Update On Scientific Linux

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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
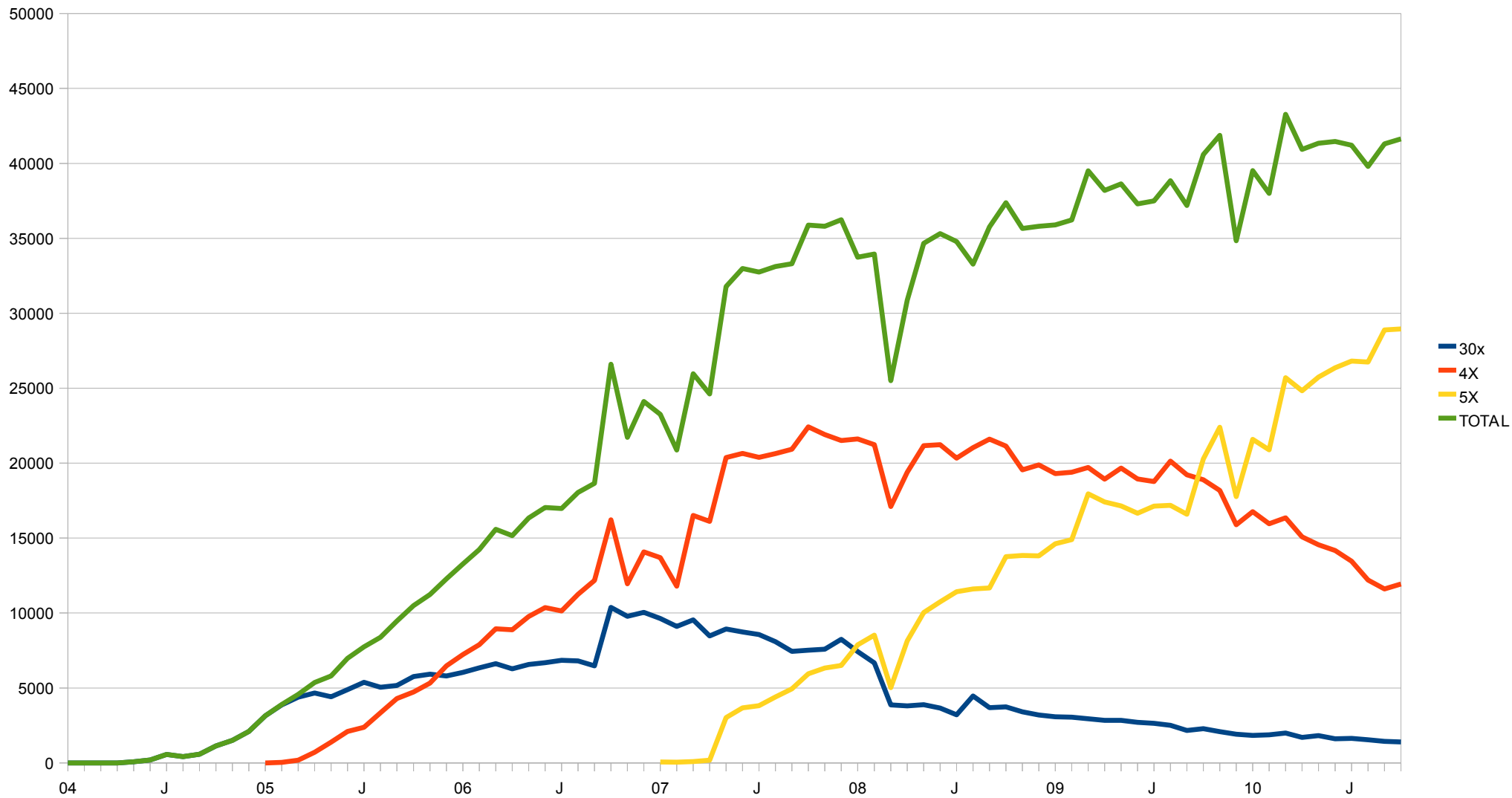
Scientific Linux
The Past Six Months

