

Update On Scientific Linux

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HEPIX Fall 2010

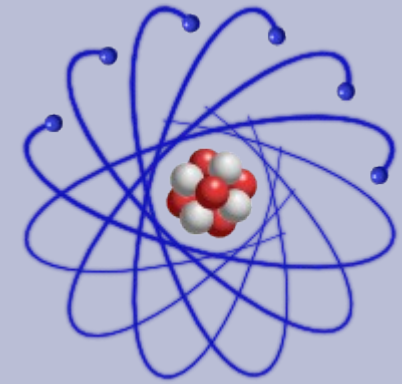
November 4, 2010

Witty Comment



- UNIX is basically a simple operating system, but you have to be a genius to understand the simplicity
- Q: How many Windows users does it take to change a lightbulb?
- A: One, but he'll swear up and down that it was JUST as easy for him as it would be for a Mac user.

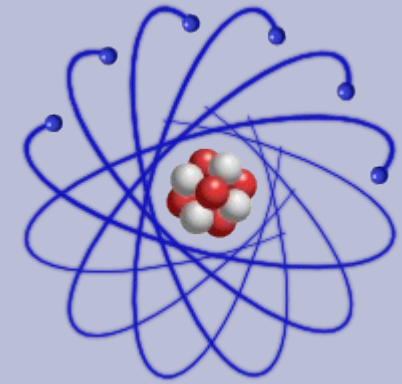
Scientific Linux



- Presentation Overview
 - The last six months
 - What we are currently working on
 - What we see in the future
 - Plenary Discussion

