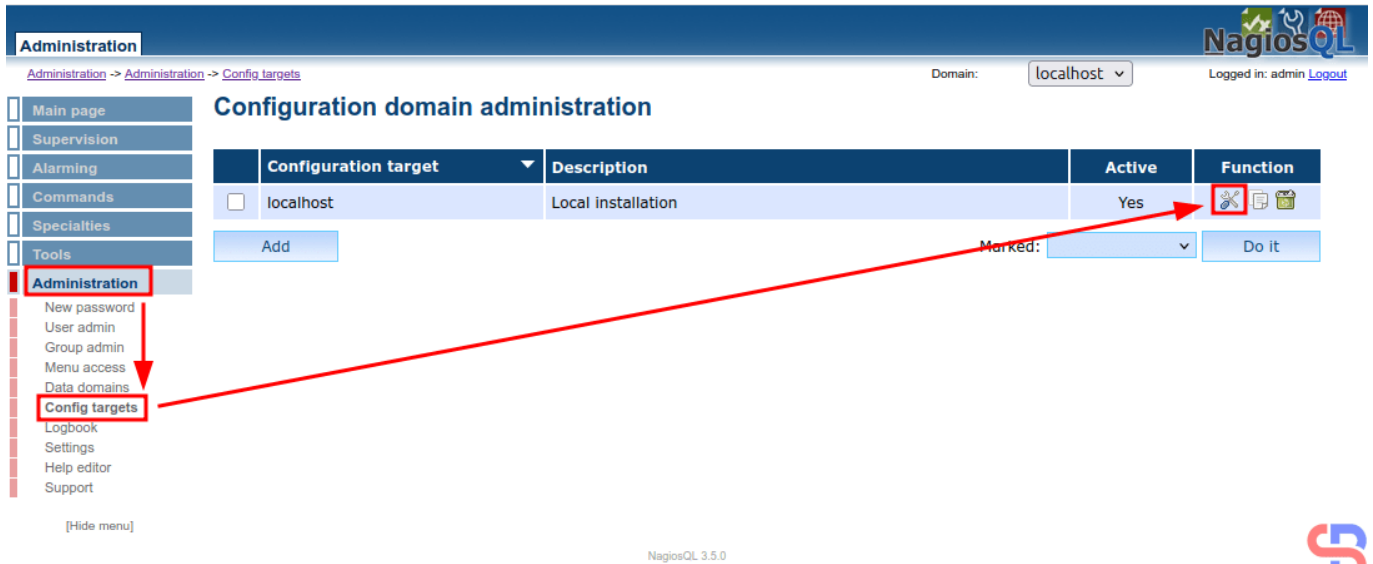
Enter the username (**admin**) and password, and if nothing is wrong, the NagiosQL application will appear like the image below:

