Introduction to CentOS

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Agenda

- A brief history
- Defining an Enterprise Linux distribution
- What is the current status?
- How to contribute?
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
Several projects came to life (Whitebox Linux, TaoLinux, ....) at that time.
cAos project announced the birth of the CentOS project:
The goal was to provide a compatible distribution rebuild from the RHEL SRPMs
2005 : CentOS project now independant from cAos:
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™ (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](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](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](http://centos.karan.org)

- **EPEL**: This repository ([See http://fedoraproject.org/wiki/EPEL](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](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 ?