



# Update On Scientific Linux

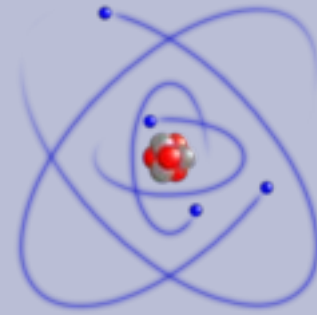
**Troy Dawson**

dawson@fnal.gov

**HEPIX Spring 2008**

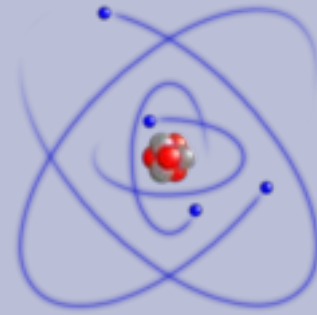
May 5, 2008

# Witty Comment



- <Insert Witty Comment Here>
  - I have yet to get a chuckle on this slide
  - This slide for rent

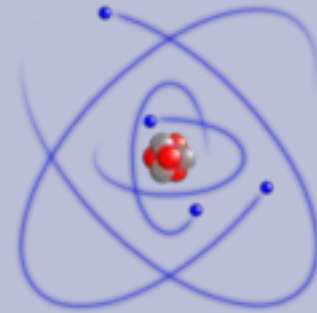
# Scientific Linux



- Presentation Overview
  - 2005 to the Present
  - The last six months
  - What we are currently working on
  - What we see in the future

