

Next Linux version at CERN

White Area / IT-SDC

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on the behalf of Linux Support Team

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AGENDA

- Scientific Linux CERN 5
- Scientific Linux CERN 6
- Koji
- Version 7
 - CentOS 7
 - CERN CentOS 7
 - Ongoing tasks
 - Community
- Questions



- Scientific Linux CERN 5.11
- Last minor version.
- Improvements:
 - New hardware : SAS LSI MegaRAID SAS 9360/9380 12Gb/s, SAS Smart Array, etc...
- Release Notes : http://linuxsoft.cern.ch/cern/slc511/x86_64/docs/RELEASE-NOTES-U11-x86-en.html



- Scientific Linux Cern 6.5 released in December 2013.
- Next version SLC 6.6 likely due this year. (“when it’s ready” RHEL 6.6 Beta is already out)
- Improvements:
 - Better guest support on Hyper-V.
 - dm-cache.

- In numbers: 80 active build target, 15400 builds, 130 users.
- Agile workflow to publish package quickly
- Improvements :
 - SSD used as a buildroot cache
 - el7 support
 - SSO (beta)
 - Gitlab integration
 - More builders (end of the year)

- Following Red Hat Enterprise Linux 7 release CentOS Core SIG released CentOS 7 on the **7th of July 2014**
- <http://wiki.centos.org/Manuals/ReleaseNotes/CentOS7>

What is it ?

- TEST version released on 04/08/2014
- CentOS 7 upstream rpms (very same packages released by CentOS team, no CERN specific customization),
- CERN Linux team provides additional software through CERN and CERNONLY repositories,
- CERN CentOS 7 updates are staged,
- CERN CentOS 7 includes the 'yum-autoupdate',
- <http://linux.web.cern.ch/linux/centos7/>

What is new ?

- x86_64 only.
- systemd.
- Gnome 3.
- lxc / docker support.
- gcc 4.8.X.
- Mysql replaced by MariaDB.



ONGOING TASKS

- Cloud image effort (oz based) : <https://github.com/cernops/openstack-image-tools>
- CERN/CERNONLY yum repositories,
- openafs upstream packages included, afs team is reviewing our approach.



- Very welcoming,
- All build logs/git repos/docs available,
- Open discussion on the mailing-list / IRC,
- Access to qa code (e.g: buildlogs.centos.org)



Cross infrastructure testing

- Openstack image
 - bugs found and fixed before release.



Community build system

- Koji installation at <http://cbs.centos.org>
- Promote a building service, common to all special interest group.
- Building from git.centos.org
- Early stage but weekly meetings to follow up changes
- Adapting Fedora toolchain (e.g : centpkg)



- openafs discussion
 - Storage SIG meeting minutes : <http://lists.centos.org/pipermail/centos-devel/2014-October/012060.html>
- Software collections
 - Trying to have a community supported rebuild starting with 1.2 (in discussion)



QUESTIONS ?

<http://cern.ch/linux>

Thank you !

- **systemd:** https://cdn.rawgit.com/ruzickap/linux.xvx.cz/gh-pages/files/systemd_cheatsheet/systemd_cheatsheet.pdf https://github.com/ruzickap/linux.xvx.cz/blob/gh-pages/files/systemd_cheatsheet/systemd_cheatsheet.tex
- **libstoragemgmt:** http://sourceforge.net/p/libstoragemgmt/wiki/v1_user_guide/
- The **OpenLMI** project provides a common infrastructure for the remote management of Linux systems.
(Web-Based Enterprise Management (WBEM) is a Distributed Management Task Force (DMTF))
<http://www.openlmi.org/QuickStart>
- **snapper for btrfs**
<http://snapper.io/>
- **networkmanager:**
<https://fedoraproject.org/wiki/Networking/CLI>