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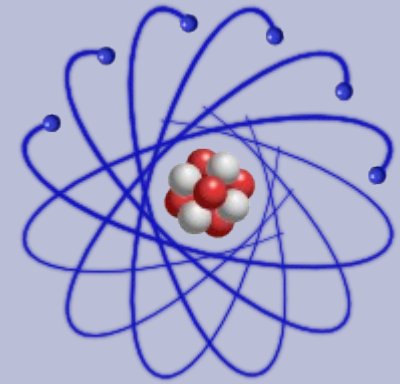
The Past Six Months



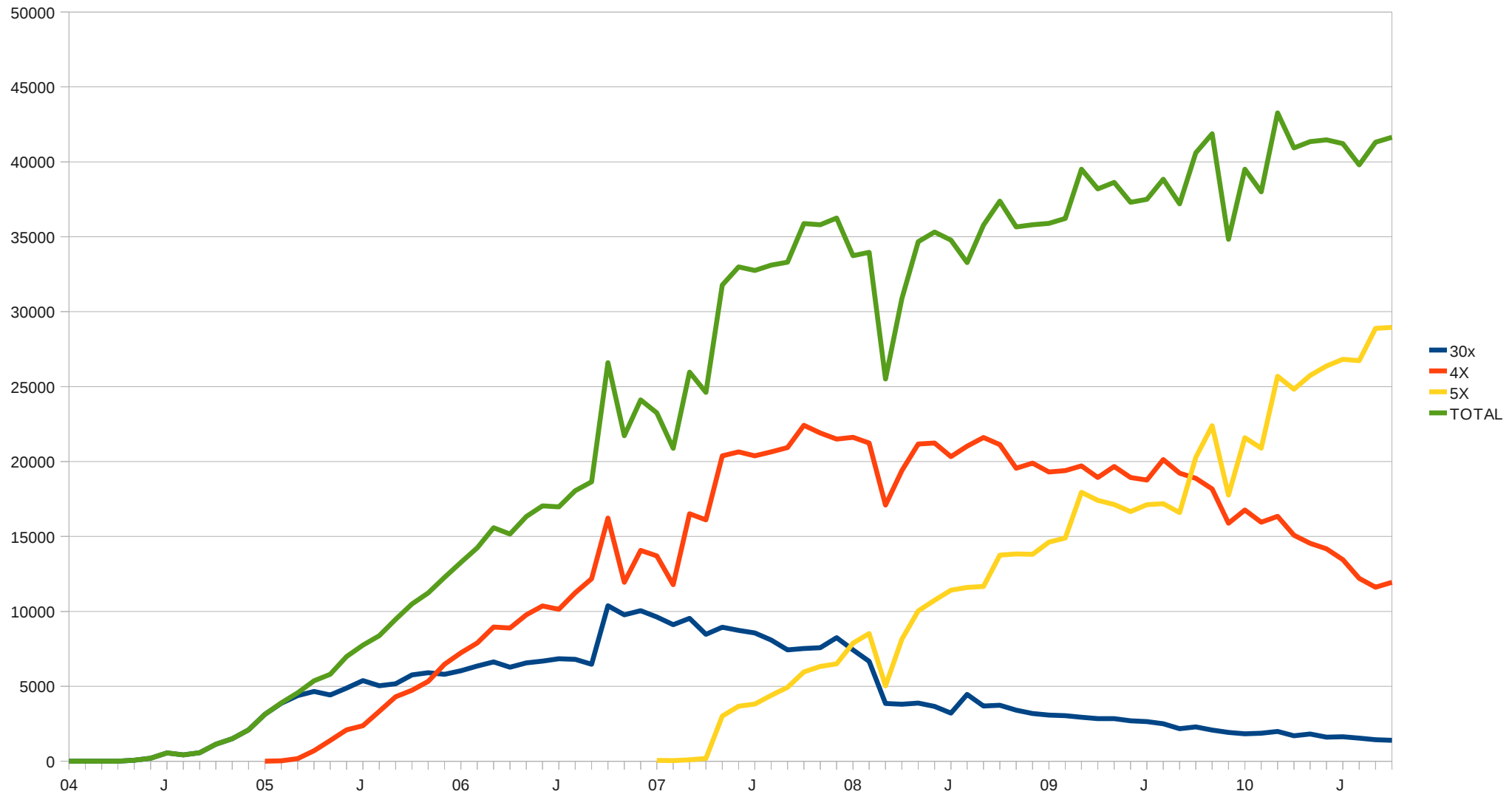
- The following statistics were gathered from <ftp.scientificlinux.org> log files
 - These numbers are the minimum. We know that they are higher.
 - These numbers are based on the yum and apt access to the errata
 - In 2010 we started counting the machines that download the distro mirrorlists. We do not know the architecture of these machines, so they have been labeled as “noarch”
 - We currently have 33 public mirrors, and know of 240 sites mirroring us. These statistics do not represent any of the mirror sites.