- 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.
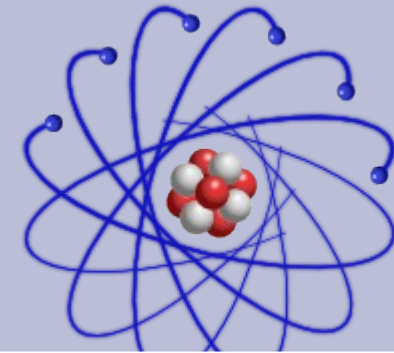
Scientific Linux
The Past Six Months
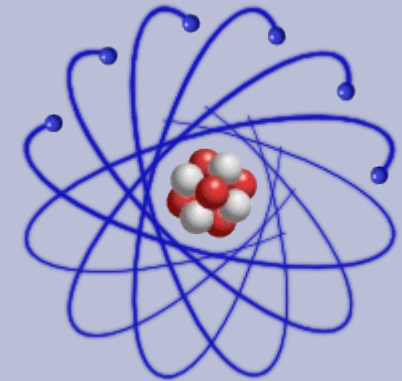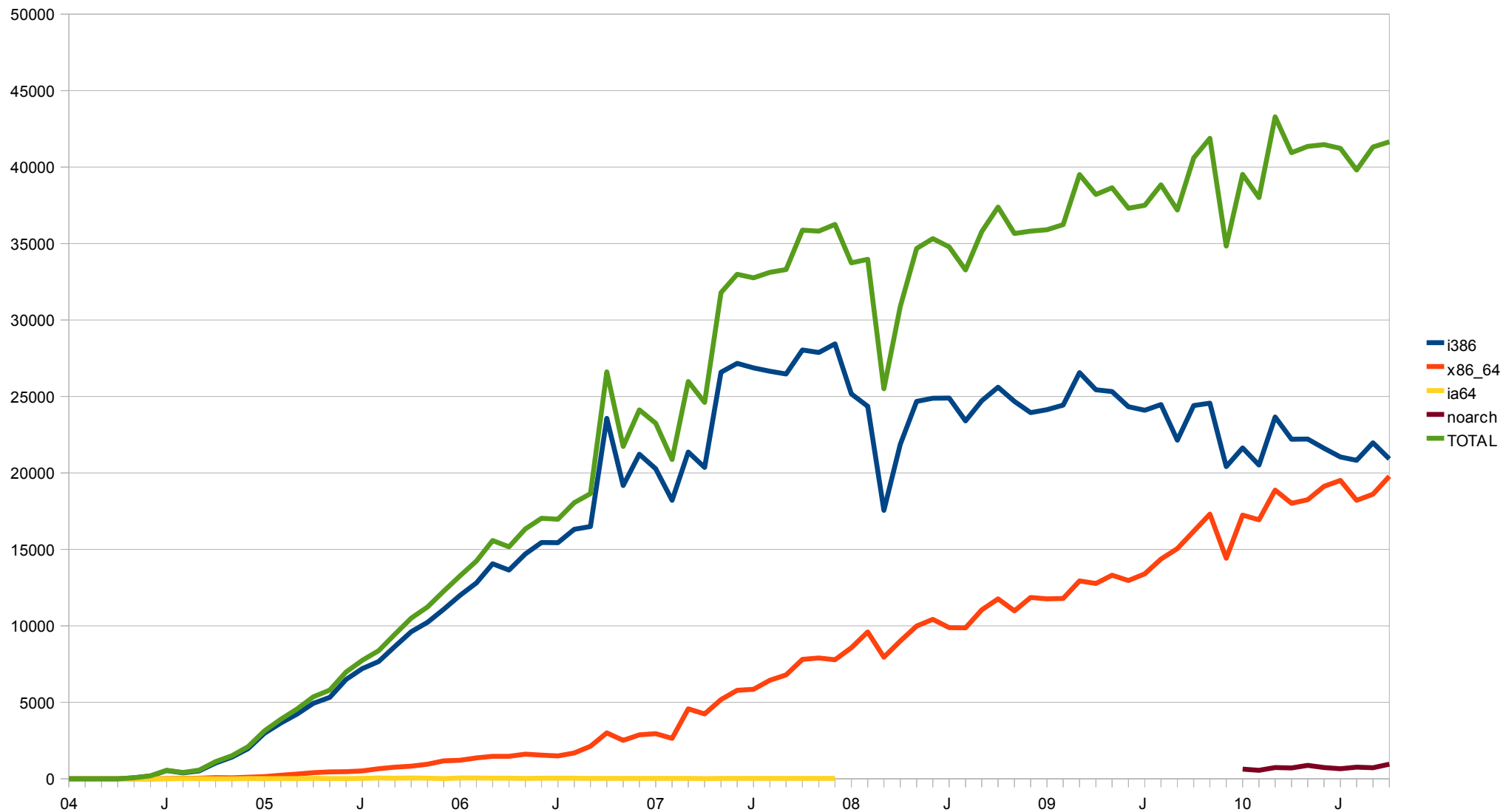
2004 to Present - By Release
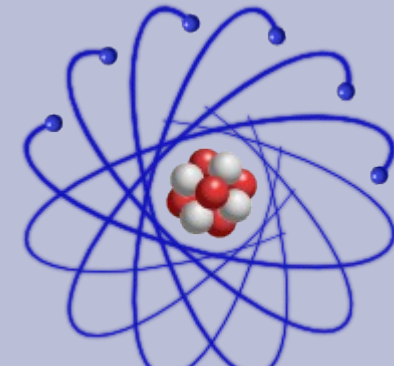
Scientific Linux
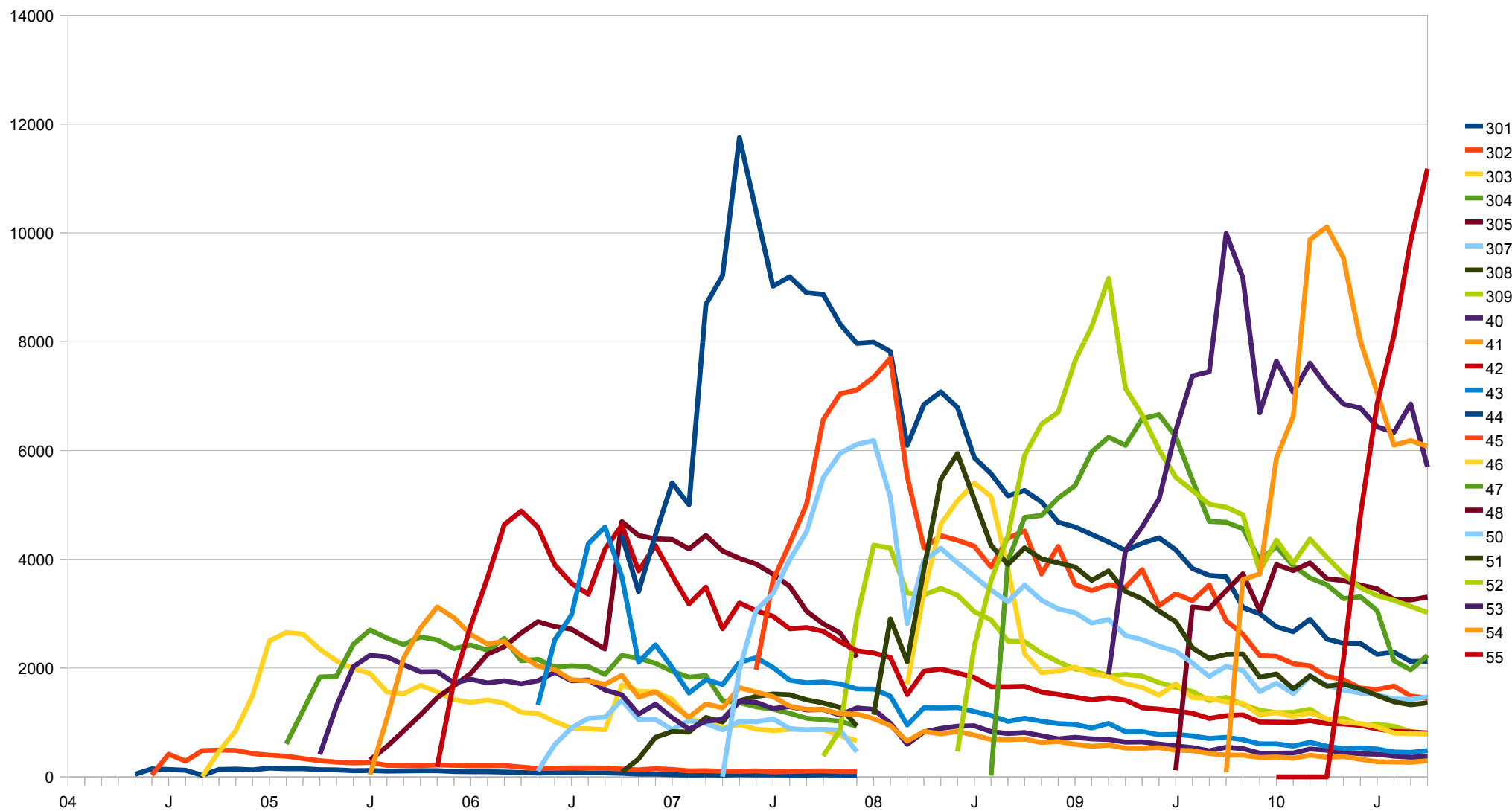## The Past Six Months

