

# Update On Scientific Linux

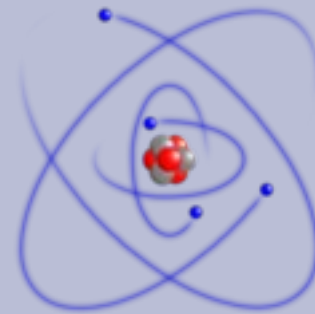
**Troy Dawson**

dawson@fnal.gov

**HEPIX Fall 2009**

October 29, 2009

# Witty Comment



Q: How many linux machines does it take to screw in a light-bulb?

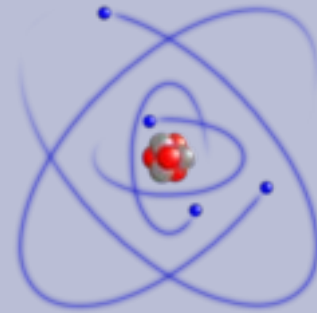
A: One, if you can find the driver.

the Gentoo motto:

if it moves, compile it.

if it doesn't move compile it anyway.

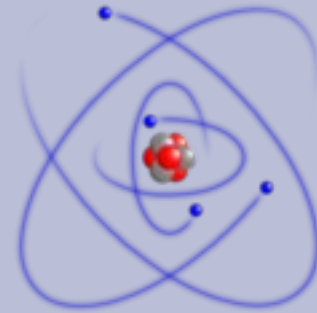
# Scientific Linux



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

# Scientific Linux

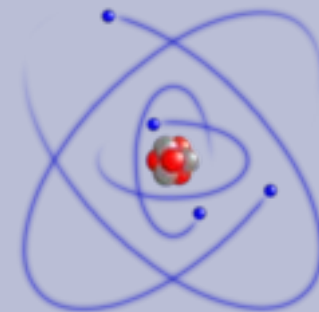
## The Past Six Months



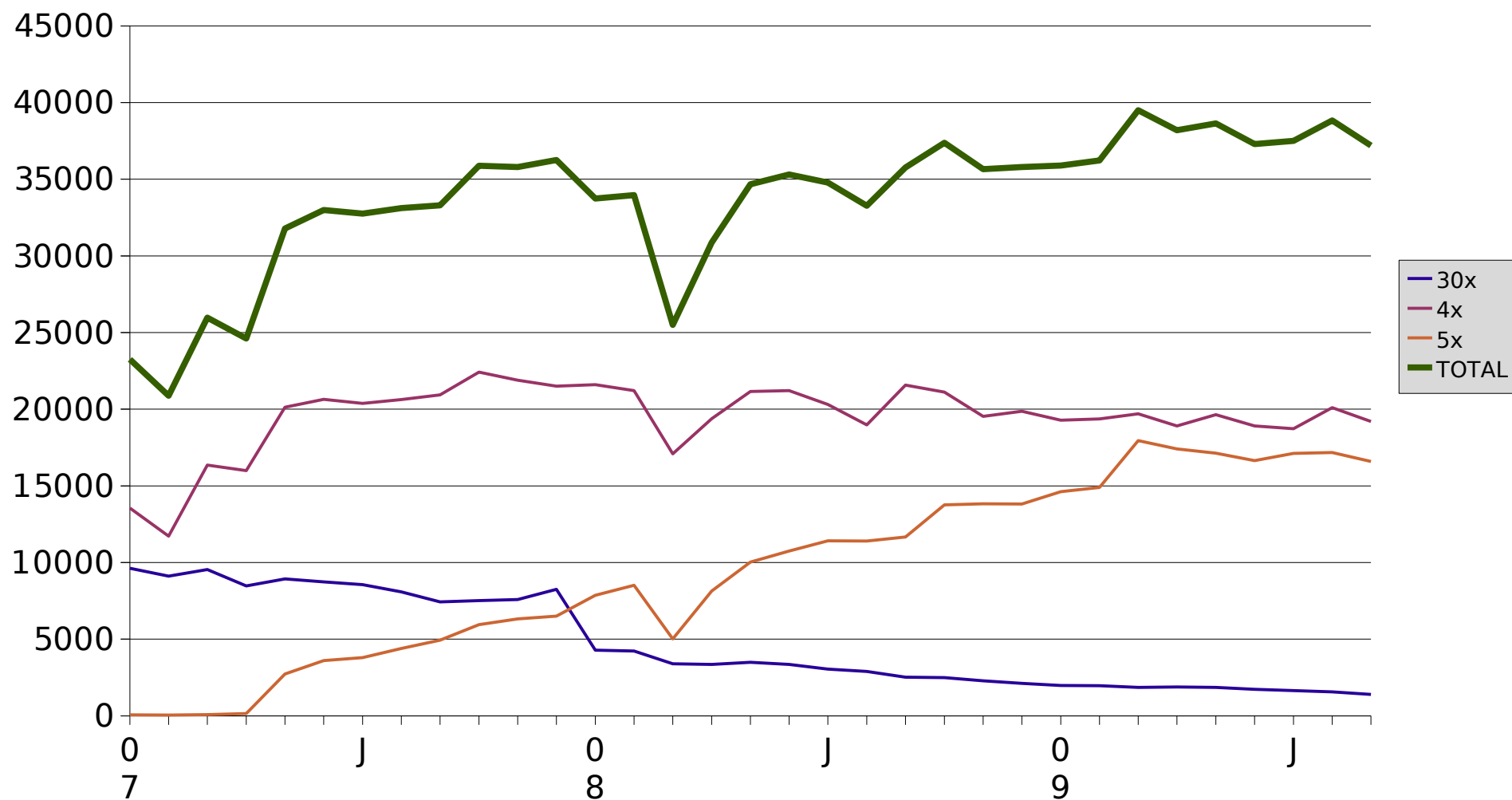
- The following statistics were gathered from <ftp.scientificlinux.org> log files
  - These numbers are the minimum. We know that they are higher.
  - These numbers are based on the yum and apt access to the errata
  - We currently have 29 public mirrors, and know of 178 sites mirroring us. These statistics do not represent any of the mirror sites.

