systemd

systemd is the init system and service manager on most modern Linux distros. `systemctl` controls units (services); `journalctl` reads their logs. Most commands need `sudo` to change state.

Control Services

Command	Action
`systemctl start nginx`	start a service now
`systemctl stop nginx`	stop it now
`systemctl restart nginx`	stop then start
`systemctl reload nginx`	reload config without a full restart
`systemctl enable nginx`	start automatically at boot
`systemctl disable nginx`	don't start at boot
`systemctl enable --now nginx`	enable at boot and start immediately

Check Status

Command	Shows
`systemctl status nginx`	state, recent logs, and PID
`systemctl is-active nginx`	`active` / `inactive` (scriptable)
`systemctl is-enabled nginx`	whether it starts at boot
`systemctl --failed`	every unit that failed to start
`systemctl list-units --type=service`	all loaded services
`systemctl list-unit-files`	all installed units + their state

Read Logs (journalctl)

Command	Shows
`journalctl -u nginx`	all logs for one service
`journalctl -u nginx -f`	follow (tail) live
`journalctl -b`	logs since the last boot
`journalctl -e`	jump to the end
`journalctl --since '1 hour ago'`	time-filtered logs
`journalctl -p err`	errors and worse only
`journalctl -k`	kernel messages (like dmesg)
`journalctl --disk-usage`	how much space the journal uses

Unit Files

Command	Does
`systemctl cat nginx`	print the unit file and any overrides
`systemctl edit nginx`	create a drop-in override (safe)
`systemctl edit --full nginx`	edit a full copy of the unit
`systemctl daemon-reload`	reload after editing unit files
`systemctl show nginx`	dump every property

> **Always daemon-reload after editing.** systemd caches unit files. Change one and forget `sudo systemctl daemon-reload` and it keeps running the old definition — a classic "why isn't my change working" trap.

System State

Command	Does
`systemctl reboot`	restart the machine
`systemctl poweroff`	shut down
`systemctl suspend`	sleep
`systemctl get-default`	current boot target (e.g. graphical)
`systemd-analyze blame`	what slowed down the last boot