

# Beyond Init: systemd

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# Who Am I?

Software Engineer at Red Hat, Inc.

Developer of PulseAudio, Avahi and a few other Free Software projects

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IRC: mezcadero

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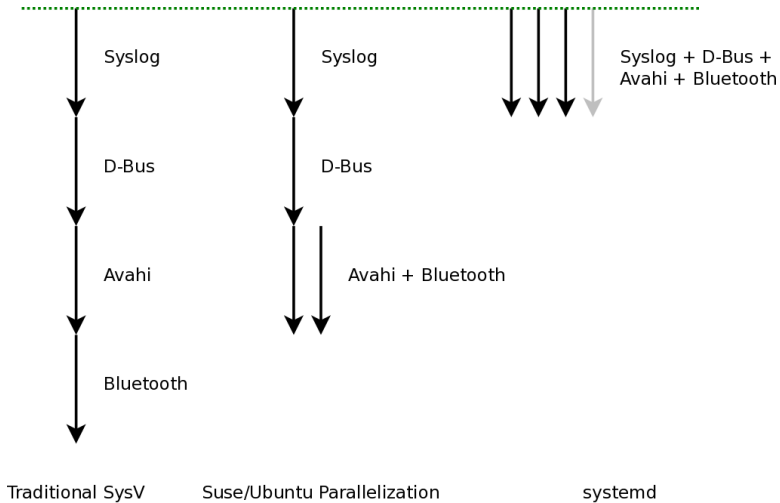
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init(8)

# Parallelization



# Socket-Based Activation



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The kernel orders and buffers requests for us!

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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.

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Control Groups!

## The best babysitter II

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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

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Read SysV/LSB init script headers, read `/etc/fstab`, support traditional `inetd` modes, support `/dev/initctl`, `utmp`, `wtmp`, support `double-fork()`ing daemons.

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`.desktop` files.

# Snapshots

# Transaction System

D-Bus!

systemadm

systemd as basic OS building block

systemd as basic OS building block  
systemd for cross-distribution standardization



## systemd in the distributions

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>

#systemd on [irc.freenode.org](http://irc.freenode.org)