# Scientific Linux

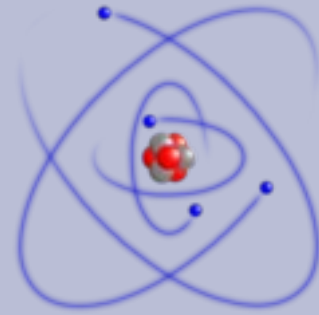
2005 - Present



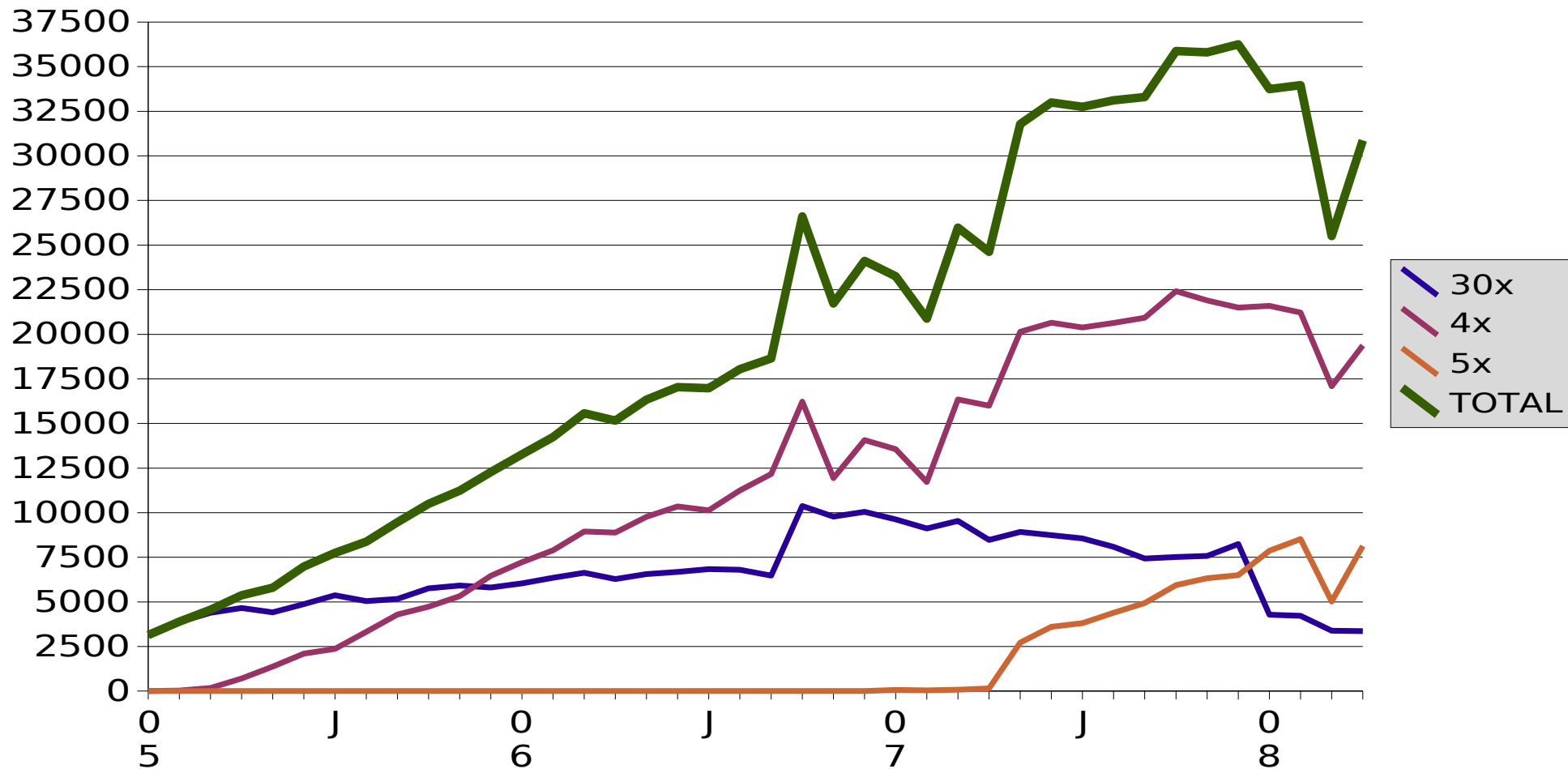
- The following statistics were gathered from [ftp.scientificlinux.org](http://ftp.scientificlinux.org) log files
  - These numbers are the minimum. We know that they are higher.
  - These numbers are based on the yum and apt access to the errata
  - We currently have 27 public mirrors, and know of 158 sites mirroring us. These statistics do not represent any of the mirror sites.

