

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)

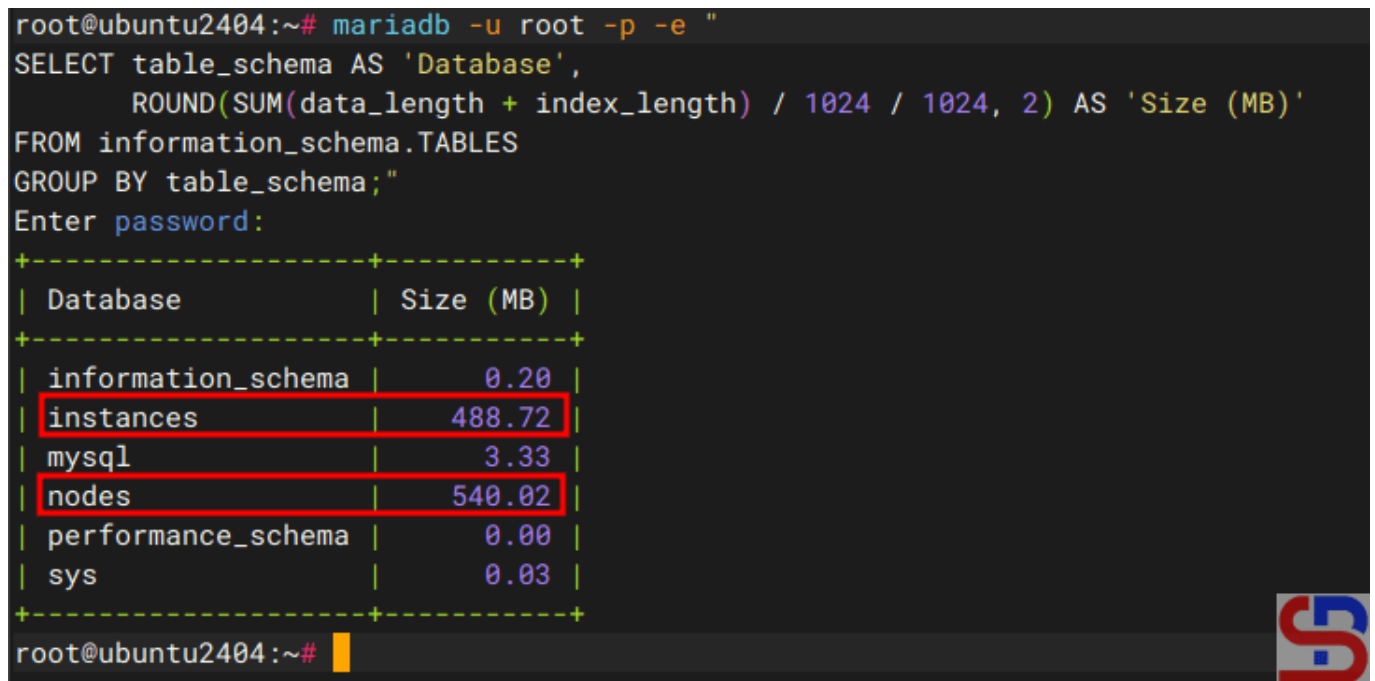
Display the total size of the databases using the query in GigaBytes

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:

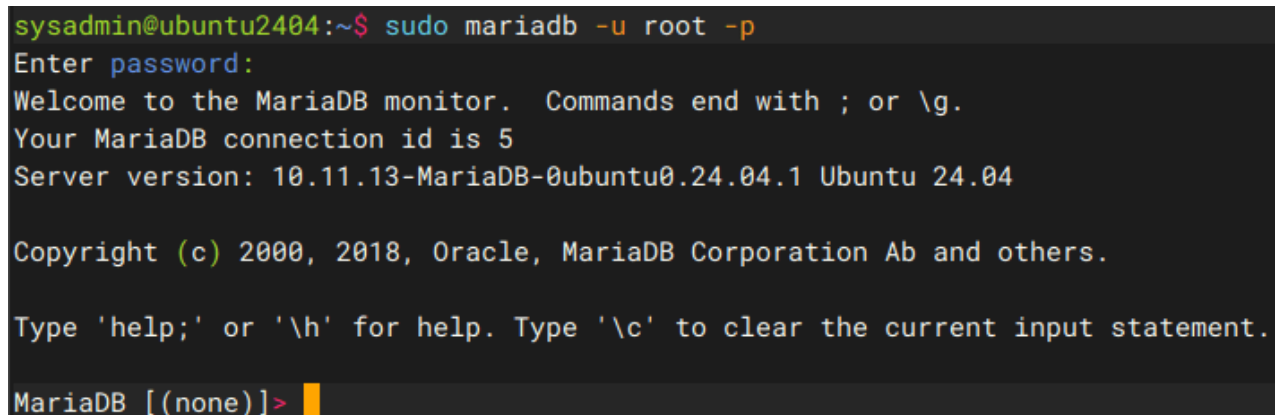
```
sudo systemctl start mariadb
```

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:

