journalctl Query the journal

CONCEPTS

The journal is a binary, indexed log. Filters narrow it before output, so combine them freely: different fields are ANDed.

Journal all entries
↓ -b -u -p
Filters boot, unit, priority
↓ --since -g
Time and text narrowed set
↓ -o -n -r
Output pager or stdout

Reading the system journal needs root or membership of the systemd-journal, adm or wheel group; otherwise you only see your own entries.

SELECT ENTRIES

journalctl -u *<unit>*
Logs of a unit

journalctl -b
Current boot only

journalctl -b -1
Previous boot

journalctl -k
Kernel messages (dmesg)

journalctl -t *<name>*
Entries by syslog identifier

TIME AND PRIORITY

journalctl -p err
Errors and worse

journalctl --since "*<date>***"**
From a point in time

journalctl --until "*<date>***"**
Up to a point in time

journalctl -S -1h
Last hour

SEARCH AND FOLLOW

journalctl -f
Follow new entries

journalctl -f -u *<unit>*
Follow one unit

journalctl -n *<num>*
Last N entries

journalctl -g *<regex>*
Search messages by pattern

journalctl -e
Open pager at the end

journalctl -r
Newest entries first

journalctl --no-pager
Print without a pager

journalctl -x
Add catalog explanations

OUTPUT

journalctl -o json-pretty
Entries as readable JSON

journalctl -o json
One JSON object per line

journalctl -o cat
Messages only

journalctl -o short-iso
ISO timestamps

FIELDS AND BOOTS

journalctl --list-boots
List recorded boots

DISK AND MAINTENANCE

journalctl --disk-usage
Total journal size

sudo journalctl --vacuum-time=*<time>*
Delete archives older than a time

sudo journalctl --vacuum-size=*<size>*
Shrink archives to a size