2004 to Present - By Arch

Scientific Linux
The Past Six Months

2004 to Present - By Individual Release

Scientific Linux
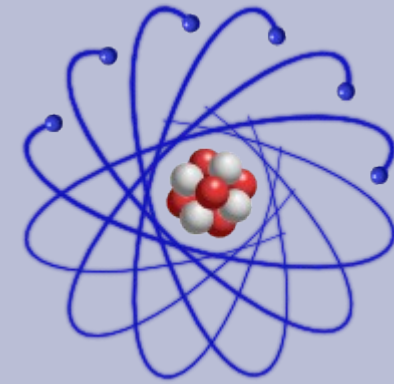## The Past Six Months

- 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.

Scientific Linux
The Past Six Months

Top Downloads of Files
September 2010

Legend:
- Italy
- Portugal
- United Kingdom
- Germany
- Canada
- France
- Brazil
- Japan
- China
- Russia
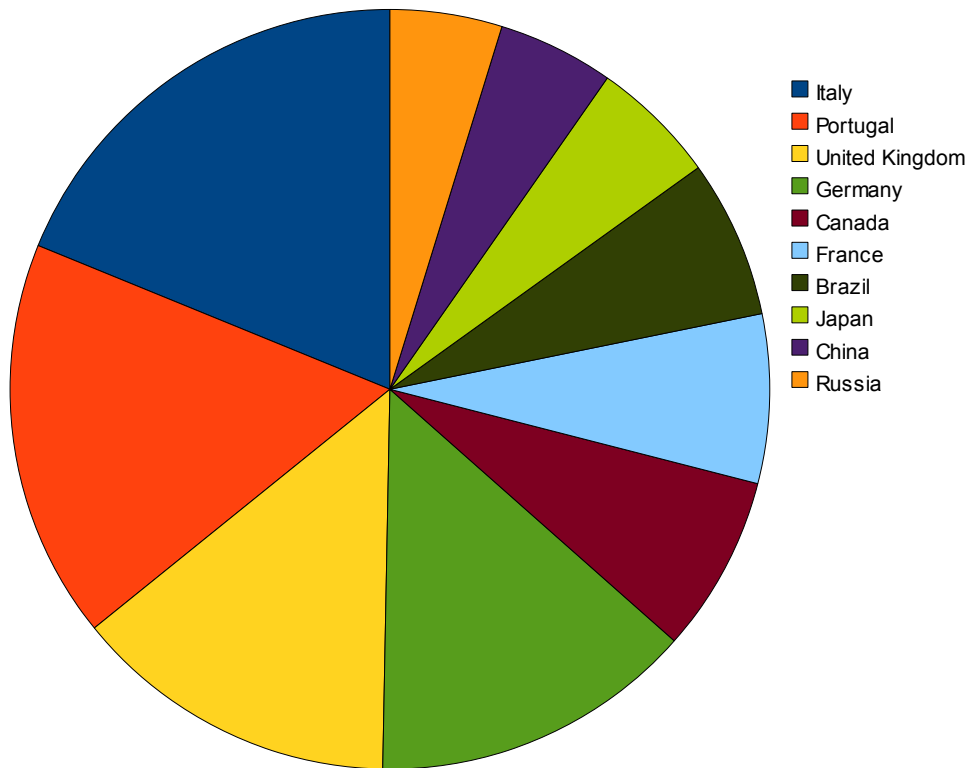
Top Downloads by Megabytes
September 2010