# Scientific Linux

## The Past Six Months

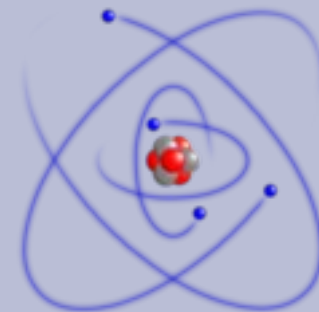


### 2007 to Present - By Release

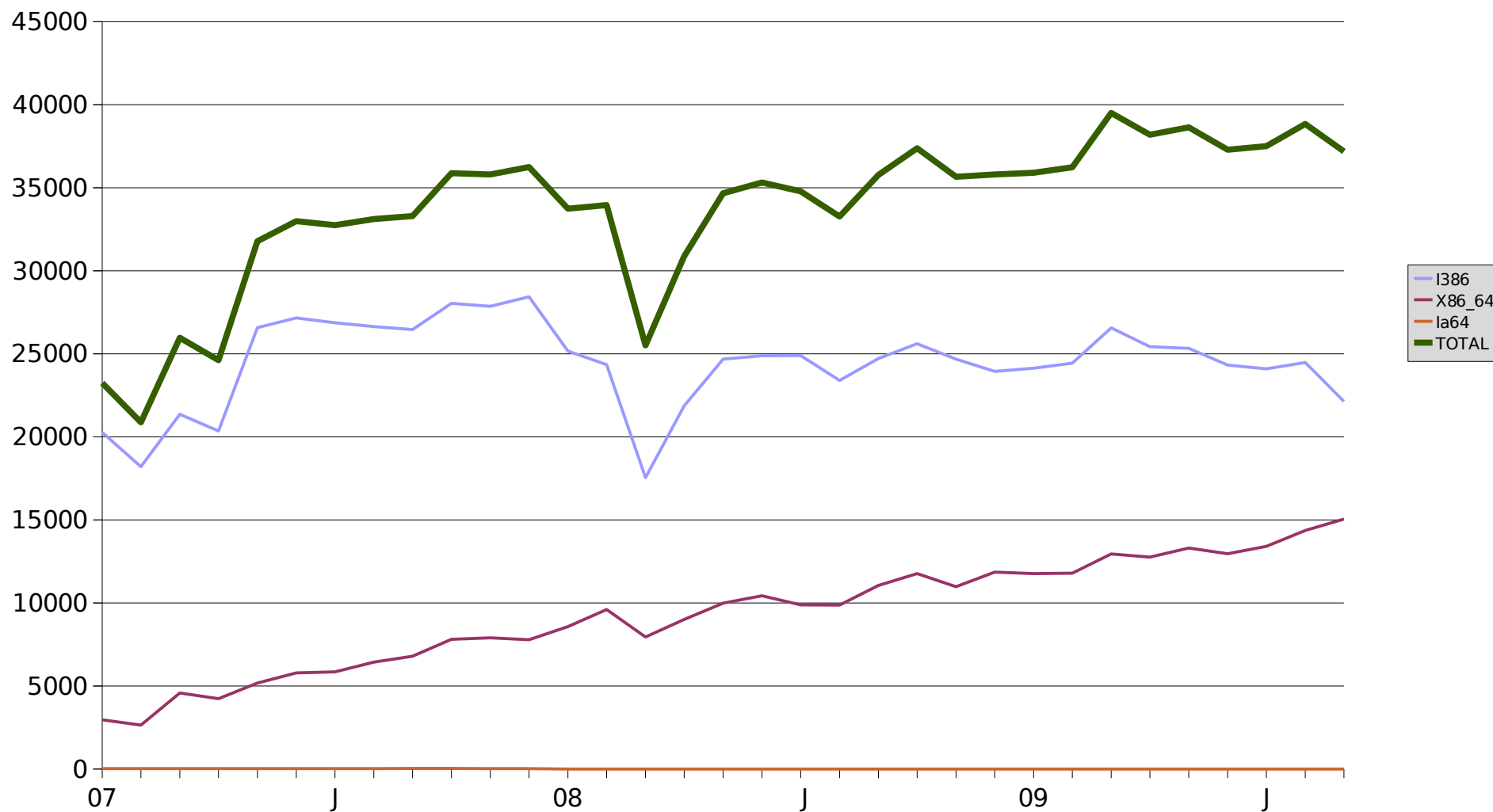


# Scientific Linux

## The Past Six Months

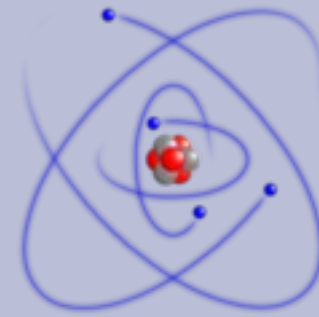


2007 to Present - By Arch

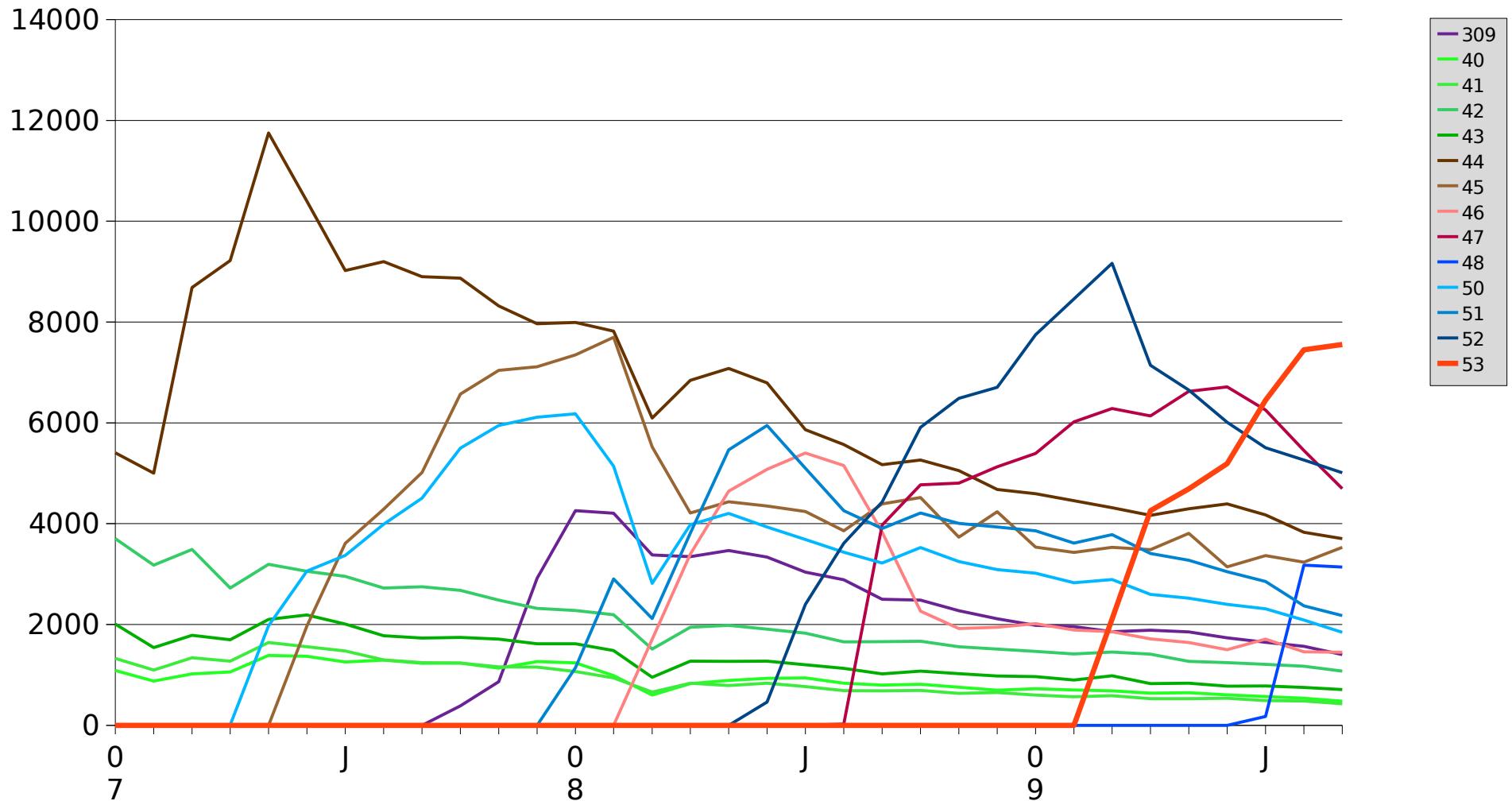


# Scientific Linux

## The Past Six Months

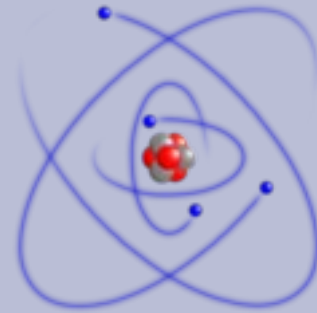


2007 to Present - By Individual Release



# Scientific Linux

## The Past Six Months

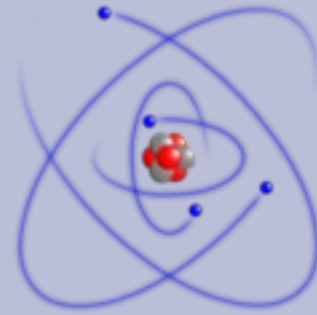


- The following charts are based on the number of files, and/or the number of megabytes downloaded from <ftp.scientificlinux.org>
- Networks in the US are not counted
- Networks that might be in several countries, such a .org or .net have been taken out as well.
- This isn't to prove anything, these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