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

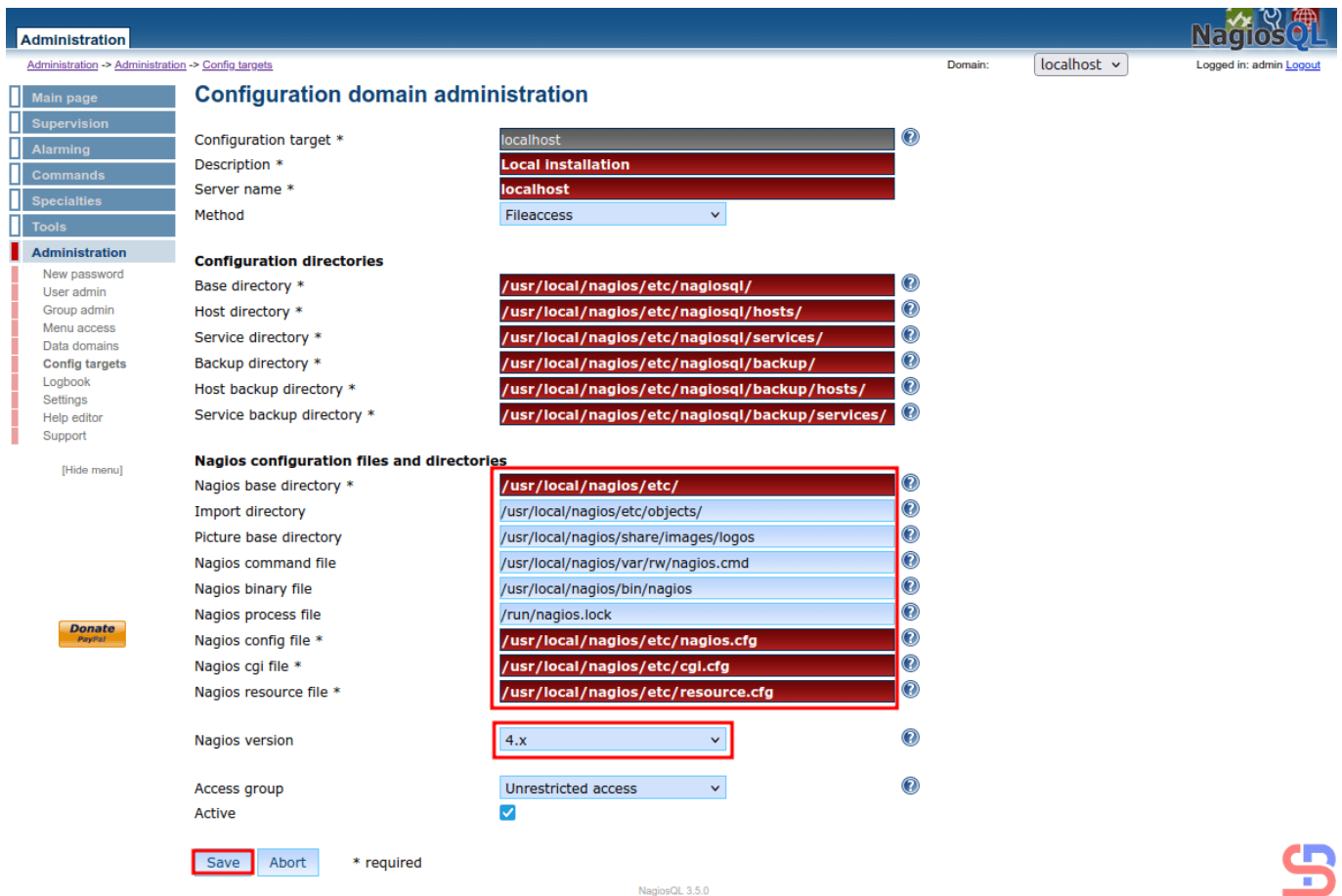
Now, configure the NagiosQL application to integrate it with Nagios. Click **Administration > Config targets > Modify**, like in the image below:





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:

← → ↻ Not Secure http://192.168.56.12/nagios/ ☆

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:

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
 All Problems All Types
 3 4

Service Status Totals
 Ok Warning Unknown Critical Pending
 7 1 1 12 0
 All Problems All Types
 14 21


View Service Status Detail For All Host Groups
 View Status Overview For All Host Groups
 View Status Summary For All Host Groups
 View Status Grid For All Host Groups

Host Status Details For All Host Groups

Limit Results: 100

| 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 |
| winsrvr | DOWN | 08-19-2025 14:56:31 | 0d 0h 8m 39s | PING CRITICAL - Packet loss = 100% |

Results 1 - 4 of 4 Matching Hosts



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:

← → ↻ Not Secure http://192.168.56.12/nagios/ ☆

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:

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
 All Problems All Types
 3 4

Service Status Totals
 Ok Warning Unknown Critical Pending
 7 1 1 12 0
 All Problems All Types
 14 21


View History For all hosts
 View Notifications For All Hosts
 View Host Status Detail For All Hosts

Service Status Details For All Hosts

Limit Results: 100

| 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_hpljd, ...) 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 | |
| winsrvr | 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 | |

Results 1 - 21 of 21 Matching Services



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 Convert the Comma\(s\) into the Space\(s\) on a Linux File?](#)

written by sysadmin | 10 September 2025

[The previous article](#) explained how to convert spaces into commas in a Linux file. This article will explain how to convert a comma into a space on Linux.