Legend:
- China
- Portugal
- Russia
- Turkey
- Italy
- United Kingdom
- Canada
- Germany
- Taiw an
- Japan
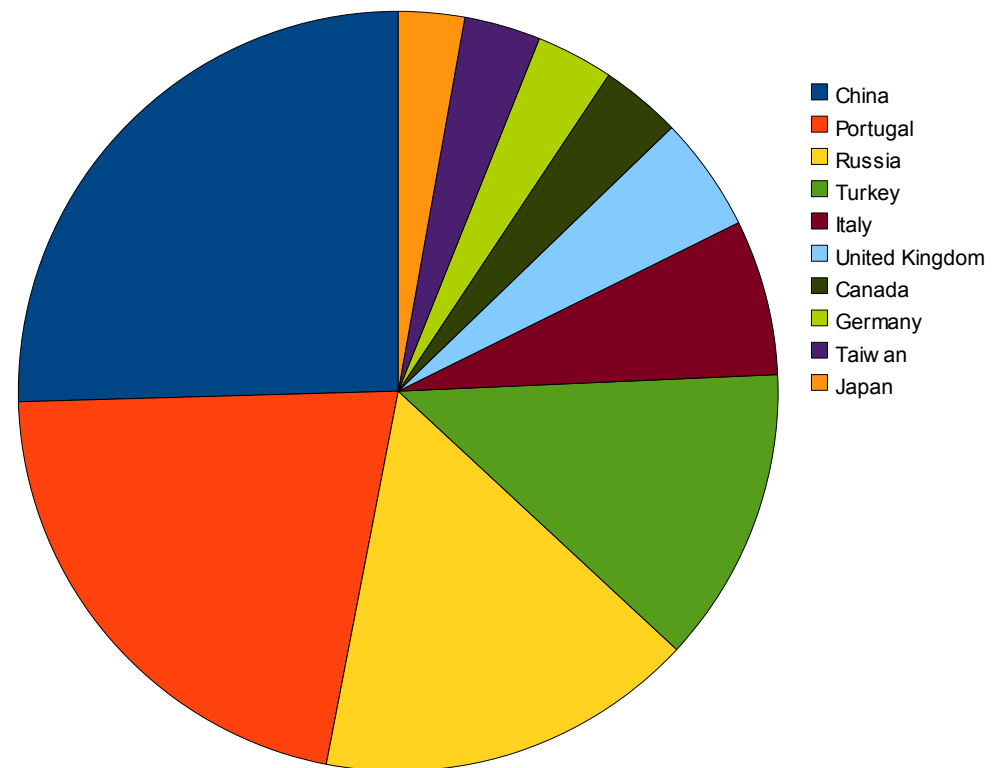
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The Past Six Months
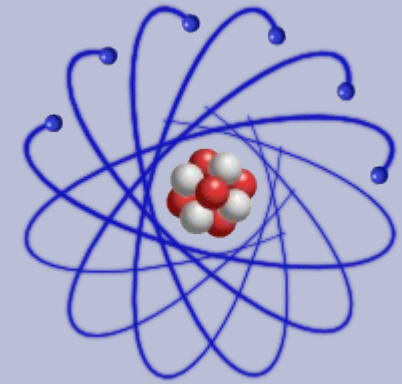
- S.L. 5.5 released – May 2010
  - For i386 and x86_64
  - Programs that we added
    - gnuplot42
    - Firmware: iwlwifi-6000-ucode
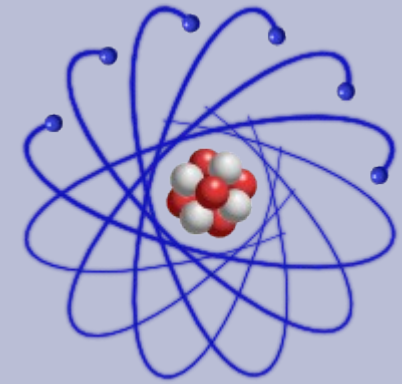 - XFS Utilities were put into the rescue image
  - Openoffice was updated to 3.1.1
  - Postgresql84 was added
  - Freeradious2 was added
  - Samba3x was added

Scientific Linux
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)
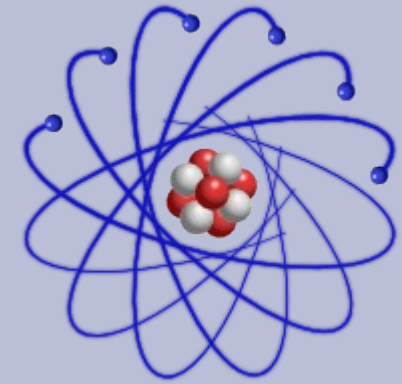
Scientific Linux
The Past Six Months

- 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.