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The Past Six Months

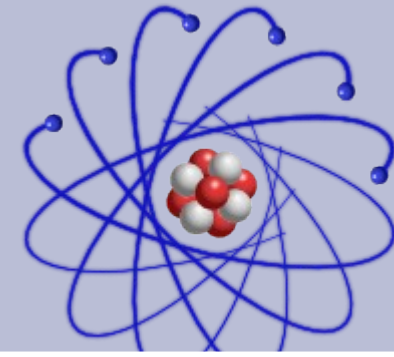


2004 to Present - By Release

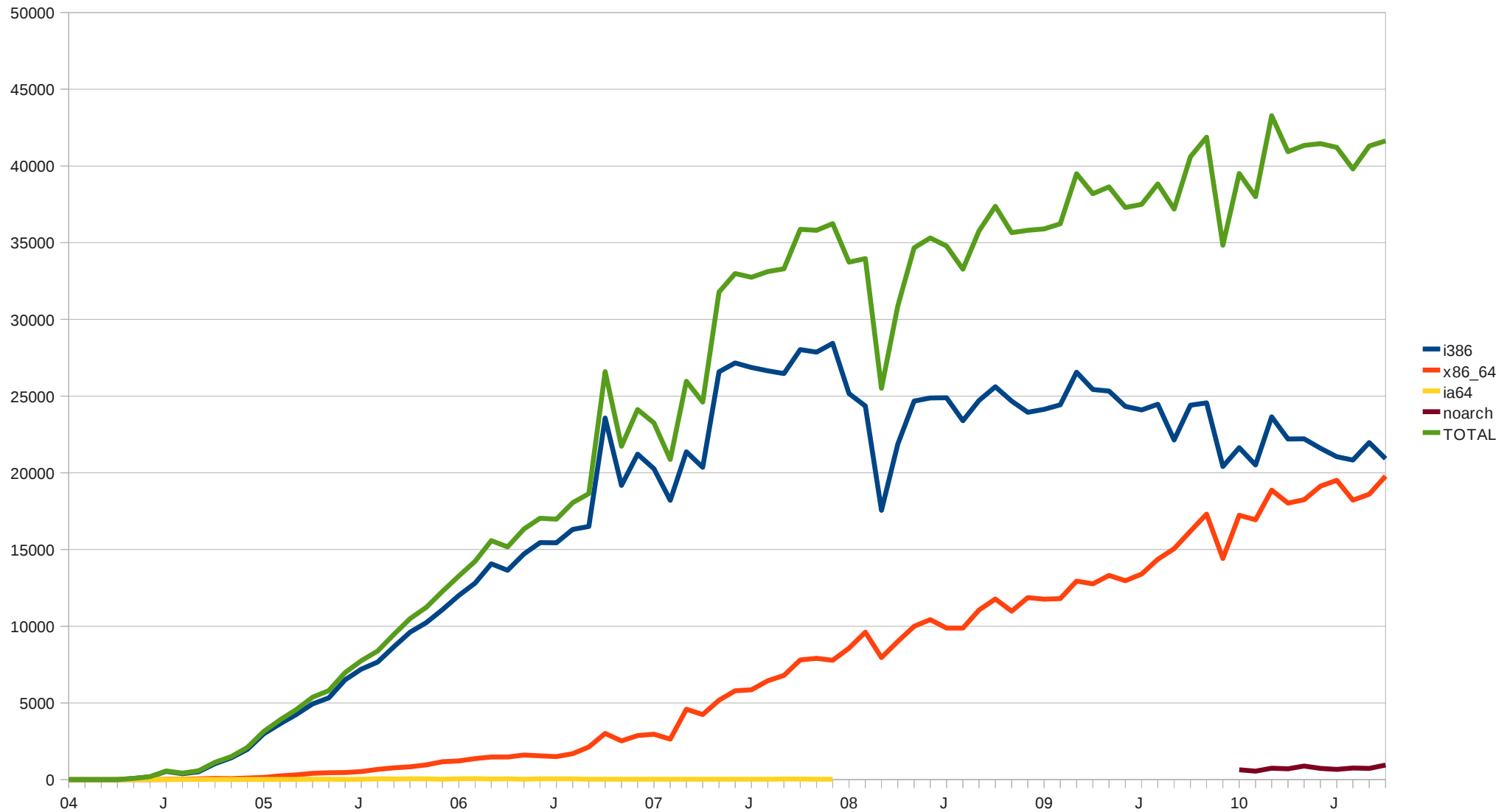


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The Past Six Months

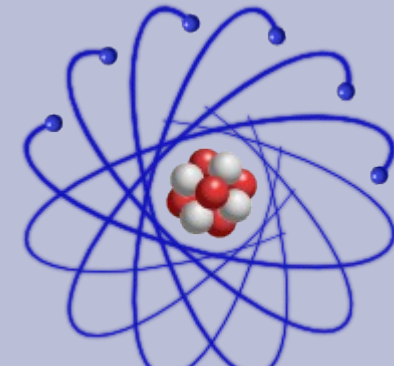