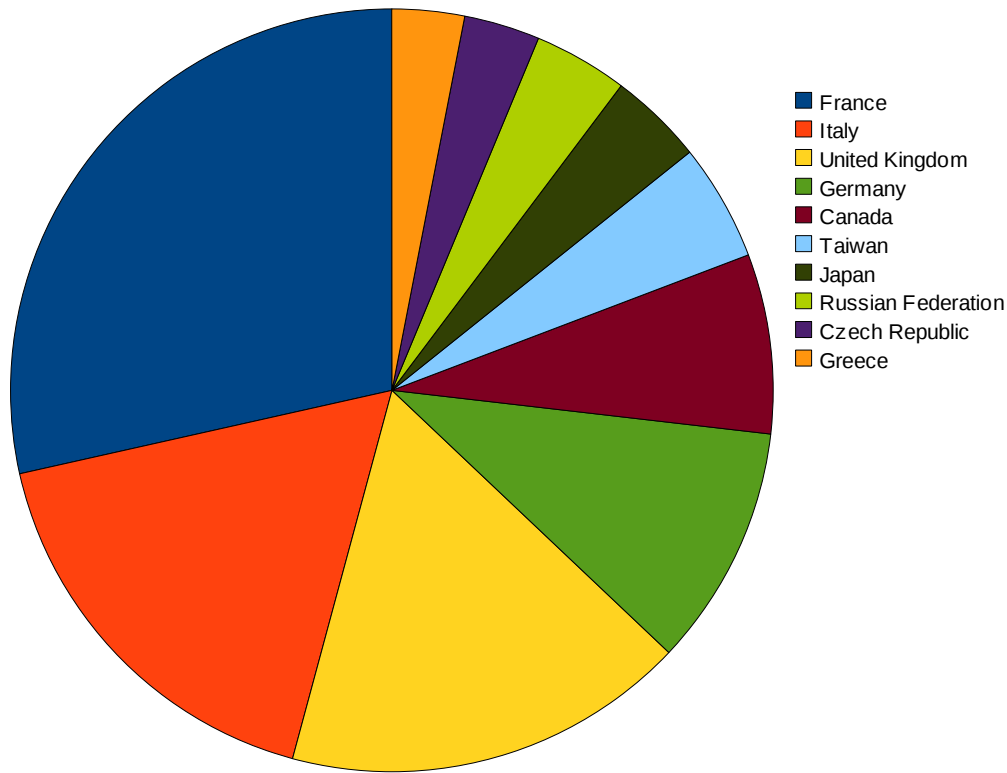


# Scientific Linux

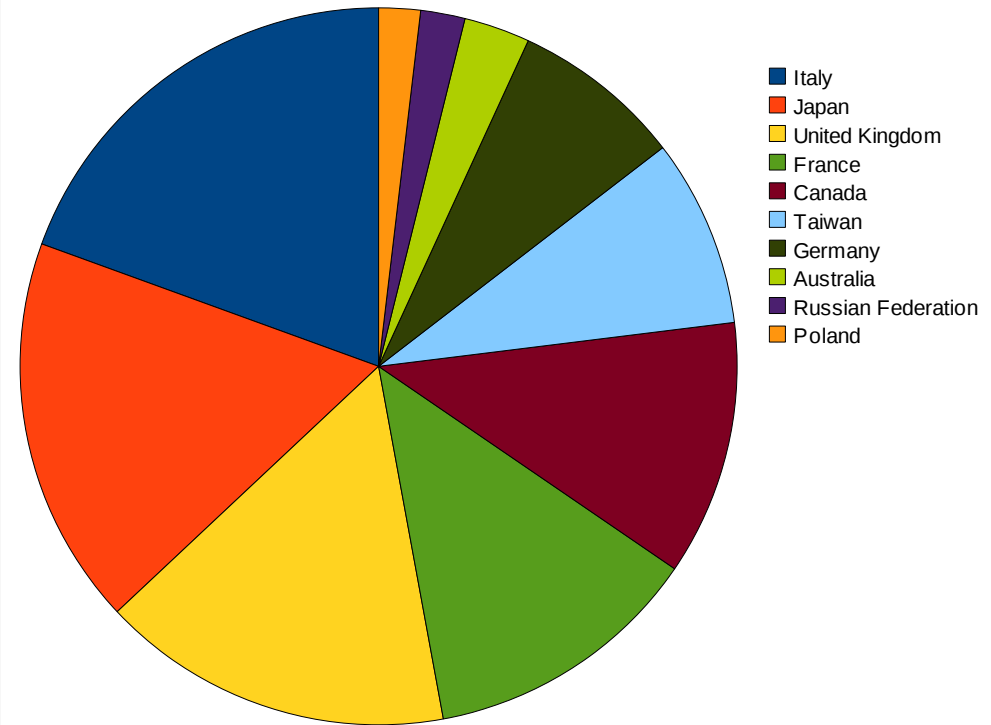
## The Past Six Months



Top Downloads of Files  
September 2009

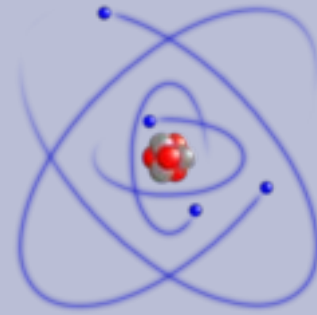


Top Downloads by Megabytes  
September 2009



# Scientific Linux

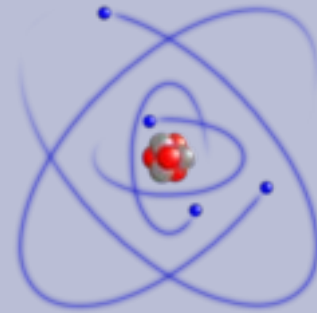
## The Past Six Months



- S.L. 4.8 released – July 2009
  - For i386 and x86\_64
  - Programs that were added
    - Squashfs, unionfs
  - comps.xml was cleaned up to match RedHat's
  - No new features were added, just a nice stable release.

# Scientific Linux

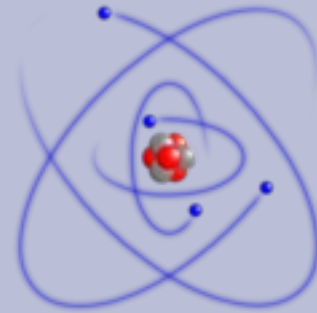
## The Past Six Months



- S.L. Live 4.8 released – August 2009
  - Web site is at [www.livecd.ethz.ch](http://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

