

CERN: Linux status update

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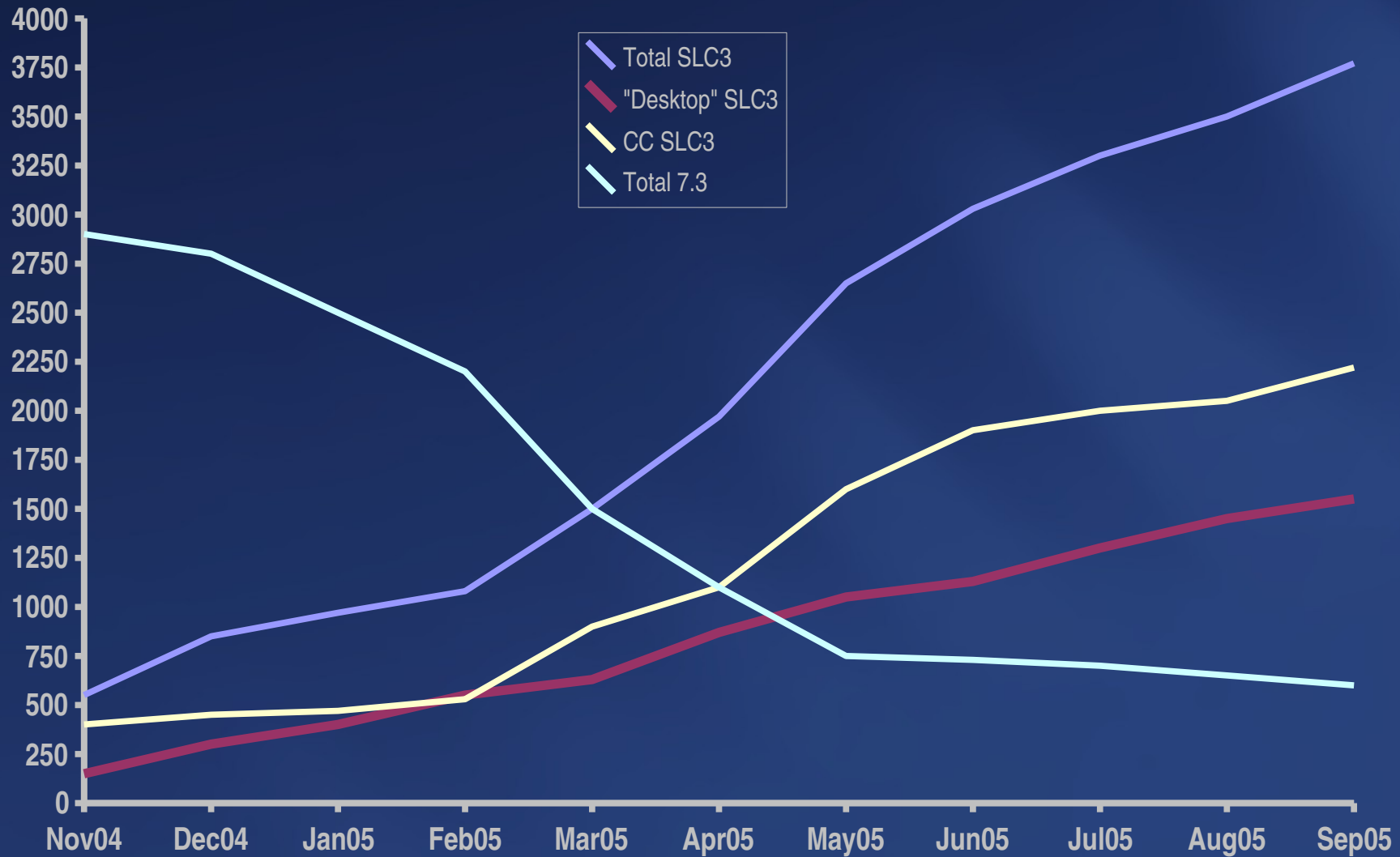


From 7.3 to Scientific Linux 3

- ✓ 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



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 2nd 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 ?