2004 to Present - By Arch

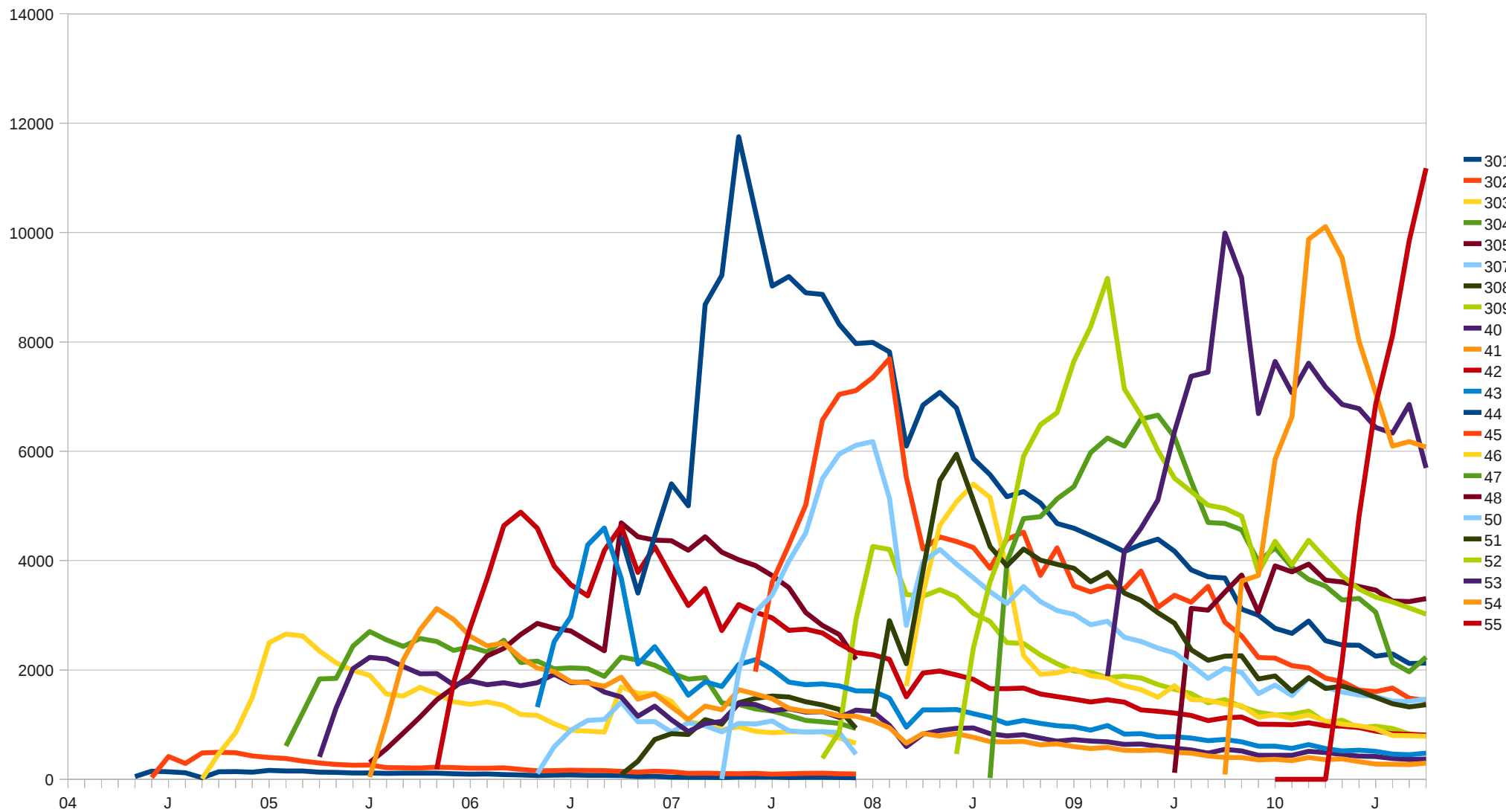


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The Past Six Months



2004 to Present - By Individual Release



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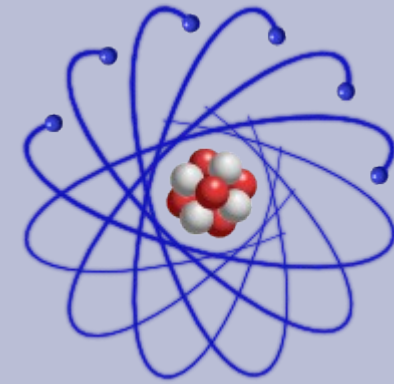
The Past Six Months