Problem

How to convert the comma(s) into the space(s) on a Linux file?

Solution

For example, you have a **test.txt** file as shown below:

```
sysadmin@Ubuntu2404:~$ cat test.txt
Ubuntu, Debian, CentOS, Red, Gentoo, Fedora, OpenSUSE, Scientific, CloudLinux, Elementary,
sysadmin@Ubuntu2404:~$
```



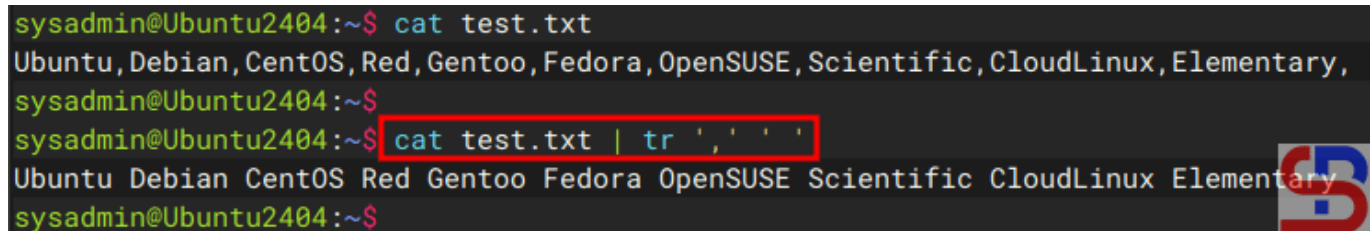
The test.txt file

So that the file is a comma sign into a space, then use the command below:

```
cat test.txt | tr ',' ' '
```

So the results will be like the picture below:

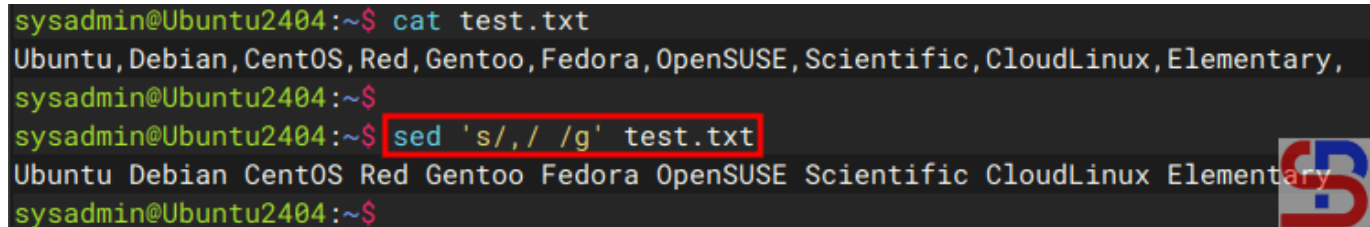
```
sysadmin@Ubuntu2404:~$ cat test.txt
Ubuntu,Debian,CentOS,Red,Gentoo,Fedora,OpenSUSE,Scientific,CloudLinux,Elementary,
sysadmin@Ubuntu2404:~$
sysadmin@Ubuntu2404:~$ cat test.txt | tr ',' ' '
Ubuntu Debian CentOS Red Gentoo Fedora OpenSUSE Scientific CloudLinux Elementary
sysadmin@Ubuntu2404:~$
```

A terminal window showing the execution of the tr command. The first command is 'cat test.txt' which outputs a list of Linux distributions separated by commas. The second command is 'cat test.txt | tr ',' ' ' ' which outputs the same list but with spaces instead of commas. The command 'cat test.txt | tr ',' ' ' ' is highlighted with a red box.

Convert the comma to a space using the tr command

You can also use the command below to convert the comma(s) to the space(s):

```
sysadmin@Ubuntu2404:~$ cat test.txt
Ubuntu,Debian,CentOS,Red,Gentoo,Fedora,OpenSUSE,Scientific,CloudLinux,Elementary,
sysadmin@Ubuntu2404:~$
sysadmin@Ubuntu2404:~$ sed 's/,/ /g' test.txt
Ubuntu Debian CentOS Red Gentoo Fedora OpenSUSE Scientific CloudLinux Elementary
sysadmin@Ubuntu2404:~$
```

A terminal window showing the execution of the sed command. The first command is 'cat test.txt' which outputs a list of Linux distributions separated by commas. The second command is 'sed 's/,/ /g' test.txt' which outputs the same list but with spaces instead of commas. The command 'sed 's/,/ /g' test.txt' is highlighted with a red box.