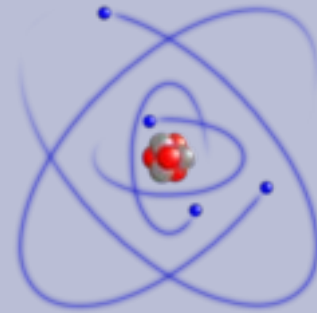
## The Past Six Months



- Security updates continually released for all supported versions
- Fastbugs updates consistently released weekly for latest versions of SL4 and SL5.
- Testing used more for errata that might cause problems.
- Changed rpm signing keys from Troy and Connies personal keys, to a general SL key.
  - When we updated this, we also added `ftp1.scientificlinux.org` as a failover for yum

# Scientific Linux

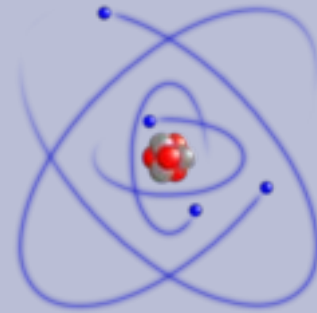
## The Past Six Months



- Updated yum for SL 5
- Updated kernel-module plugin for SL 5 yum
  - Correct yum when yum picks a random kernel module to install
  - Cleanup your system if you have kernel modules for kernels you do not have
  - removes kernel modules when kernels get removed

# Scientific Linux

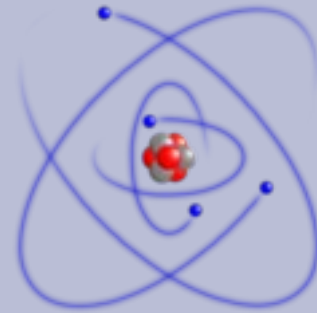
## The Past Six Months



- Web site changed to plain http
  - Old: <https://www.scientificlinux.org/>
  - New: <http://www.scientificlinux.org/>
  - Formal announcement will go out with the announcement of the new Scientific Linux logo

# Scientific Linux

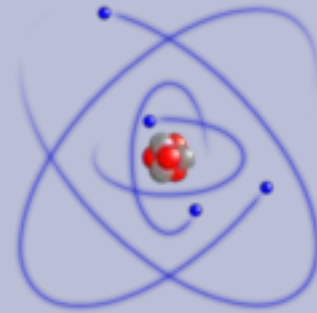
## What we are currently working on



- Building SL 5.4
  - Programs that we added
    - Lua, imlib
    - Firmware: iwlwifi 5150 & 1000, rt62pci, rt73usb
  - comps.xml was cleaned up to match RedHat's
    - The i386 and x86\_64 comps files are different now
  - KVM was added to x86\_64
  - xfs kernel module is now part of the kernel
  - If nothing show stopping is found it should be released next week – November 3 or 4, 2009

# Scientific Linux

## What we are currently working on

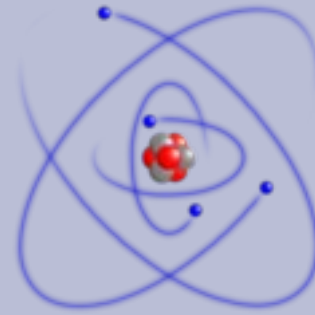


- Newer, faster, better distribution servers
  - New servers have been bought
  - They are currently being burned in
  - We are taking this as an opportunity to review the configuration and security on the servers before putting them into production.
- Redundancy for servers
  - Take some of the load off the main server
  - Allow yum to fall back to another server
    - [ftp1.scientificlinux.org](ftp://ftp1.scientificlinux.org)
    - [ftp2.scientificlinux.org](ftp://ftp2.scientificlinux.org)



# Scientific Linux

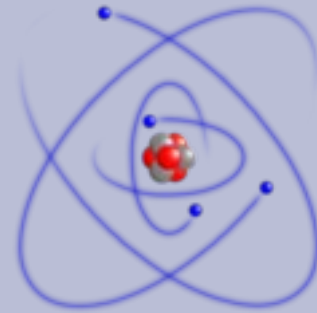
What we are currently working on



- Scientific Linux Bugzilla
  - Infiscale has offered to setup a bugzilla for us
- More automated build process
  - Make things easier for us with current releases
  - Try to make building SL 6 smoother