Scientific Linux
The Past Six Months

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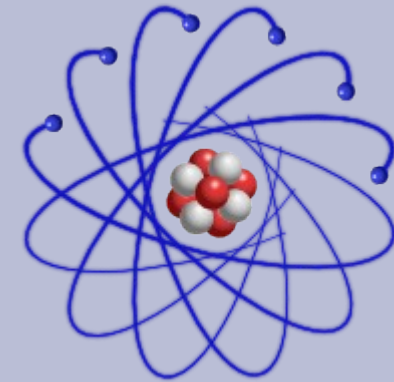 - Official end of support day was 10-10-10
  - We did compile and push out the two security updates that were released for SL3 after that date.
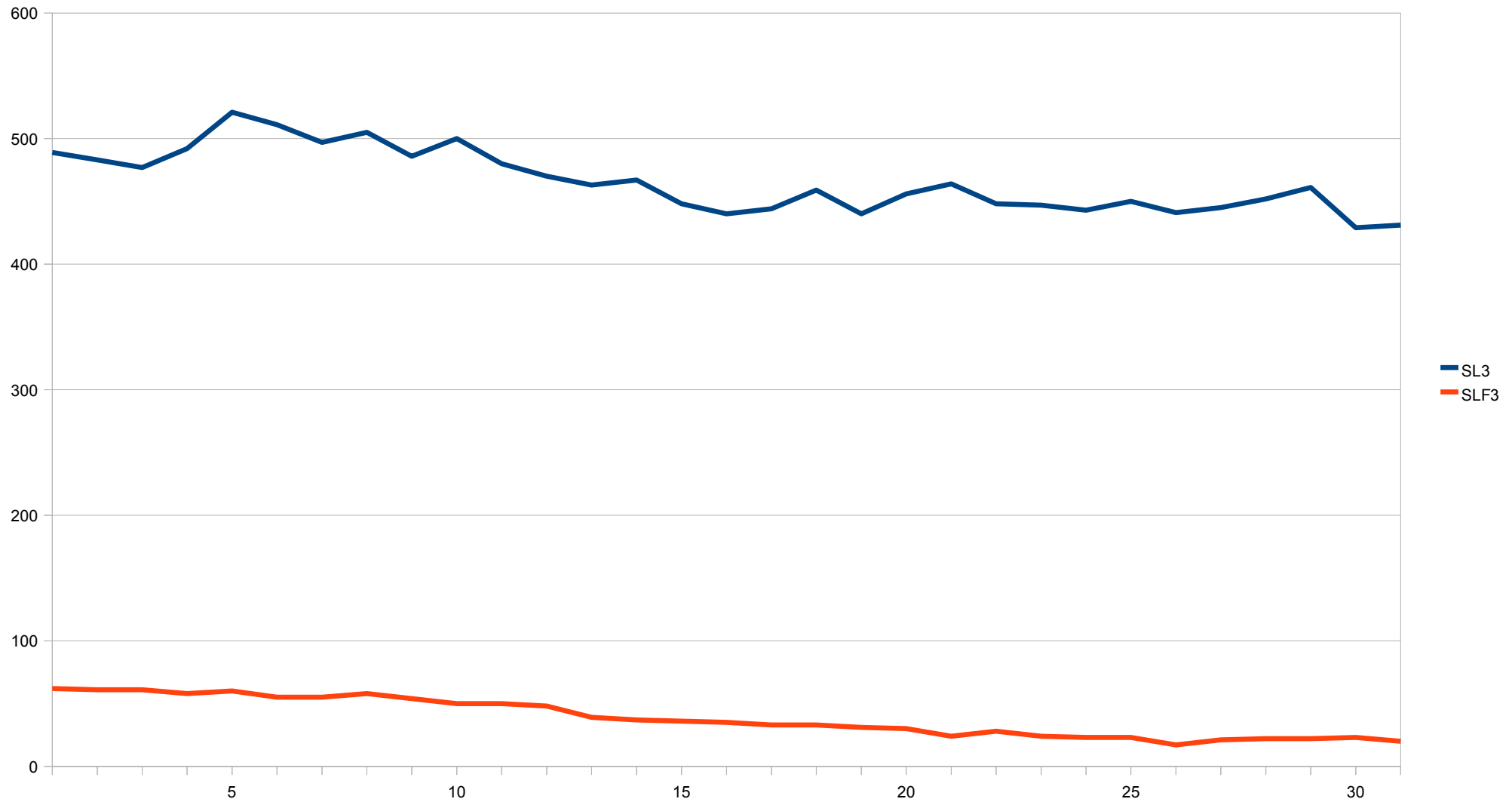 - The number of SL3 machines dropped dramatically after 10-10-10*

