

systemctl cheat sheet

Field-tested systemd commands for everyday admin work – searchable and copyable in one click. Units, timers, overrides and boot analysis.

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cheat sheet

Status & control

State and latest log lines of a unit

```
systemctl status nginx
```

Start a unit

```
sudo systemctl start nginx
```

Stop a unit

```
sudo systemctl stop nginx
```

! Stop and start a unit again

```
sudo systemctl restart nginx
```

Reload the config without stopping

```
sudo systemctl reload nginx
```

Short state: active, inactive or failed

```
systemctl is-active nginx
```

Check whether the unit starts at boot

```
systemctl is-enabled nginx
```

Autostart & masking

Enable autostart at boot

```
sudo systemctl enable nginx
```

Enable autostart and start now

```
sudo systemctl enable --now nginx
```

Disable autostart

```
sudo systemctl disable nginx
```

! Fully block a unit (also as dependency)

```
sudo systemctl mask nginx
```

Remove the mask

```
sudo systemctl unmask nginx
```

Re-read unit files after changes

```
sudo systemctl daemon-reload
```

Finding & inspecting units

List all failed units

```
systemctl --failed
```

List running services

```
systemctl list-units --type=service --state=running
```

Show the unit file including drop-ins

```
systemctl cat nginx
```

Dependency tree of a unit

```
systemctl list-dependencies nginx
```

Journal pointers

Follow the logs of a unit live

```
journalctl -u nginx -f
```

Messages from the last hour

```
journalctl -u nginx --since '1 hour ago'
```

Errors since the last boot

```
journalctl -b -p err
```

Disk space used by the journal

```
journalctl --disk-usage
```

Timers

All timers with next and last run

```
systemctl list-timers --all
```

Enable and start a timer

```
sudo systemctl enable --now backup.timer
```

Run the matching job once right now

```
sudo systemctl start backup.service
```

Timer line: every day at 03:00

```
OnCalendar=*-*-* 03:00:00
```

Timer line: catch up on missed runs after boot

```
Persistent=true
```

Validate a time expression and show next run

```
systemd-analyze calendar 'Mon *-*-* 06:00'
```

Overrides with drop-ins

Create a drop-in (survives package updates)

```
sudo systemctl edit nginx
```

! Discard all local changes to the unit

```
sudo systemctl revert nginx
```

Drop-in [Service]: restart on failure (RestartSec=5 waits 5 s)

```
Restart=on-failure
```

Drop-in [Service]: cap memory at 1 GB

```
MemoryMax=1G
```

Drop-in [Service]: clear the inherited ExecStart before setting a new one

```
ExecStart=
```

Analysis & targets

Show total boot time

```
systemd-analyze
```

The 15 slowest units at boot

```
systemd-analyze blame | head -n 15
```

Sandboxing score of a unit

```
systemd-analyze security nginx
```

Boot without a graphical interface

```
sudo systemctl set-default multi-user.target
```

! Switch to rescue mode (stops services)

```
sudo systemctl isolate rescue.target
```