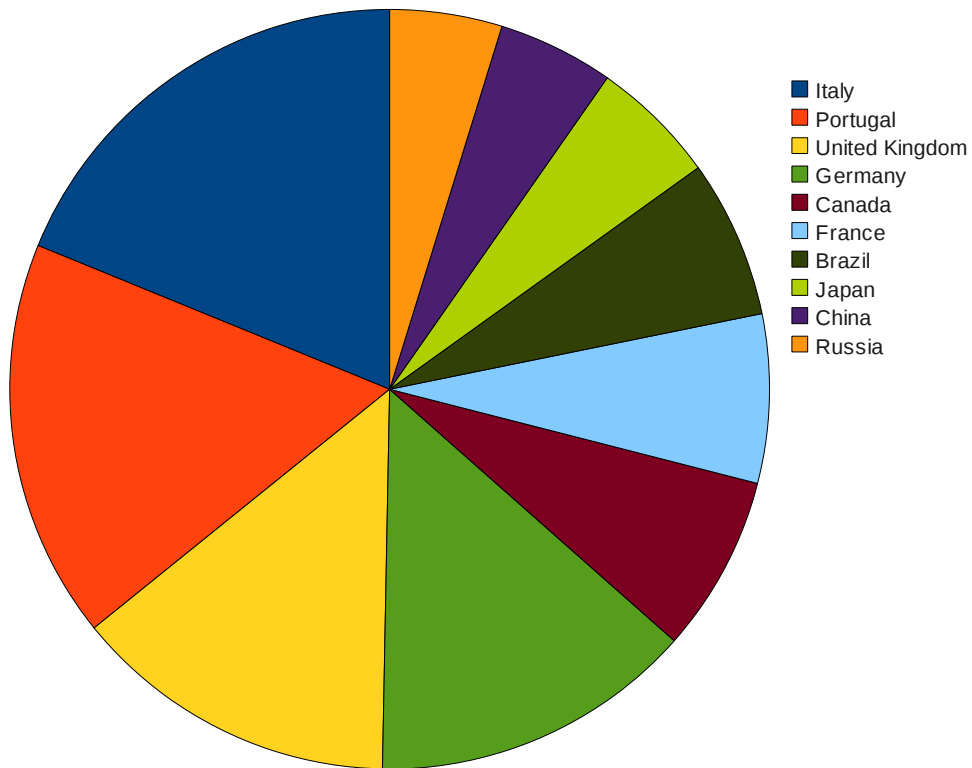
- The following charts are based on the number of files, and/or the number of megabytes downloaded from <http://ftp.scientificlinux.org>
- Networks in the US are not counted
- Networks that might be in several countries, such a .org or .net have been taken out as well.
- This isn't to prove anything, these charts are made just for fun.

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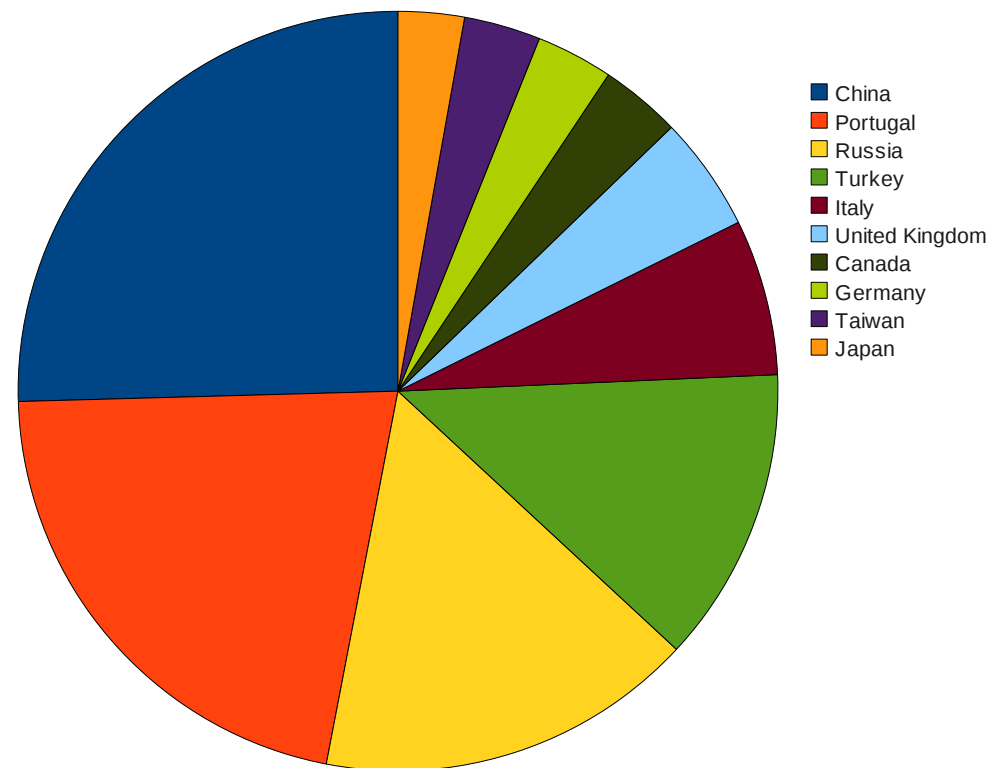
The Past Six Months