# Scientific Linux

2005 - Present

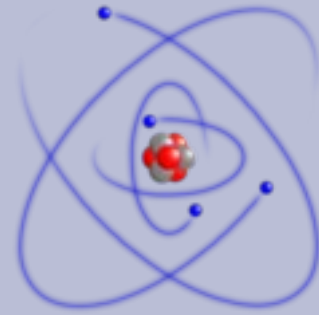


## 2005 to Present - By Release

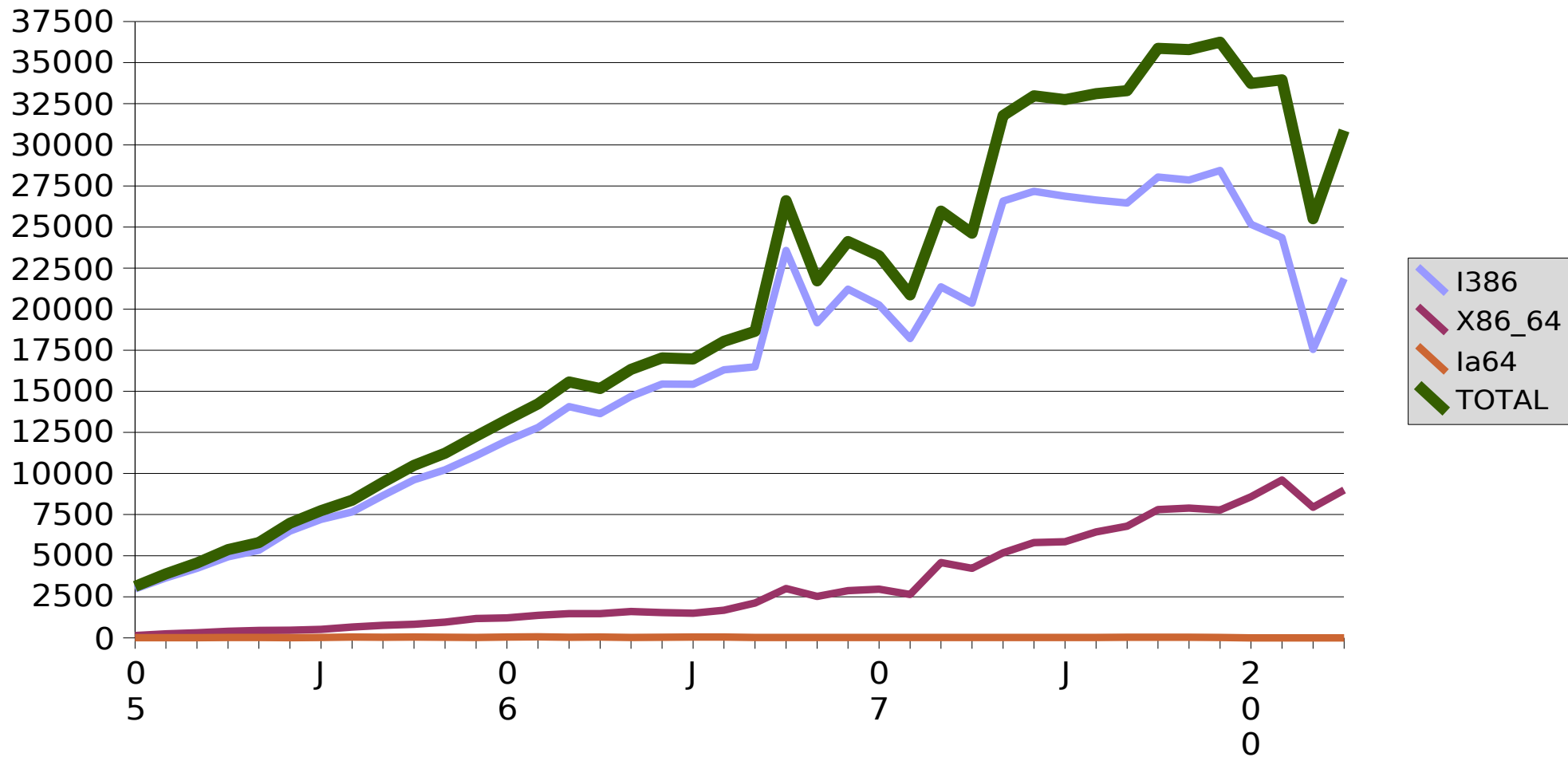


# Scientific Linux

2005 - Present

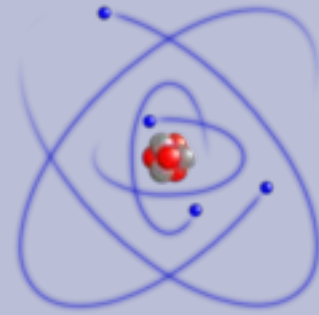


## 2005 to Present - By Arch

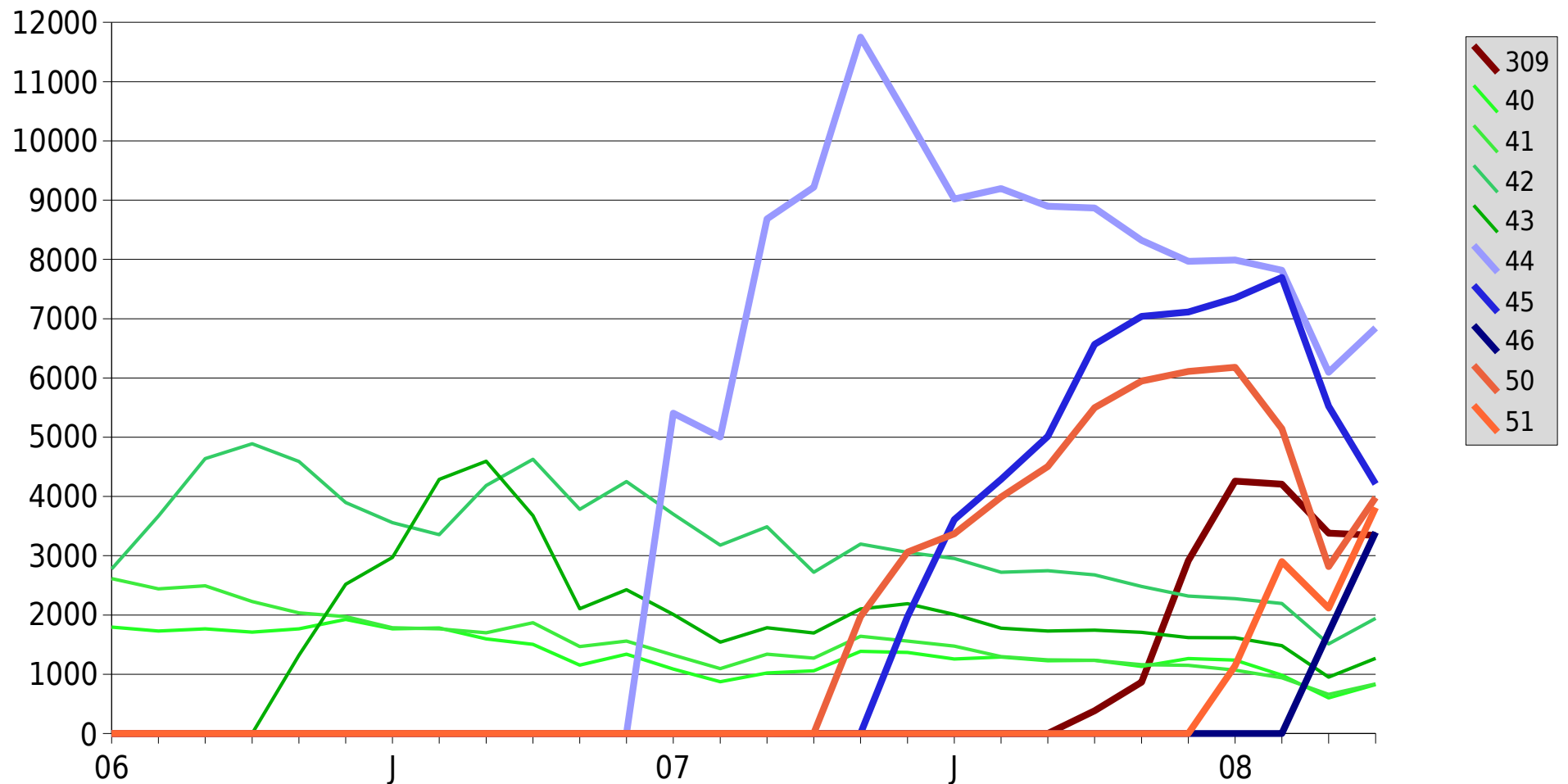