# Scientific Linux

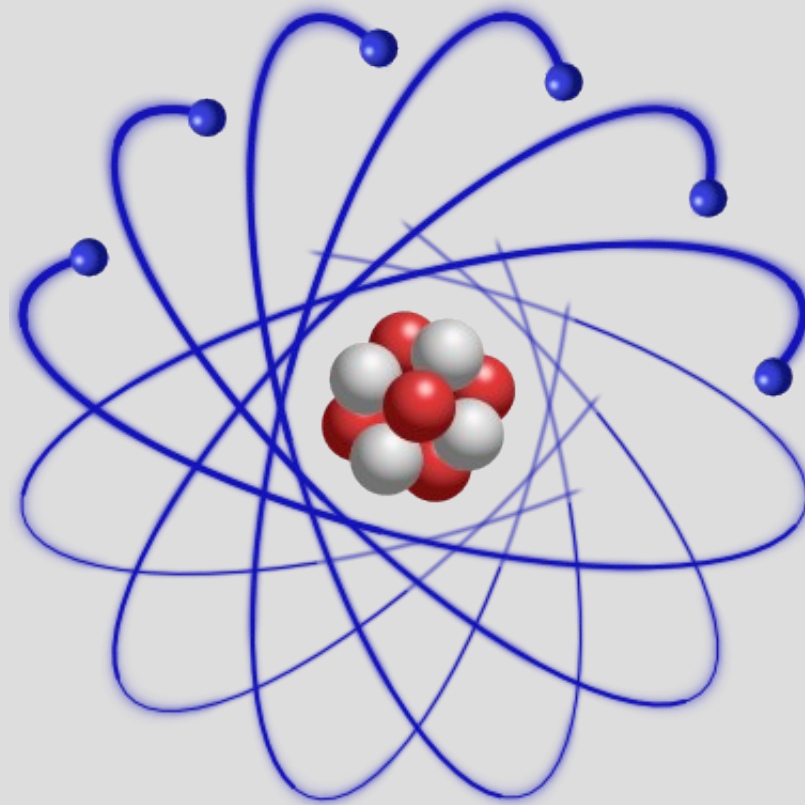
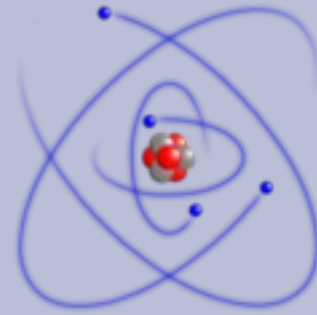
What we are currently working on



- Contest for the new logo for Scientific Linux
  - We had 16 entries from 10 people
  - All entries were very good
  - As they sometimes say “we all can't be winners”
- And here is our new logo

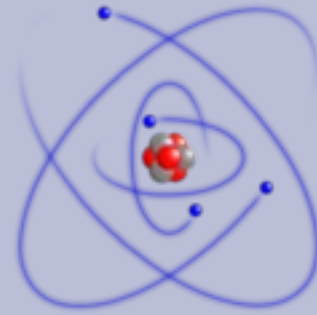
# Scientific Linux

What we are currently working on



# Scientific Linux

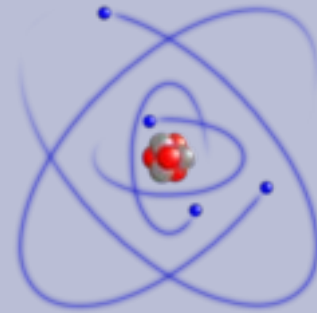
What we are currently working on



- Will redesign [www.scientificlinux.org](http://www.scientificlinux.org) to reflect new logo
  - Change the colors to match logo
  - Use http instead of https

# Scientific Linux

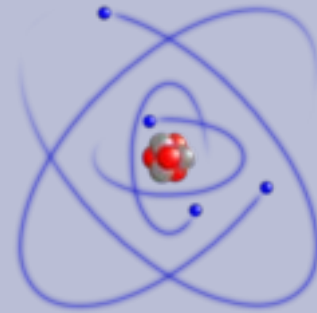
## What we see in the future



- Continue to have security updates for SL 3.0.9
  - This will continue until October 2010
- 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

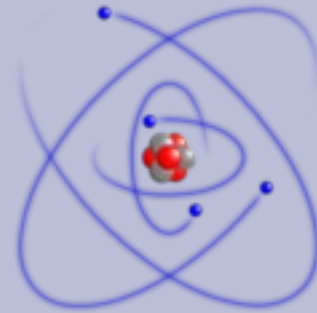
## What we see in the future



- Releasing S.L. 4.9
  - Estimate - February 2010
- When RHEL 5 Update 5 comes out, releasing S.L. 5.5
  - Estimate - May 2010
- When RHEL 6 comes out, releasing S.L. 6.0
  - Estimate - August 2010
    - RHEL 6 beta – late Nov. early Dec. 2009
    - RHEL 6 released – late May or June 2010
    - This is a total guess. We have no idea

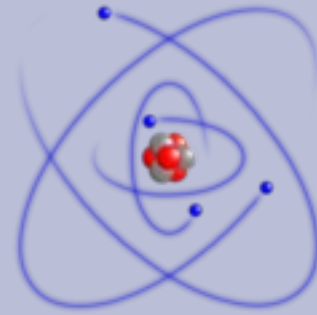
# Scientific Linux

## What we see in the future



- Create [errata.scientificlinux.org](http://errata.scientificlinux.org) similar to <http://rhn.redhat.com/errata/>
- More automation of rpm checking and errata email.

