

Beyond Init: Systemd

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Who Am I?

Software Engineer at Red Hat, Inc.

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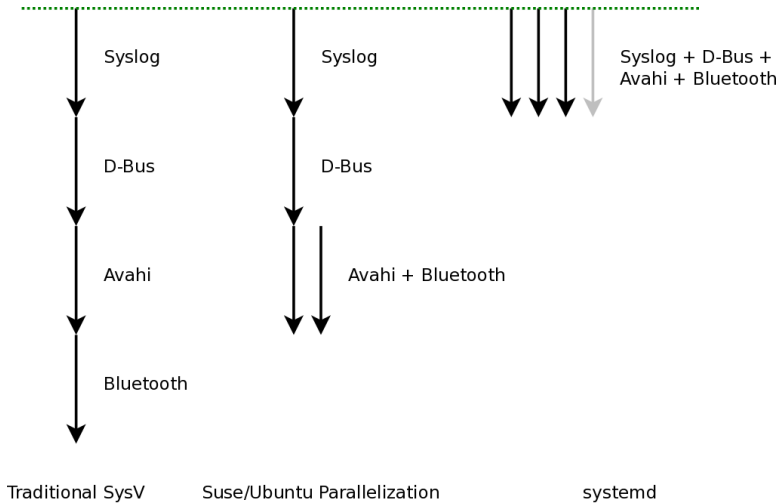
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init(8)

Parallelization



Socket-Based Activation

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The kernel orders and buffers requests for us!

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Implicit dependencies!

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Patching daemons

Bus-Based Activation

Starting Less: On-Demand Loading

Parallelizing File System Jobs

Parallelizing File System Jobs autofs!

Shell is evil

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Move to systemd, daemons, kernel, udev, . . .

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Provide proper debugging facilities

The best babysitter.

The best babysitter.
Control Groups!

The best babysitter II

The best babysitter II

Environment, resource limits, working directory, `chroot()`, `umask`, OOM adjustment, nice level, IO priority and class, CPU scheduler priority and policy/reset-on-fork, CPU affinity, timer slack, `stdio` to `syslog/tty/null/kmsg`, `uid`, `gid`, supplementary groups, file system namespacing (r/o file systems, inaccessible systems, mount propagation, private `/tmp`), capabilities (inherited set, bounding set, secure bits), ...

Unit types: service, socket, device, mount, automount, target,
snapshot, timer, swap, path

Don't reinvent the wheel:

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 `.desktop` files.

Snapshots

Transaction System

D-Bus!

systemadm

Future: managing sessions

Say No! to Copyright Assignment.

That's all, folks.

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Any questions?

systemd

<http://www.freedesktop.org/wiki/Software/systemd>

<http://0pointer.de/blog/projects/systemd>

[git://anongit.freedesktop.org/systemd](https://anongit.freedesktop.org/systemd)

#systemd on irc.freenode.org