A terminal window screenshot showing the successful login to MariaDB. The prompt is 'sysadmin@ubuntu2404:~\$' and the command 'sudo mariadb -u root -p' has been entered. The prompt changes to 'Enter password:'. After the password is entered (indicated by a redacted area), the terminal displays: '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.', and finally 'MariaDB [(none)]>' with a yellow cursor bar.

```
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
```

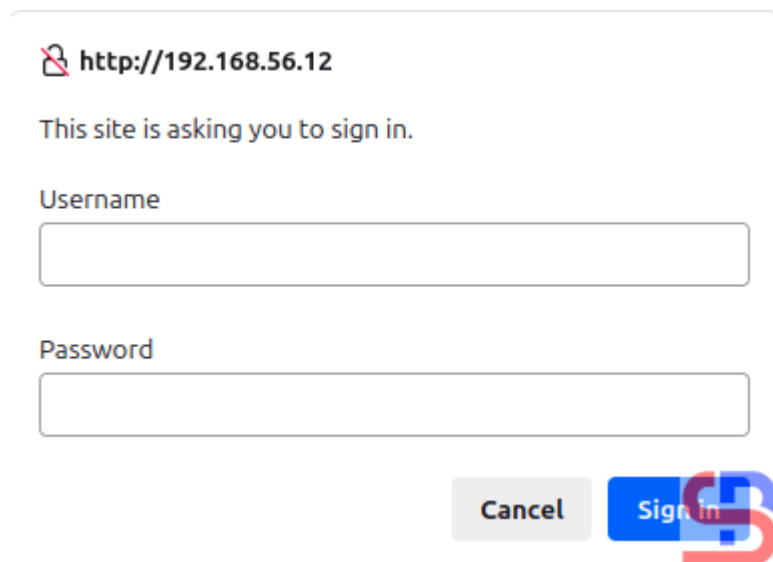
```
echo "cfg_dir=/usr/local/nagios/etc/nagiosql" | sudo tee -a  
/usr/local/nagios/etc/nagios.cfg
```

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 web browser window with the address bar displaying `http://192.168.56.12`. Below the address bar, a message states "This site is asking you to sign in." There are two input fields: "Username" and "Password". At the bottom right, there are two buttons: "Cancel" and "Sign In". A large, stylized 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



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:

Requirements

Installation

Finish

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?	☒
NagiosQL User Setup	
Initial NagiosQL User *	admin
Initial NagiosQL Password *	*****
Please repeat the password *	*****
Nagios Configuration	
Import Nagios sample config?	☒
NagiosQL path values	
Create NagiosQL config paths?	☒
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.)	



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

Requirements

Installation

Finish

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 (Only added rights to existing user: nagiosql_user)
Set initial NagiosQL Administrator	done
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:

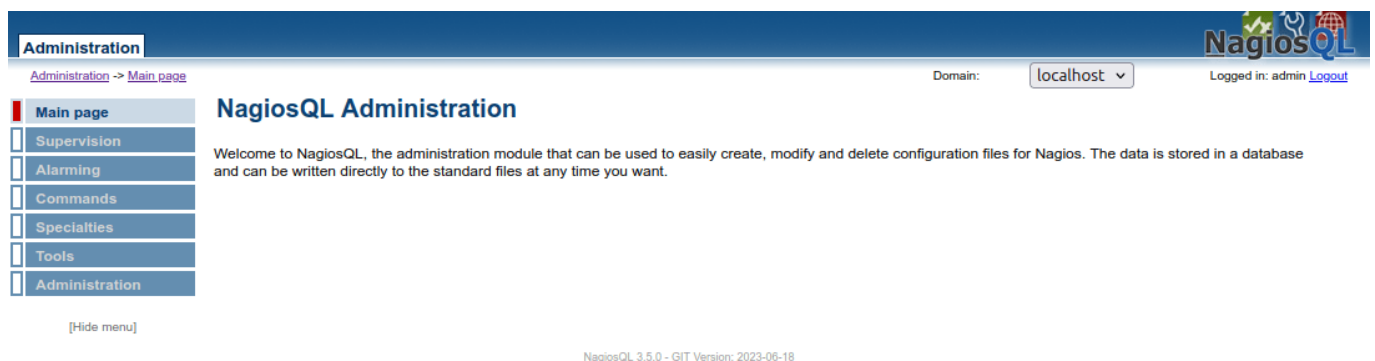
Please enter your username and password to access NagiosQL.
If you forgot one of them, please contact your Administrator.

