

Stephan Wiesand
DESY Linux User Meeting
Hamburg, 2015-03-12

Red Hat Enterprise Linux

- > 10 years life time
 - 5.5 years production 1
 - 1 year production 2
- > release cycle undefined
 - in fact, almost 4 years
- > 7.0 release last June, 7.1 this month
- > commercial distribution, subscriptions charged per system/year
- > sources freely available
 - ≤ 6 : SRPMs
 - ≥ 7 : git
 - > customers still get SRPMs, but the derivatives can't use them
 - they have to build their own now



What's new in 7? - Highlights

- > of course: kernel, compiler, glibc, ...
- > GNOME 3
 - completely governs graphical logins
 - > gdm is the only supported display manager
 - > dependent on accountsservice daemon and gnome-shell
 - > simply won't work with more than a handful local accounts
 - > lots of bugs fixed and arbitrary limits removed in 7.1 – let's see
 - 20 years of Linux, and I had to figure out how to login!
 - after login, GNOME 3 is a matter of taste...
- > Systemd
 - replaces init (EL <= 5) and upstart (EL6), and udev
 - and aims for replacing a lot more
 - > xinetd, syslog



First experience with Systemd

- > Gross violation of “the UNIX principle”
 - a tool should do one thing, and do it well
 - systemd wants to do everything
 - admittedly, it's doing that very well
- > in fact, not so bad
 - useful features, does fix some shortcomings of init
 - well documented
- > backward compatibility is limited
- > soon found that we have to rewrite almost all init scripts into unit files
 - not hard, but still a lot of work



Systemd continued

- > the actual problem with systemd on EL7 is the way it's configured
- > totally optimized for the “private laptop” use case
 - boot as quickly as possible
 - allow login before the network is up
- > which is absolutely not what we need
- > we now de-parallelize the system startup by using a custom target
 - “target” = former “run level”



Derived Distributions

- > Scientific Linux
 - continues to exist
- > CentOS
 - now under the roof of Red Hat
 - > hired all the main developers
- > SLC is gone
 - as of &, CERN bases its Linux on CentOS
- > PUIAS
 - 7 exists – still public?
- > OEL
 - 7 exists



SL vs. CentOS

> release numbers

- RHEL: 7.0, 7.1, ...
- SL: 7.0, 7.1, ...
- CentOS: 7.0.1406, 7.1.1503 (?), ...

> errata policy

- SL: always filtered out security updates from next minor release
 - > allowed sitting on a release
 - > security updates while getting next release ready
- CentOS: less convenient
 - > historically: no updates at all, until next release finished
 - update to next release only way to get updates then
 - > new: “continuous release” repository
 - whatever they have ready, reduced QA
- alas: SL7 policy not quite clear yet, this will change in the next days

