

# How to Remove And Limit Journal Log Size in Linux?

written by sysadmin | 19 February 2025

systemd-journald is a service that collects and stores logging data, creating structured, indexed journals based on the logging information it receives. But sometimes the logs produced are so large that you have to remove and limit the journal log.

## **Problem**

How to remove and limit journal log size in Linux?

## **Solution**

By default, the log journal is in the folder `/var/log/journal` and will retain 4 GB of data. You can limit the log size by using the format below:

```
journalctl --vacuum-size=BYTES
```

If you want to remove the journal log to 100 MB, you can use the command below:

```
journalctl --vacuum-size=100M
```

The journal log size will reduce to around 100 MB, like in the image below, after you execute the above command:

```
sysadmin@ubuntu2404:~$ sudo du -sh /var/log/* | grep journal
154M /var/log/journal
sysadmin@ubuntu2404:~$
sysadmin@ubuntu2404:~$ sudo journalctl --vacuum-size=100M
Vacuuming done, freed 0B of archived journals from /var/log/journal.
Deleted archived journal /var/log/journal/85c0e32a21c641759079243181fbc47c/system@bc13c4fd59024a358c751fe6d4da7bbb-000000000000fef6-00062c584f266b36.journal (4.3M).
Deleted archived journal /var/log/journal/85c0e32a21c641759079243181fbc47c/system@cc5952ea6f674b38957fe90f48f78949-000000000000f458-00062c7f4e2c54fa.journal (4.5M).
Deleted archived journal /var/log/journal/85c0e32a21c641759079243181fbc47c/system@8bcbecaf23374a168448a4ae2b0b6d76-000000000000fa40-00062c7f65e9038d.journal (4.3M).
Deleted archived journal /var/log/journal/85c0e32a21c641759079243181fbc47c/user-1000@8bcbecaf23374a168448a4ae2b0b6d76-000000000000ff09-00062c7f6a96f7b6.journal (3.6M).
Deleted archived journal /var/log/journal/85c0e32a21c641759079243181fbc47c/system@8bcbecaf23374a168448a4ae2b0b6d76-000000000000ffa-00062c7f6aaaf46.journal (4.4M).
Deleted archived journal /var/log/journal/85c0e32a21c641759079243181fbc47c/system@6e124681eb404b148aed9f69d1df0bdd-00000000000010403-00062ca834262375.journal (4.3M).
Deleted archived journal /var/log/journal/85c0e32a21c641759079243181fbc47c/user-1000@6e124681eb404b148aed9f69d1df0bdd-000000000000108bb-00062ca83864e3b2.journal (3.7M).
Deleted archived journal /var/log/journal/85c0e32a21c641759079243181fbc47c/system@6e124681eb404b148aed9f69d1df0bdd-000000000000108bc-00062ca8386e9ce5.journal (19.6M).
Deleted archived journal /var/log/journal/85c0e32a21c641759079243181fbc47c/system@7aee55235bc044b8a520870112675d3d-0000000000001c50c-00062cbb81c47378.journal (5.0M).
Vacuuming done, freed 54.0M of archived journals from /var/log/journal/85c0e32a21c641759079243181fbc47c.
Vacuuming done, freed 0B of archived journals from /run/log/journal.
sysadmin@ubuntu2404:~$
sysadmin@ubuntu2404:~$ sudo du -sh /var/log/* | grep journal
100M /var/log/journal
sysadmin@ubuntu2404:~$
```

Remove the journal log

You can also make the journal log remain 100 MB without running the command above by configuring it in the **journald.conf** file. But the file is in a different folder in each Linux distro, so you have to search for the file using the following command:

```
find / -name journald.conf
```

After you find the file, for example, you want to limit the journal log to only 100 MB, then change the file so that it looks like the following:

```
[Journal]
SystemMaxUse=100MB
```

After that, restart the journald service using the command below:

```
systemctl restart systemd-journald.service
```

The journal log size should be produced in the folder /var /log, only measuring about 100 MB.

## Note

If you want to test to generate lots of logging quickly, you can use the following command:

```
while true; do dd if=/dev/urandom bs=3 count=10000 | base64 | logger; done
```

At the same time, you can execute the following command to display the size of the journal log in another terminal:

```
while true; do du -s /var/log/journal/ ; sleep 5 ;done
```

What you should know is that the journal should not be disabled, especially if you use rsyslogd, because rsyslogd can get its information from journald, and they play very well together this way.

## References

[reintech.io](http://reintech.io)

[sematext.com](http://sematext.com)

[andreaskaris.github.io](http://andreaskaris.github.io)

[unix.stackexchange.com](http://unix.stackexchange.com)