# logrotate Log rotation

## CONCEPTS

logrotate is not a daemon: cron or a systemd timer runs it (daily by default). It decides per log whether a rotation is due and records the last rotation date in a state file.

**prerotate** optional script
↓ rename
**Rotate** app.log to app.log.1
↓ create
**New log** empty file
↓ postrotate
**Reload app** reopen log files
↓ compress
**Compress** app.log.2.gz
What happens to one log when it is due

The main file /etc/logrotate.conf sets global defaults and ends with include /etc/logrotate.d; packages drop one small file each into that directory.

Options set before any log path act as defaults for the rest of the file; options inside a block { } apply to that block only.

## RUNNING

**logrotate** *<conf>*
Run with a config file (or directory)

**logrotate -d** *<conf>*
Debug: show what would happen, change nothing

**logrotate -f** *<conf>*
Force rotation even if not due

**logrotate -v** *<conf>*
Print what is being done

**logrotate -s** *<file>* *<conf>*
Use another state file

**logrotate -l** *<file>* *<conf>*
Write verbose output to a log file

**logrotate --version**
Show the installed version

**/var/lib/logrotate.status**
State file: last rotation per log

**systemctl list-timers logrotate.timer**
See when the systemd timer runs it

## CONFIG STRUCTURE

**/path/to/app.log { ... }**
Block: log path(s) and their directives

**/var/log/a.log /var/log/b.log { ... }**
One block for several logs

**/var/log/app/*.log { ... }**
Glob for the log files

**include /etc/logrotate.d**
Read all files of a directory

**# comment**
Comment line

**su** *<user>* *<group>*
Rotate as this user and group

## SCHEDULE AND SIZE

**hourly**
Rotate every hour

**daily**
Rotate once a day

**weekly**
Rotate once a week

**monthly**
Rotate once a month

**yearly**
Rotate when the year changes

**rotate** *<count>*
Keep this many old logs

**size** *<size>*
Rotate only when larger (k, M, G)

**minsize** *<size>*
Rotate when due and at least this big

**maxsize** *<size>*
Rotate when too big, even before due

**maxage** *<days>*
Delete rotated logs older than this

**minage** *<days>*
Skip logs younger than this

## COMPRESSION

**compress**
Compress rotated logs (gzip)

**nocompress**
Do not compress

**delaycompress**
Compress one cycle later

## FILES AND NAMING

**missingok**
No error if the log does not exist

**notifempty**
Skip rotation if the log is empty

**create** *<mode>* *<user>* *<group>*
Make a new log after rotation

**nocreate**
Do not create a new log

**copytruncate**
Copy, then truncate in place

**dateext**
Use a date instead of a number

**olddir** *<dir>*
Move rotated logs to a directory

## SCRIPTS

**postrotate ... endscript**
Run commands after rotation

**prerotate ... endscript**
Run commands before rotation

**sharedscripts**
Run scripts once per block, not per log

## RECIPES

### Typical application config

```
/var/log/myapp/*.log {
    weekly
    rotate 8
    compress
    delaycompress
    missingok
    notifempty
    create 0640 myapp adm
}
```

### Reload a service after rotation

```
/var/log/nginx/*.log {
    daily
    rotate 14
    compress
    delaycompress
    sharedscripts
    postrotate
        systemctl reload nginx ||
true
    endscript
}
```

### Size-capped log that cannot reopen files

```
/var/log/legacy.log {
    size 50M
    rotate 5
    copytruncate
    compress
    dateext
    missingok
}
```