

systemd is a suite of basic building blocks for a Linux system. It provides a system and service manager that runs as PID 1 and starts the rest of the system. It also provides a logging daemon, tracks logged-in users and running containers and virtual machines, maintains mount and automount points, and more.

## Services

|   |   |
|---|---|
| List all available services                   | <code>systemctl list-unit-files --type service</code> |
| Start service <b>sshd</b>                     | <code>systemctl start sshd</code>                     |
| Stop service <b>sshd</b>                      | <code>systemctl stop sshd</code>                      |
| Show status of service <b>sshd</b>            | <code>systemctl status sshd</code>                    |
| Start <b>sshd</b> now and at system startup   | <code>systemctl enable --now sshd</code>              |
| At system startup, start (enable) <b>sshd</b> | <code>systemctl enable sshd</code>                    |
| At system startup, do not start <b>sshd</b>   | <code>systemctl disable sshd</code>                   |
| Show whether service <b>sshd</b> is enabled   | <code>systemctl is-enabled sshd</code>                |
| Prevent service from starting (mask)          | <code>systemctl mask sshd</code>                      |
| Unmask service, allowing it to be started     | <code>systemctl unmask sshd</code>                    |

## Targets (runlevels)

|                               |  |
|-------------------------------|--|
| List all available targets    | <code>systemctl list-unit-files --type target</code> |
| Boot to a graphical desktop   | <code>systemctl set-default graphical</code>         |
| Boot to a text console        | <code>systemctl set-default multi-user</code>        |
| Show default boot target      | <code>systemctl get-default</code>                   |
| Show dependencies of a target | <code>systemctl list-dependencies graphical</code>   |

## Logs

|  |                                    |                  |
|--|------------------------------------|------------------|
| View all system logs                           | <code>journalctl</code>            |                  |
| View system logs from most recent              | <code>--catalog --pager-end</code> | <code>-xe</code> |
| View logs for unit <b>foo</b>                  | <code>--unit foo</code>            | <code>-u</code>  |
| View logs since boot NUMBER (default: current) | <code>--boot</code>                | <code>-b</code>  |
| List boot numbers                              | <code>--list-boots</code>          |                  |

## Introspection

|                              |   |
|------------------------------|---|
| Show contents of unit file   | <code>systemctl cat sshd</code>           |
| Show unit file settings      | <code>systemctl show sshd</code>          |
| Show whether unit is active  | <code>systemctl is-active sshd</code>     |
| Show whether unit has failed | <code>systemctl is-failed sshd</code>     |
| Edit unit file configuration | <code>sudo systemctl edit sshd</code>     |
| Restart daemon               | <code>sudo systemctl daemon-reload</code> |

## Power

|  |  |
|--|--|
| Power down the system                              | <code>systemctl poweroff</code>                |
| Reboot, inserting the message "foo" into the logs  | <code>systemctl --message="foo" reboot</code>  |
| Reboot container or virtual machine <b>foo</b>     | <code>systemctl --machine=foo reboot</code>    |
| Halt remote host <b>example</b> as user <b>tux</b> | <code>systemctl --host=tux@example halt</code> |