# Scientific Linux

2005 - Present

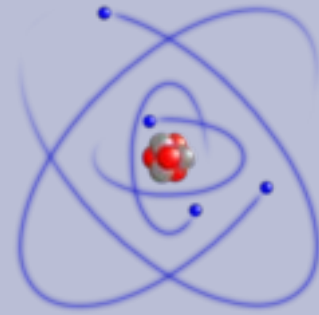


## 2006 to Present - By Individual Release

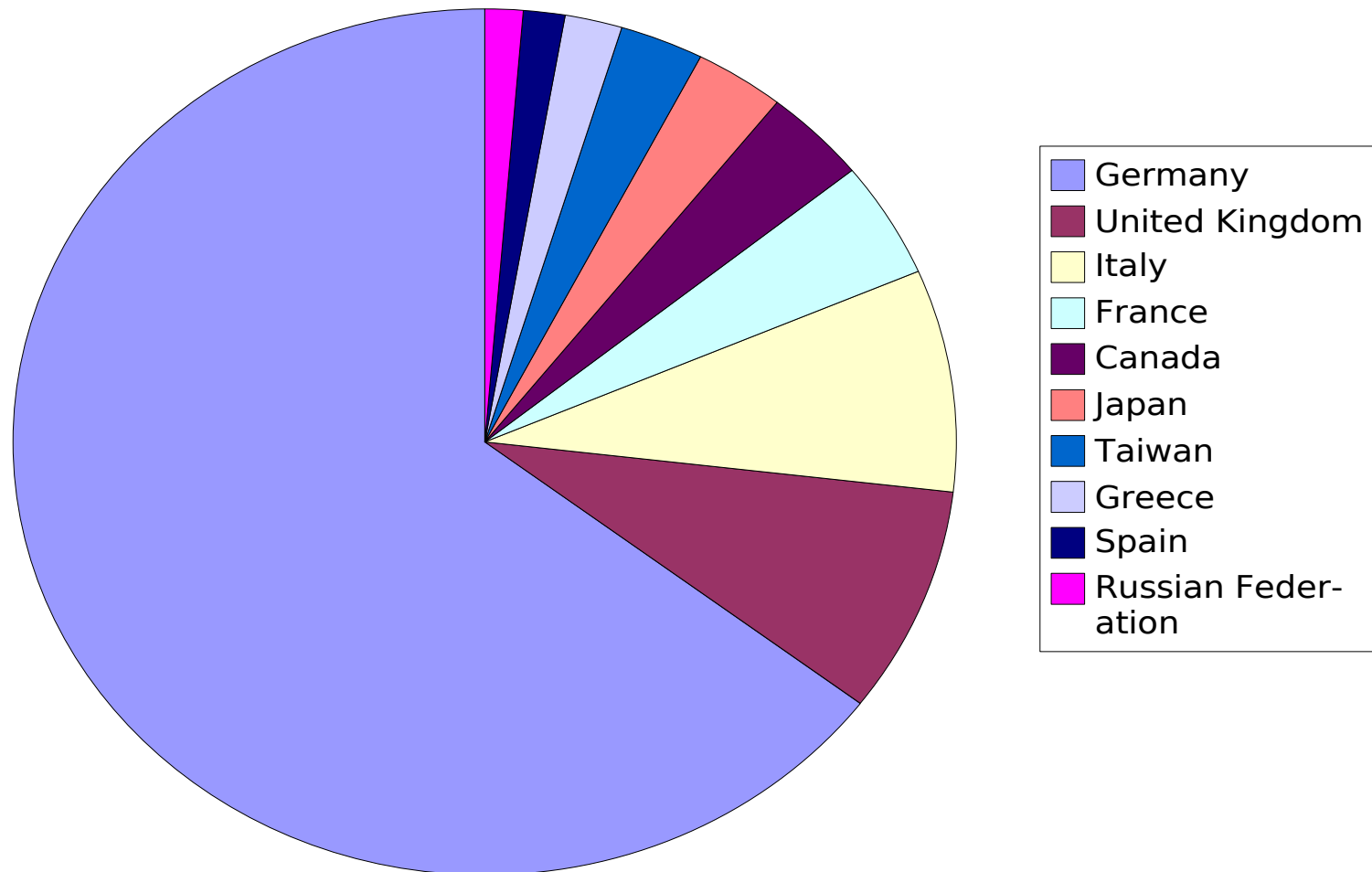


# Scientific Linux

2005 - Present

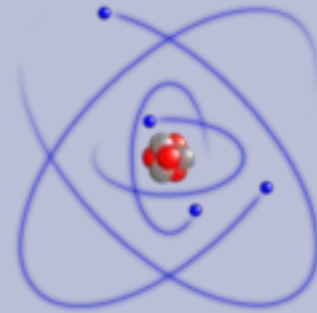


## Top 10 Downloads of Files by Country



# Scientific Linux

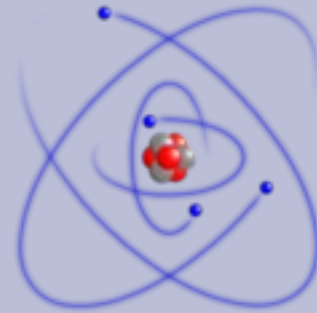
## The Past Six Months



- S.L. 5.1 released – January 2008
  - For i386 and x86\_64
  - Site support was added
  - Scientific programs were added that had been left out in SL 5.0
    - ADDED: 915 resolution, Alpine, iwlwifi-4965 firmware, Numpy, Tidy, yum-installonlyn