Top Downloads of Files
September 2010

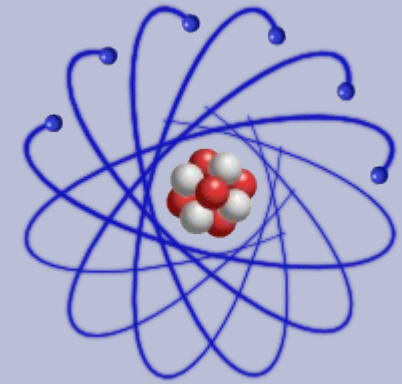


Top Downloads by Megabytes
September 2010



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The Past Six Months



- S.L. 5.5 released – May 2010
 - For i386 and x86_64
 - Programs that we added
 - gnuplot42
 - Firmware: iwlwifi-6000-ucode
 - XFS Utilities were put into the rescue image
 - Openoffice was updated to 3.1.1
 - PostgreSQL84 was added
 - Freeradius2 was added
 - Samba3x was added

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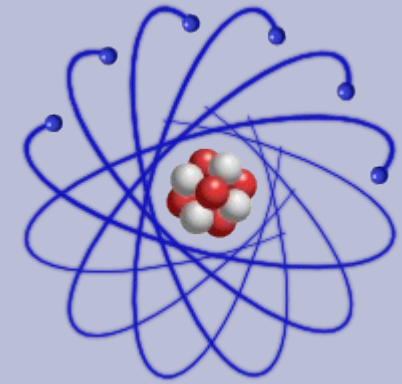
The Past Six Months



- S.L. Live 5.5 released – June 2010
 - Web site is at www.livecd.ethz.ch
 - For i386 and x86_64
 - CD, DVD, mini-CD
 - Changes can be stored persistently on a storage device like an USB key
 - can be installed on USB key, or local hard disk
 - LiveCD can be mounted over NFS (diskless client)

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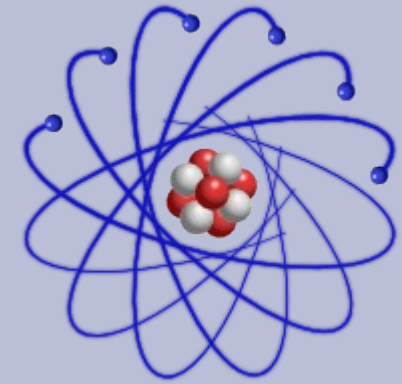
The Past Six Months



- Security updates continually released for all supported versions
- Fastbugs updates consistently released weekly for latest versions of SL4 and SL5.
- Distribution servers were updated to newer hardware
- The Fermilab Scientific Linux Development Team was moved from the Central Services Infrastructure Department to the Scientific Computing Facility Quadrant. This should have no negative impact on Scientific Linux support.

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The Past Six Months

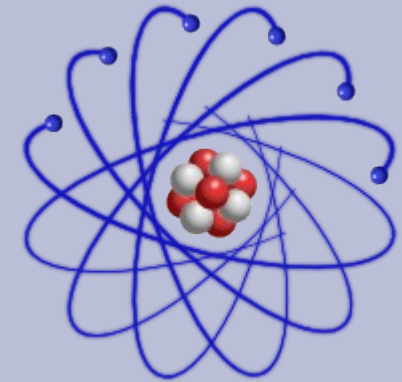


- Scientific Linux 3 Decommissioned
 - Official end of support day was 10-10-10
 - We did compile and push out the two security updates that were released for SL3 after that date.
 - The number of SL3 machines dropped dramatically after 10-10-10*