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:



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:

Administration

Administration -> Administration -> Config targets

Domain: localhost Logged in: admin Logout

Configuration domain administration

Configuration target	Description	Active	Function
☐ localhost	Local installation	Yes	

Add

Marked:

[Hide menu]

NagiosQL 3.5.0

Configure domain administration

And there will be a display like the image below:

Administration

Administration -> Administration -> Config targets

Domain: localhost Logged in: admin Logout

Configuration domain administration

Configuration target * localhost

Description * Local installation

Server name * localhost

Method Fileaccess

Configuration directories

Base directory * /usr/local/nagios/etc/nagiosql/

Host directory * /usr/local/nagios/etc/nagiosql/hosts/

Service directory * /usr/local/nagios/etc/nagiosql/services/

Backup directory * /usr/local/nagios/etc/nagiosql/backup/

Host backup directory * /usr/local/nagios/etc/nagiosql/backup/hosts/

Service backup directory * /usr/local/nagios/etc/nagiosql/backup/services/

Nagios configuration files and directories

Nagios base directory * /usr/local/nagios/etc/

Import directory /usr/local/nagios/etc/objects/

Picture base directory /usr/local/nagios/share/images/logos

Nagios command file /usr/local/nagios/var/rw/nagios.cmd

Nagios binary file /usr/local/nagios/bin/nagios

Nagios process file /run/nagios.lock

Nagios config file * /usr/local/nagios/etc/nagios.cfg

Nagios cgi file * /usr/local/nagios/etc/cgi.cfg

Nagios resource file * /usr/local/nagios/etc/resource.cfg

Nagios version 4.x

Access group Unrestricted access

Active ☒

* required

[Hide menu]

Donate

NagiosQL 3.5.0

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:

Check written configuration files

Write monitoring data

Write additional data

Check configuration files:

Restart Nagios:

Write host configurations ...
Hosts: Configuration file successfully written!
Write service configurations ...
Services: Configuration file successfully written!
Write hostgroups.cfg ...
Hostgroups: Configuration file successfully written!
Write servicegroups.cfg ...
Servicegroups: Configuration file successfully written!
Write hosttemplates.cfg ...
Hosttemplates: Configuration file successfully written!
Write servicetemplates.cfg ...
Servicetemplates: Configuration file successfully written!

Check written configuration files

Write monitoring data

Write additional data

Check configuration files:

Restart Nagios:

Total Warnings: 0
Total Errors: 0
Written configuration files are valid, Nagios can be restarted!

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 21 services.
Checked 4 hosts.
Checked 4 host groups.

Check written configuration files

Write monitoring data

Write additional data

Check configuration files:

Restart Nagios:

Restart command successfully send to Nagios

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

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 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
----	----

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
winserver	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

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	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
----	----

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%
hplj2605dn	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_hpjd, ...) failed. errno is 2: No such file or directory
linksys-srw224p	PING	CRITICAL	08-19-2025 14:56:28	0d 0h 7m 20s	1/3	PING CRITICAL - Packet loss = 100%
linksys-srw224p	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
linksys-srw224p	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
localhost	Current Load	OK	08-19-2025 14:53:54	0d 3h 14m 54s	1/4	OK - load average: 0.00, 0.00, 0.00
localhost	Current Users	OK	08-19-2025 14:54:32	0d 3h 14m 16s	1/4	USERS OK - 1 users currently logged in
localhost	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
localhost	PING	OK	08-19-2025 14:55:47	0d 3h 13m 1s	1/4	PING OK - Packet loss = 0%, RTA = 0.06 ms
localhost	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%):
localhost	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)
localhost	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)
localhost	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
winserver	CPU Load	CRITICAL	08-19-2025 14:50:21	0d 0h 8m 27s	1/3	CRITICAL - Socket timeout
winserver	Explorer	CRITICAL	08-19-2025 14:51:50	0d 0h 6m 58s	1/3	CRITICAL - Socket timeout
winserver	Memory Usage	CRITICAL	08-19-2025 14:53:20	0d 0h 5m 28s	1/3	CRITICAL - Socket timeout
winserver	NSClient++ Version	CRITICAL	08-19-2025 14:54:50	0d 0h 3m 58s	1/3	CRITICAL - Socket timeout
winserver	Uptime	CRITICAL	08-19-2025 14:56:20	0d 0h 2m 28s	1/3	CRITICAL - Socket timeout
winserver	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:~$
```

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:~$
```