Convert the comma to a space using the sed command

Note

If your file uses other symbols besides the comma symbol, for example, the symbol of the colon(:), just change the comma into a colon on the two commands above. For example, if you use the tr command, then use the command below:

```
cat test.txt | tr ':' ' '
```

And the file should be as shown below:

```
sysadmin@Ubuntu2404:~$ cat test.txt
Ubuntu:Debian:CentOS:Red:Gentoo:Fedora:OpenSUSE:Scientific:CloudLinux:Elementary:
sysadmin@Ubuntu2404:~$
sysadmin@Ubuntu2404:~$ cat test.txt | tr ':' ' '
Ubuntu Debian CentOS Red Gentoo Fedora OpenSUSE Scientific CloudLinux Elementary
sysadmin@Ubuntu2404:~$
```

Change the colon(s) to a space

References

stackoverflow.com

phoenixnap.com

[How to Convert the Space\(s\) to a Comma in a Linux File?](#)

written by sysadmin | 10 September 2025

I want to convert the space(s) in a Linux file to a comma.

Problem

How to convert the space(s) to a comma in a Linux file?

Solution

For example, you have a **test.txt** file as shown in the image below:

```
sysadmin@Ubuntu2404:~$ cat test.txt
Ubuntu Debian CentOS Red Gentoo Fedora OpenSUSE Scientific CloudLinux Elementary
sysadmin@Ubuntu2404:~$
```

The test.txt file

Use the command below if you want to convert the space to a comma:

```
tr -s '[:blank:]' ',' < test.txt
```

So that your file will convert to the image below:

```
sysadmin@Ubuntu2404:~$ cat test.txt
Ubuntu Debian CentOS Red Gentoo Fedora OpenSUSE Scientific CloudLinux Elementary
sysadmin@Ubuntu2404:~$
sysadmin@Ubuntu2404:~$ tr -s '[:blank:]' ',' < test.txt
Ubuntu,Debian,CentOS,Red,Gentoo,Fedora,OpenSUSE,Scientific,CloudLinux,Elementary,
sysadmin@Ubuntu2404:~$
```

Convert a space to a comma

Not only that, the command can also be used if you have a file that has irregular spaces as shown in the image below:

```
sysadmin@Ubuntu2404:~$ cat test.txt
Ubuntu  Debian  CentOS  Red          Gentoo      Fedora      OpenSUSE      Scientific      CloudLinux  Elementary
sysadmin@Ubuntu2404:~$
sysadmin@Ubuntu2404:~$ tr -s '[:blank:]' ',' < test.txt
Ubuntu,Debian,CentOS,Red,Gentoo,Fedora,OpenSUSE,Scientific,CloudLinux,Elementary,
sysadmin@Ubuntu2404:~$
```

Convert an irregular space to a comma

Even the above command can also convert the free space created using the **Tab** key, as shown in the image below:

```
sysadmin@Ubuntu2404:~$ cat test.txt
Ubuntu  Debian  CentOS  Red          Gentoo  Fedora  OpenSUSE      Scientific      CloudLinux      Elementary
sysadmin@Ubuntu2404:~$
sysadmin@Ubuntu2404:~$ tr -s '[:blank:]' ',' < test.txt
Ubuntu,Debian,CentOS,Red,Gentoo,Fedora,OpenSUSE,Scientific,CloudLinux,Elementary,
sysadmin@Ubuntu2404:~$
```