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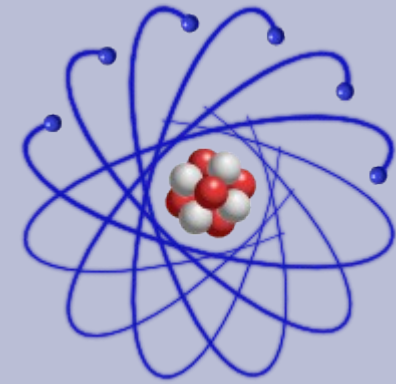
Scientific Linux
The Past Month

October SL3 & SLF3 users

Scientific Linux
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

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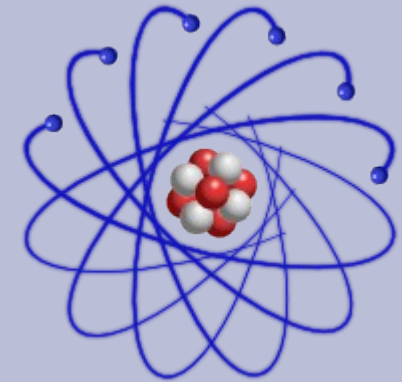
- Preparing for SL 6.0
  - RHEL 6 is currently in Release Candidate 1 phase
  - We only have access to the Public Beta
  - We have created a Pre-Alpha release
  - We are seeing which tweak rpms need fixing
  - We are working on what packages to put into the release.

Scientific Linux
What we are currently working on

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

Scientific Linux
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

Scientific Linux
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

Scientific Linux
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"

Scientific Linux
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.
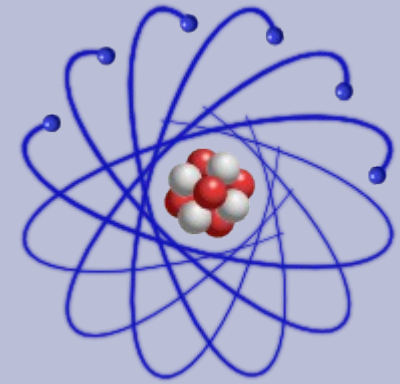
Scientific Linux
What we see in the future
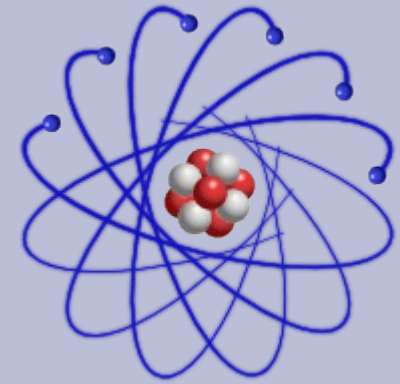
- SL build environment more open.
  - Users able to see the progress of errata
  - SL developers at Fermi and abroad being able to build on the build servers.
  - Build and publish process more refined and available.
  - This will start with SL6, but we should be able to switch the SL5 build and publication 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
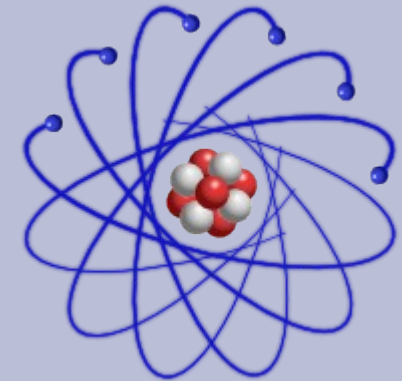
- Last Hepix it was discussed that we should put a minimum of items in SL6, and encourage the scientists to put items into EPEL.
  - Are we still in agreement with that?
  - Items I feel should be in SL
    - Tweak rpm's
    - Openafs (it's not in EPEL)
    - Revisor (for building sites)
    - Icewm (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/