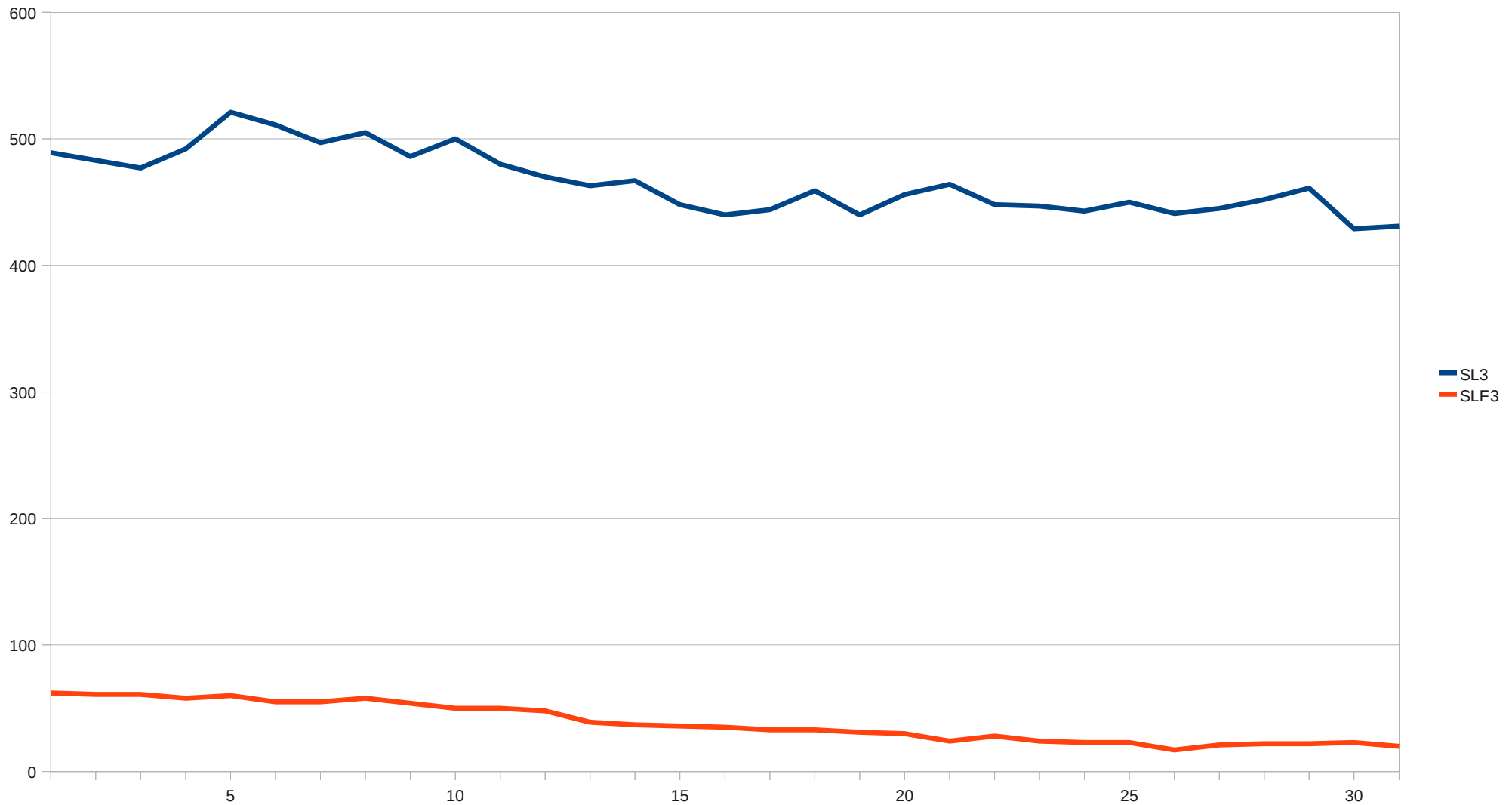
* The number of machines moving off SL3 varied from site to site. This comment might be exaggerated

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The Past Month

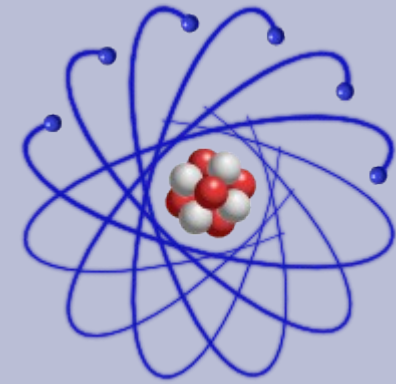


October SL3 & SLF3 users



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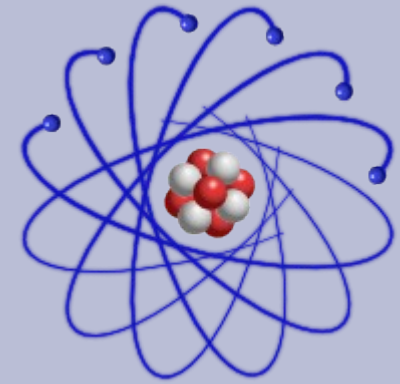
The Past Six Months



- Scientific Linux 6 Preparation
 - Build and Development machines were purchased
 - Build and Development software
 - Koji - working
 - Bodhi / Mash - investigating
 - cvs / subversion / git for rpm development - investigation
 - Revisor - working
- Spacewalk Investigation
 - What can it do, what can't it do
 - Writing scripts to download errata meta-data from rhn and use it for S.L.
 - Create automatic emails – 80% done
 - Verify recompiled rpms – 20% done
 - Upload to spacewalk server – 95% done

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What we are currently working on



- Preparing for SL 6.0
 - RHEL 6 is currently in Release Candidate 1 phase
 - We only have access to the Public Beta
 - We have created a Pre-Alpha release
 - We are seeing which tweak rpms need fixing
 - We are working on what packages to put into the release.