Convert a Tab space to a comma

You can also use the below command in addition to the above command to make the space(s) in a Linux file a comma:

```
sed 's/\s\+/,/g' < test.txt
```

```
sysadmin@Ubuntu2404:~$ cat test.txt
Ubuntu  Debian  CentOS  Red          Gentoo  Fedora  OpenSUSE      Scientific      CloudLinux      Elementary
sysadmin@Ubuntu2404:~$
sysadmin@Ubuntu2404:~$ sed 's/\s\+/,/g' < test.txt
Ubuntu,Debian,CentOS,Red,Gentoo,Fedora,OpenSUSE,Scientific,CloudLinux,Elementary,
sysadmin@Ubuntu2404:~$
```

Convert the space(s) using the sed command

Note

If you want the free space to convert to something other than a comma, for example, to a colon (:), Then convert the comma in both commands above to become a colon as in the command below:

```
tr -s '[:blank:]' ':' < test.txt
```

```
sysadmin@Ubuntu2404:~$ cat test.txt
Ubuntu Debian CentOS Red Gentoo Fedora OpenSUSE Scientific CloudLinux Elementary
sysadmin@Ubuntu2404:~$
sysadmin@Ubuntu2404:~$ tr -s '[:blank:]' ':' < test.txt
Ubuntu:Debian:CentOS:Red:Gentoo:Fedora:OpenSUSE:Scientific:CloudLinux:Elementary:
sysadmin@Ubuntu2404:~$
```

Convert the space(s) to a colon

References

unix.stackexchange.com
stackoverflow.com

[How to Convert a Row to a Column in Linux File?](#)

written by sysadmin | 10 September 2025

[The previous article](#) explained how to convert a column into a row in a Linux file. This article will explain how to convert a row into a column.

Problem

How to convert a row to a column in a Linux file?

Solution

Suppose you have a **test.txt** file as below:

```
sysadmin@Ubuntu2404:~$ cat test.txt
Ubuntu Debian CentOS Red Gentoo Fedora OpenSUSE Scientific CloudLinux Elementary
sysadmin@Ubuntu2404:~$
```

The test.txt file

Use the command below to convert the file into a column:

```
tr -s ' ' '\n' < test.txt
```

Then the file will become like the image below:

```
sysadmin@Ubuntu2404:~$ cat test.txt
Ubuntu Debian CentOS Red Gentoo Fedora OpenSUSE Scientific CloudLinux Elementary
sysadmin@Ubuntu2404:~$
sysadmin@Ubuntu2404:~$ tr -s ' ' '\n' < test.txt
Ubuntu
Debian
CentOS
Red
Gentoo
Fedora
OpenSUSE
Scientific
CloudLinux
Elementary
sysadmin@Ubuntu2404:~$
```

Using the tr command

Or you can use the command below:

```
fmt -1 test.txt
```

so that the file will be as shown in the image below:

```
sysadmin@Ubuntu2404:~$ cat test.txt
Ubuntu Debian CentOS Red Gentoo Fedora OpenSUSE Scientific CloudLinux Elementary
sysadmin@Ubuntu2404:~$
sysadmin@Ubuntu2404:~$ fmt -1 test.txt
Ubuntu
Debian
CentOS
Red
Gentoo
Fedora
OpenSUSE
Scientific
CloudLinux
Elementary
sysadmin@Ubuntu2404:~$
```



Using the fmt command

Note

If you want to enter the results in a file, for example, the result.txt file, then you can use the standard output redirection or stdout on Linux. For example, you use the tr command to change the file, so you can use the command below:

```
tr -s ' ' '\n' < test.txt > result.txt
```

Then the results of these changes are in the result.txt file as shown below:

```
sysadmin@Ubuntu2404:~$ cat test.txt
Ubuntu Debian CentOS Red Gentoo Fedora OpenSUSE Scientific CloudLinux Elementary
sysadmin@Ubuntu2404:~$
sysadmin@Ubuntu2404:~$ tr -s ' ' '\n' < test.txt > result.txt
sysadmin@Ubuntu2404:~$
sysadmin@Ubuntu2404:~$ cat result.txt
Ubuntu
Debian
CentOS
Red
Gentoo
Fedora
OpenSUSE
Scientific
CloudLinux
Elementary
sysadmin@Ubuntu2404:~$
```



Using the redirection to save the result

Likewise, by using another command above, you can simply add stdout at the end of the command.

References

- unix.stackexchange.com
- odin.mdacc.tmc.edu