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:~$
```

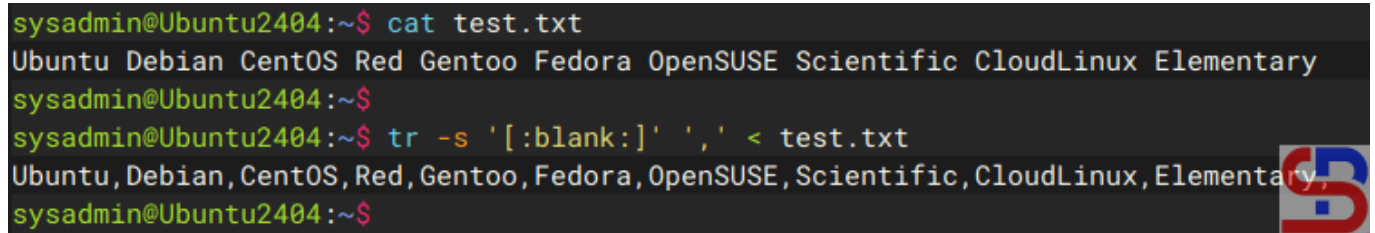
The test.txt file

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:

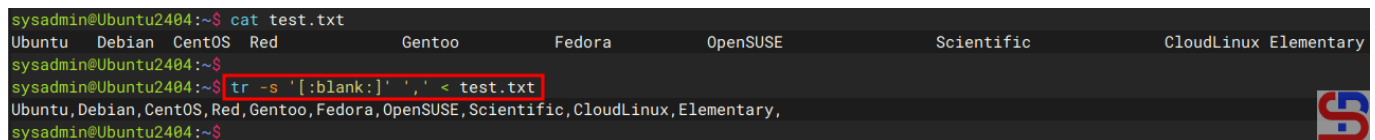
```
sysadmin@Ubuntu2404:~$ cat test.txt
Ubuntu Debian CentOS Red Gentoo Fedora OpenSUSE Scientific CloudLinux Elementary
sysadmin@Ubuntu2404:~$
sysadmin@Ubuntu2404:~$ tr -s '[:blank:]' ',' < test.txt
Ubuntu,Debian,CentOS,Red,Gentoo,Fedora,OpenSUSE,Scientific,CloudLinux,Elementary,
sysadmin@Ubuntu2404:~$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



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:

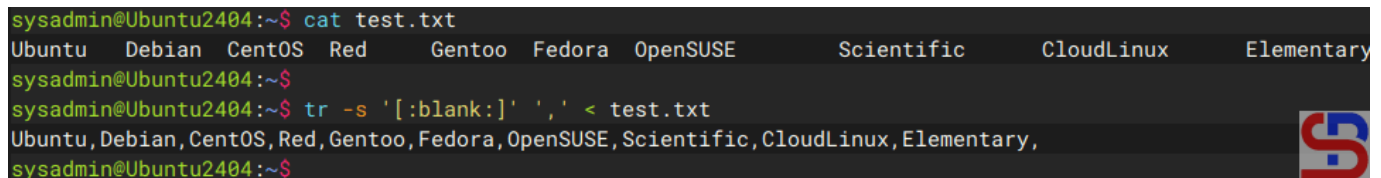
```
sysadmin@Ubuntu2404:~$ cat test.txt
Ubuntu  Debian  CentOS  Red          Gentoo    Fedora    OpenSUSE    Scientific    CloudLinux  Elementary
sysadmin@Ubuntu2404:~$
sysadmin@Ubuntu2404:~$ tr -s '[:blank:]' ',' < test.txt
Ubuntu,Debian,CentOS,Red,Gentoo,Fedora,OpenSUSE,Scientific,CloudLinux,Elementary,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

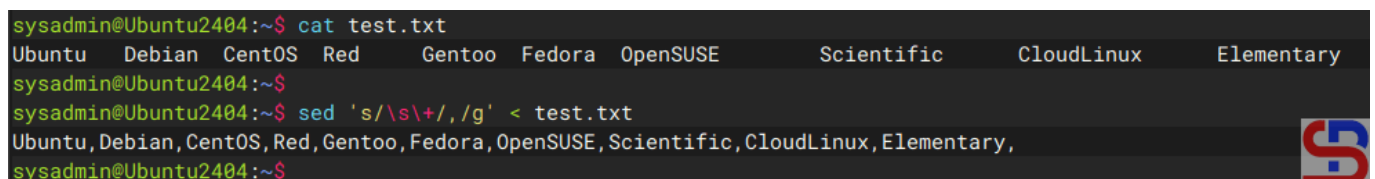


Convert a Tab space to a comma

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:~$ 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