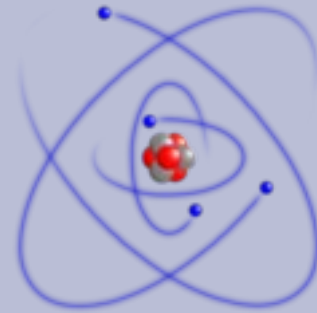
# Scientific Linux Plenary Discussion



- 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

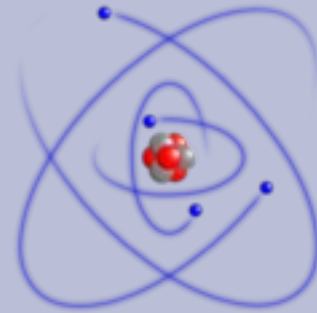


# Scientific Linux Plenary Discussion



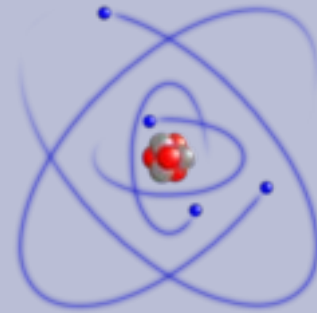
- Scientific Linux 4 timeline
  - Currently we say we support it until 10/10/10
  - RedHat's last RHEL 4 update will be Q4 2009
    - <https://www.redhat.com/security/updates/errata/>
  - At Fermilab we have SLF 4 users that will not be able to be off SLF 4 in a years time.
  - Should we do the same to SL4 that we did to SL3
    - One last release SL 4.9 codename Legacy
    - On October 10, 2010 end support for all older SL4
    - Support SL 4.9 until Feb. 2012

# Scientific Linux Plenary Discussion



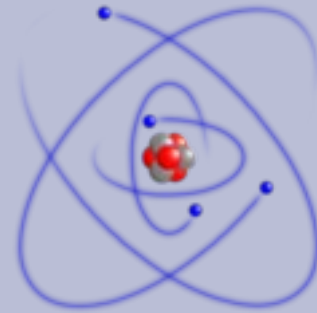
- Scientific Linux 6
  - People's feelings about working with CentOS?
    - It just doesn't seem like the same as before.
  - Idea's about creating “sites”?

# Scientific Linux Plenary Discussion



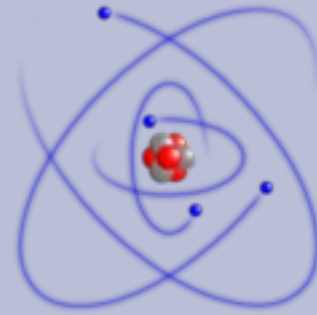
- Luster
  - Do we want it into the release?
  - We cannot provide a kernel, but is there a kernel module that will work?
  - Is this maintainable?
- Globus Toolkit or Utilities
  - Should we take what is in EPEL and put it into the main Scientific Linux?
  - Are the labs ready for this?
  - Should we just leave it in EPEL and let users get it from there if they want?

# Scientific Linux Plenary Discussion



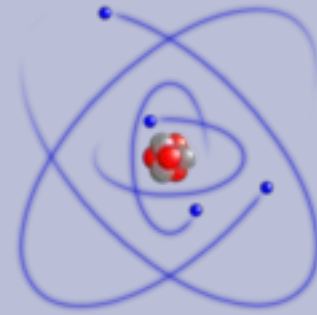
- Wiki?
  - In addition to a bugzilla site, Infiscale has offered to host a wiki for Scientific Linux
    - We must have at least one moderator that makes sure objectionable material doesn't appear, or the sight doesn't loose focus.
    - The moderator cannot be Troy Dawson or Connie Sieh
  - Do we need and/or want a Wiki?
  - Shall we ask the community for a volunteer to maintain the site?

# Scientific Linux Plenary Discussion



- Other Topics?
  -

# References



- <https://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://www.redhat.com/security/updates/errata/>