CERN: Linux status update

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From 7.3 to Scientific Linux 3

✔ May 2005:

✔ ~ 1000 individual SLC3 installations
✔ ~ 1600 centrally managed
✔ ~ 720 running CERN Linux 7.3

✔ September 2005:

✔ ~ 1500 individual SLC3 installations
✔ ~ 2200 centrally managed
✔ ~ 600 running CERN Linux 7.3
From 7.3 to Scientific Linux 3

The graph shows the transition from Scientific Linux 7.3 to Scientific Linux 3 from November 2004 to September 2005. The lines represent different categories:

- **Total SLC3**
- **"Desktop" SLC3**
- **CC SLC3**
- **Total 7.3**

The y-axis represents the number of users or systems, while the x-axis shows the months from November 2004 to September 2005.

The progression indicates a steady increase in the number of users and systems transitioning to Scientific Linux 3, with a notable growth in "Desktop" SLC3 and CC SLC3 categories during the later months.
From 7.3 to Scientific Linux 3

✔ Migration, next steps
  ✔ Desktops:
    ✔ Ongoing campaign (via Desktop Forum etc)
    ✔ e-mails are sent once per month to LANDB resp.
  ✔ Computer Center:
    ✔ only about 70 systems left on 7.3 in CC:
      ✔ last batch machines removed in September, disk servers run SLC3, tape servers in migration
  ✔ A trend observed:
    ✔ Users move to SLC3 from other linux versions
Scientific Linux CERN 4

✔ Test version released beginning Sep.05
  ✔ Formal certification process:
    ✔ Starts October 2005
    ✔ Shall be completed by end of the year.

✔ NOT FOR WIDE DEPLOYMENT in CC
  ✔ It is just a safety solution in case SLC5 would be too late for LHC startup

✔ BUT: interesting alternative for desktop users...

✔ kernel 2.6 being investigated for storage
Scientific Linux CERN 5

✔ Red Hat Enterprise Linux 5 / Scientific Linux 5:
  ✔ up-to-date, including stable 2.6 kernel
  ✔ **BUT:** release 2\textsuperscript{nd} Q 2006 (?)
    ✔ Add 2-4 weeks for building SL5
    ✔ Another 2-4 for building SLC5
  ✔ RedHat does not commit to any release date –
    but their product lifecycle is 12-18 months
  ✔ ... may be **too late** for CERN full certification.
Linux @ 64bit

✔ Scientific Linux CERN 3/4:
  ✔ running on Itanium 2 (ia64)
  ✔ available for Opteron/Xeon EM64T (x86_64)
  ✔ ... not used for production so far ...

✔ All machines delivered to CC since few months are 64bit capable ...

✔ But: no services planned on 64bit yet

✔ All desktops delivered from now on, are 64bit capable too ...
SLC4 certification

✔ Responsible for OS certification:

✔ Linux Certification Committee

✔ http://cern.ch/linux/documentation/LXCERT/

✔ Responsible for physics compilers/software stack certification:

✔ LCG Architects Forum

✔ http://lcgapp.cern.ch/project/mgmt/af.html

✔ system compiler still preferred choice, but now may change during OS lifetime --> some divergence recently ..

✔ commercial libraries and products, as well as overlaps with system libraries have to be carefully watched ...
SLC4/SLC5 certification

✔ Certify twice
✔ SLC4 – 'slowly' Q3/Q4 2005
✔ SLC5 – 'fast' Q2 2006 (Q3 2006 ?)
✔ Use 'split certification'
✔ Operating system
✔ Experiments compilers plus software
✔ Decide deployment late
✔ .. and then do it quickly !
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Questions ?