

# Why systemd?

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# fast boot

/etc/fstab

```
UUID=... /boot ext4 comment=systemd.automount 0 2
```

```
UUID=... /home ext4 comment=systemd.automount 0 2
```

## socket activation

- ▶ create the communication sockets
- ▶ start background services
- ▶ pass sockets to the services while launching

# unification

## service files

Same in Fedora, SUSE, Gentoo, Debian, openembedded, ...

/etc/hostname

m\_melnikau

/etc/locale.conf

LANG=en\_US.UTF-8

/etc/os-release

```
NAME=Gentoo
ID=gentoo
PRETTY_NAME="Gentoo Linux"
ANSI_COLOR=1;32
```

/etc/vconsole.conf

```
KEYMAP=us
FONT=default8x16
```

## simple service files

`/etc/systemd/system/graphical.target.wants/bumblebeed.service`

`[Unit]`

`Description=Bumblebee C Daemon`

`[Service]`

`Type=simple`

`CPUSchedulingPolicy=idle`

`ExecStart=/usr/sbin/bumblebeed`

`Restart=always`

`RestartSec=60`

`StandardOutput=kmsg`

`[Install]`

`WantedBy=graphical.target`

# cgroups integration

## systemd-cgtop

Path	Tasks	%CPU
/	477	27.0
/system	1	26.5
/system/kdm@.service	-	25.2
/system/rabbitmq-server.service	44	0.7
/system/dbus.service	12	0.3
/system/NetworkManager.service	4	0.2
/system/mysqld.service	16	0.1
/system/avahi-daemon.service	2	0.0
/system/console-kit-daemon.service	65	-
/system/rtkit-daemon.service	3	-
/system/systemd-journald.service	1	-
/system/systemd-logind.service	1	-
/system/udev.service	3	-

## improved logs

```
systemd-journalctl -o verbose _PID=11937
```

```
PRIORITY=4
SYSLOG_FACILITY=1
SYSLOG_IDENTIFIER=org.kde.powerdevil.backlighthelper
MESSAGE=QDBusConnection: ... Application may misbehave.
_TRANSPORT=syslog
_PID=11937
_UID=0
_GID=0
_COMM=backlighthelper
_EXE=/usr/lib64/kde4/libexec/backlighthelper
_CMDLINE=/usr/lib64/kde4/libexec/backlighthelper
_SYSTEMD_CGROUP=/system/dbus.service
_SYSTEMD_UNIT=dbus.service
_SOURCE_REALTIME_TIMESTAMP=1335685169367215
_BOOT_ID=083530b34e7547e48fcfe7be0726fa3f
```

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- ▶ <http://www.freedesktop.org/wiki/Software/systemd>
- ▶ <http://0pointer.de/blog>