# Scientific Linux

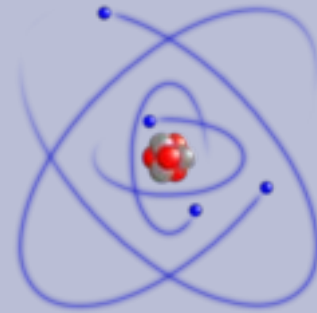
## The Past Six Months



- S.L. Live 5.1 released – February 2008
  - For i386 and x86\_64
  - CD, DVD, mini-CD
  - can be installed on USB key, or local hard disk
  - Programs added that are not part of the plain SL 5.1
    - ADDED: ntfs-3g (read/write NTFS support), ntfsprogs, kernel-module-ntfs, gparted, testdisk, dd\_rescue, partimage (only i386 and DVD), iperf, aufs

# Scientific Linux

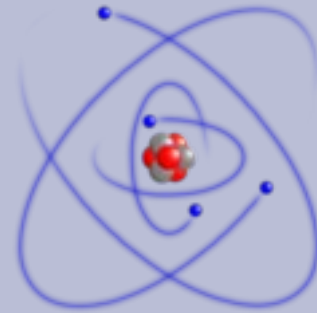
## The Past Six Months



- S.L. 4.6 released – March 2008
  - For i386 and x86\_64
  - Was a little late due to the effort in getting S.L. 5.1 out
  - Java was changed from 1.4.2 to 1.5.0
  - Added Alpine

# Scientific Linux

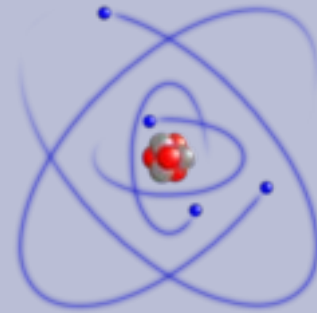
## The Past Six Months



- S.L. Live 4.6 released – April 2008
  - For i386 and x86\_64
  - CD, DVD, mini-CD
  - LiveCD/DVD can be installed to local hard disk
  - Programs added that are not part of the plain SL 4.6
    - 915resolution, ntfsprogs, kernel-module-ntfs, qtparted, gparted, testdisk, dd\_rescue, partimage (only i386), iperf, tkcvs, ms-sys, unionfs and squashfs for w/r live system

# Scientific Linux

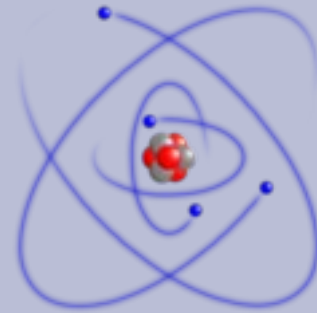
## The Past Six Months



- Security updates continually released for all supported versions
- S.L. 3.0.1 - 3.0.8 moved to obsolete

# Scientific Linux

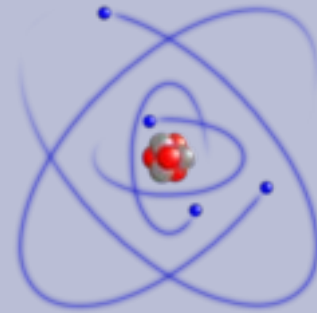
## The Past Six Months



- Fixed poorly named rpm's
  - Problem came about when TUV changed their naming convention on certain rpms.
    - Cups is the biggest problem, but there are others
      - cups-1.1.22-0.rc1.9.20.2.2 (old)
      - cups-1.1.22-0.rc1.9.20.2.el4\_6.6 (new)
  - We have fixed our build scripts so rpm's are built with the correct name.
  - We have removed problem rpm's from repositories.
  - Working on a yum plugin for affected systems.
    - Plugin is working on SL5, but not yet in SL4