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What we are currently working on



- Investigating new tools for the S.L. Development team
 - See previous presentation
 - Koji
 - Bodhi
 - Mash
 - Pungi
 - Revisor
 - Spacewalk

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What we are currently working on



- Investigating the process that packages go through to be published into S.L.
 - How does a new package make it into S.L.
 - What is the work flow that errata must go through

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What we see in the future



- Continue to have security updates for all releases of SL 4
- Continue to have fastbug updates for only the latest release of SL 4
- Continue to have security updates for all releases of SL 5
- Continue to have fastbug updates for only the latest release of SL 5

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What we see in the future



- Releasing S.L. 4.9
 - Estimate - ?? - we're not even sure if there will be a 4.9
- Releasing S.L. 5.5
 - Estimate - Spring 2011 ??
- When RHEL 6 comes out, releasing S.L. 6.0
 - Estimate - April 2011
 - RHEL 6 released – December 2010 ??
 - This is a guess.
 - Red Hat will not release RHEL 6 until “it is ready”
 - We will not release SL 6 until “it is ready”

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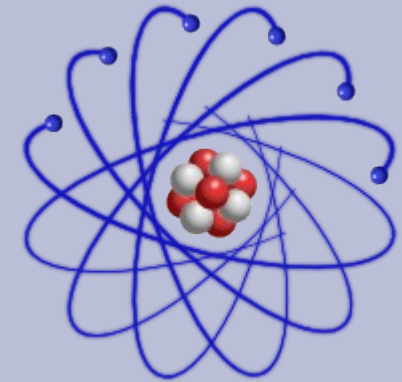
What we see in the future



- Create errata.scientificlinux.org similar to <http://rhn.redhat.com/errata/>
 - This would be on our spacewalk server
- More automation of rpm checking and errata email.
 - This is progressing. The scripts and programs being written for our spacewalk server are a very large step forward in this direction.

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What we see in the future



- SL build environment more open.
 - Users able to see the progress of errata
 - SL developers at Fermi and abroad being able to build on the build servers.
 - Build and publish process more refined and available.
 - This will start with SL6, but we should be able to switch the SL5 build and publication process over.

Scientific Linux Plenary Discussion



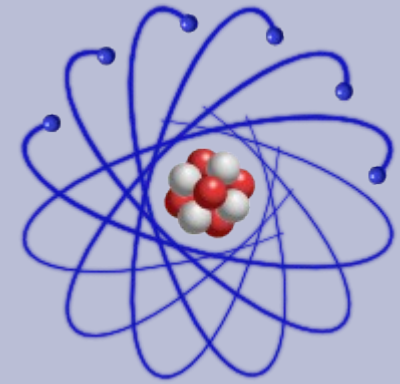
- This is our chance to get direction from you, the users of Scientific Linux
 - What is important
 - What should we change
 - Discuss time lines and road maps

Scientific Linux Plenary Discussion



- When should SL 309 *really* be moved over to obsoletes
 - I'd like to move it over during November.
 - Is there anyone who needs us to wait until 2011?

Scientific Linux Plenary Discussion



- Last Hepix it was discussed that we should put a minimum of items in SL6, and encourage the scientists to put items into EPEL.
 - Are we still in agreement with that?
 - Items I feel should be in SL
 - Tweak rpm's
 - Openafs (it's not in EPEL)
 - Revisor (for building sites)
 - Icewm (It's not in EPEL, and should be a choice during install)

Scientific Linux Plenary Discussion



- Other Topics?
 -

References



- <http://www.scientificlinux.org/>
- <http://ftp.scientificlinux.org/linux/scientific/>
- <http://ftp1.scientificlinux.org/linux/scientific/>
- <http://ftp2.scientificlinux.org/linux/scientific/>
- <ftp://ftp.scientificlinux.org/linux/scientific/>
- <http://www.livecd.ethz.ch/>
- <https://rhn.redhat.com/errata/>