



Introduction to CentOS

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Agenda

- A brief history
- Defining an Enterprise Linux distribution
- What is the current status ?
- How to contribute ?



History line

Back in 2003, Red Hat announced that they stop providing the traditional Red Hat Linux distribution

Users had to make a choice :

- * use Red Hat Enterprise Linux (only available through RHN subscriptions)
- * use the newly created Fedora project



History line

Several projects came to life (Whitebox Linux, TaoLinux,) at that time.

cAos project announced the birth of the CentOS project :

<http://caos.caosity.org/pipermail/caos/2003-December/001205.html>

The goal was to provide a compatible distribution rebuild from the RHEL SRPMs

2005 : CentOS project now independant from cAos :

<http://lists.centos.org/pipermail/centos/2005-March/003752.html>



Enterprise Linux ?

- Long support cycles
- Security updates (low risk) for seven years
- ABI/API stability - patches get ***backported***
- Support by Hardware/Software vendors
- Certifications are compatible

The need for an Enterprise distribution ?



- You cannot afford to update all your servers each year
- Some software you use requires a supported distribution
- Your own software needs a stable interface
- You need stable Desktop software for your business



Project goals

- Easy maintenance via yum
- Building a self hosting distribution - CentOS RPMs are built on a CentOS environment
- Build up a friendly environment for users and maintainers
- Long-term support of the base distribution
- Community infrastructure



CentOS Pros and Cons

- Pros :
 - Freely available (no licenses)
 - Everything in one “channel”
 - Strong and big community support
 - Stable/tested
 - No need to upgrade to the next major release
 - Not limited by Upstream restrictions



CentOS Pros and Cons

- Cons :
 - No official support from upstream
 - No RHN TM (SpaceWalk alternative available now)
 - Not bleeding edge
 - Newer softwares will require maybe newer underlying software in the future (all enterprise distros)
 - 'small' delay for the security releases (2h –24h)



Supported architectures

- CentOS 2 only supports x86.
- CentOS 3 currently supports x86, x86_64 (AMD64 and Intel EM64T), s390, s390x, ia64 (Intel Itanium2).
- CentOS 4 currently supports x86, x86_64, s390, s390x and ia64. ppc (PowerPC), alpha (DEC Alpha) and sparc are released in beta for CentOS 4.
- CentOS 5 currently supports x86 and x86_64. ia64, ppc (PowerPC) and sparc are being developed.



Eol timeline

- 7 years of updates :
- CentOS-2 updates until May 31 2009
- CentOS-3 updates until Oct 31, 2010
- CentOS-4 updates until Feb 29, 2012
- CentOS-5 updates until Mar 31, 2014



CentOS projects

- **CentOS LiveCD**
- **CDS** (Centos Directory Server –in the testing repo now –IPA planned too)
- **Project Cranberry** : an effort started by a few people associated with the CentOS Project, to try and create a general purpose sysadmin toolkit which tries to provide most recovery resources required by people.
- **Pandora** : a package browser for the CentOS repositories that is currently under development.
- **Dasha** : the CentOS extra drivers project, aims to bring wider hardware availability to CentOS users.
- **Yours ?** : read <http://wiki.centos.org/Projects>



CentOS repositories

- **Base** : the RPMS released on the iso/tree
- **Updates** : updates to the [base] repo
- **Extras** : items produced only by CentOS (not upstream) and that don't overwrite [base] packages. Examples : FreeNX, Heartbeat, DRBD ...
- **CentosPlus** : items produced by CentOS (not upstream) and that overwrite [base] packages ! (centosplus kernels, jfs, xfs, reiserfs, postfix with MySQL, Postgresql support, higher php and mysql for Centos 4,)



External repositories

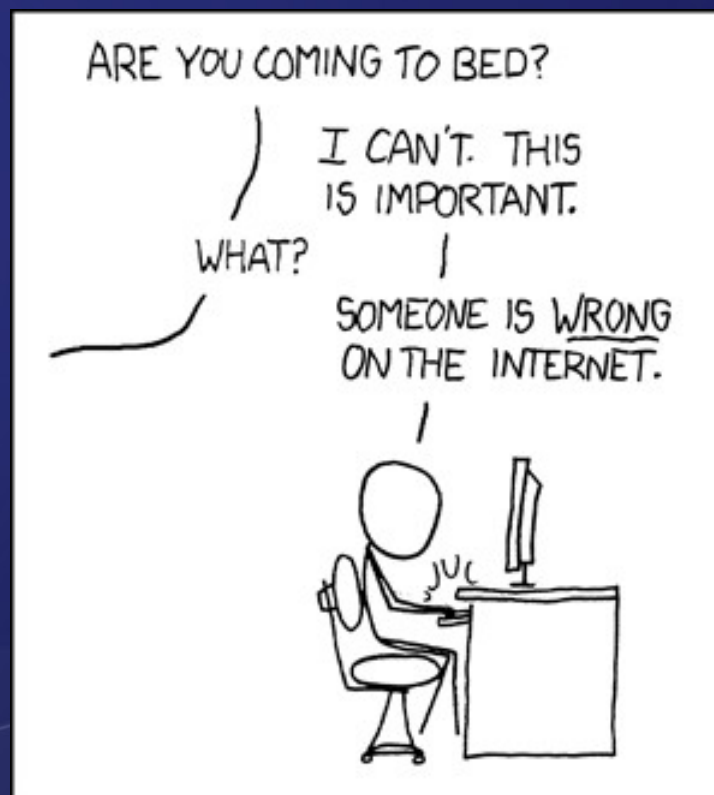
- **RPMforge** : This repository is a collaboration of Dag, Dries, and other packagers. They provide over 4000 packages for CentOS.
<http://www.rpmforge.net>
- **ATrpms** : This repository provides many bleeding-edge applications and media utilities such as mythtv. This repository is available at <http://atrpms.net> (use the stable repo !)
- **KBS-Extras** : This site provides a rebuild of Fedora Extras for CentOS, as well as number of other packages -
<http://centos.karan.org>
- **EPEL** : This repository (See <http://fedoraproject.org/wiki/EPEL>) provides rebuilds of Fedora packages for EL4 and EL5
- **!!! use the yum priorities plugin !!!**
see <http://wiki.centos.org/Repositories>



How to contribute

Help other CentOS users/community :

- **Mailing-lists (localized)** - <http://lists.centos.org>
- **Forum** - <http://www.centos.org/modules/newbb/>
- **Irc** - #centos on irc.freenode.net
see also <http://www.centos.org/irc>





How to contribute

- Provide mirrors/bandwidth (if you have)
- Provide HW (ia64, sparc and ppc/ppc64)
- Donate ;-)
- Report bugs on <http://bugs.centos.org> (! not a support website)
- Submit patches ;-)
- Submit spec files to be included in Extras
- QA team
- Write articles/translate them on the wiki



Centos Links

- <http://www.centos.org>
- <http://wiki.centos.org>
- <http://planet.centos.org>
- <http://lists.centos.org>
- <http://mirror.centos.org>
- <http://isoredirect.centos.org>



Questions ?