# Scientific Linux

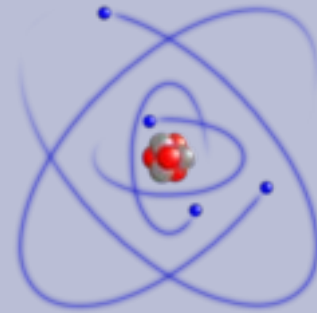
## What we are currently working on



- Work on automating download and building of packages
  - This had been done earlier, but broke due to changes that The Upstream Vendor made.
  - Using virtual machines for SL3 and soon SL4
- Work on getting fastbugs automated and pushed out at a consistent time
  - Fastbugs will be for SL4 and SL5
  - We will push them out once a week

# Scientific Linux

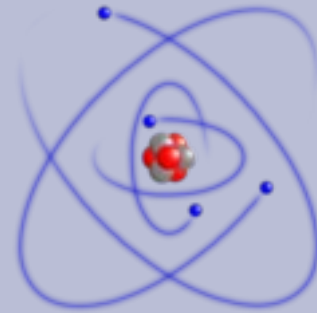
## What we are currently working on



- Clarifying the policy about security errata
  - Packages will only go into the security errata repository if
    - T.U.V. Classifies the package as a security update, including non-security dependancies.
    - It is a package we provide, and it has a security or critical bug update.
    - the package falls into our list of packages that affect the machine in a critical way and must be updated even if it isn't security related.
      - The list is currently: tzdata

# Scientific Linux

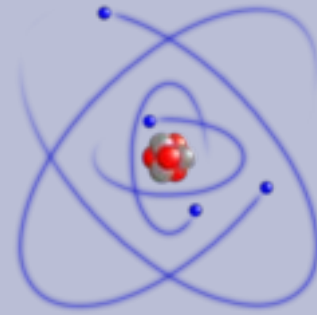
## What we are currently working on



- Clarifying the policy about security errata
  - By default, machines running Scientific Linux update themselves nightly from the security errata repository.
    - Excluded packages are listed in `/etc/yum.d/yum.cron.excludes`
  - All other package updates will go into the fastbugs repository.
  - The fastbugs repository is not enabled by default

# Scientific Linux

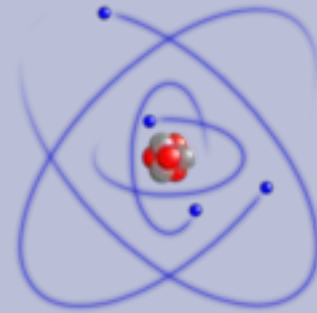
## What we are currently working on



- Preparing for S.L. 5.2
  - We have downloaded and built almost all of the beta packages
    - This allowed us to tweak our build scripts to get ready for the update
    - We haven't released these builds to the public because we got the source rpm's from a non-public area.

# Scientific Linux

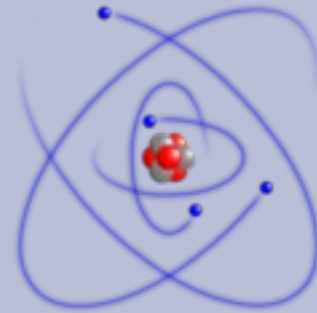
## What we see in the future



- Continue to have security updates for SL 3.0.9
  - This will continue until October 2010
  - Automating the download and building of packages using virtual machines

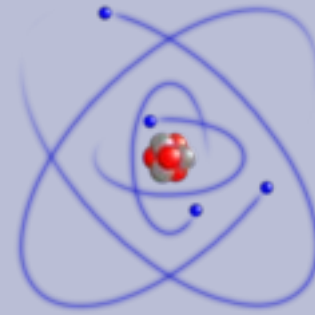
# Scientific Linux

## What we see in the future



- When RHEL 4 Update 7 comes out, releasing S.L. 4.7
- When RHEL 5 Update 2 comes out, releasing S.L. 5.2
- When RHEL 6 comes out, releasing S.L. 6.0

# References



- <https://www.scientificlinux.org/>
- <http://ftp.scientificlinux.org/linux/scientific/>
- <ftp://ftp.scientificlinux.org/linux/scientific/>
- <http://linux.web.psi.ch/livecd>