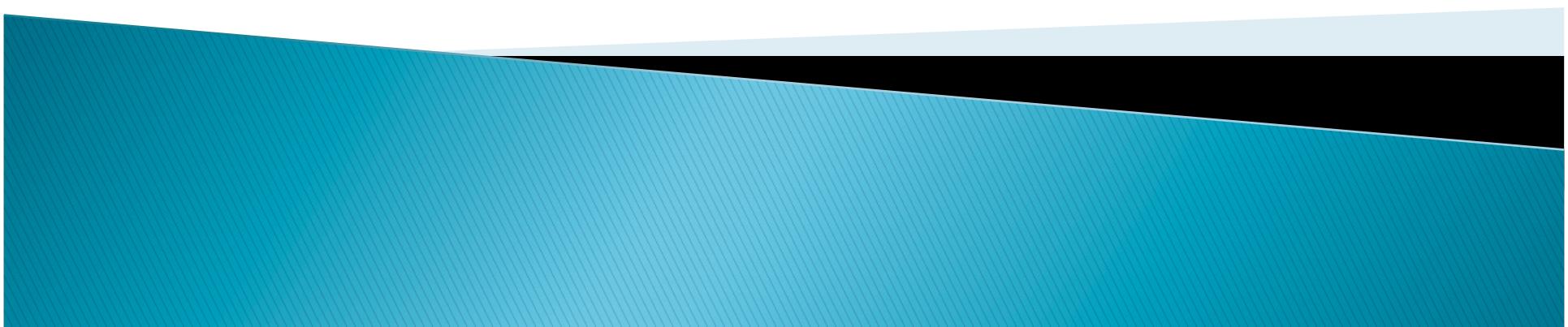


SL5 for the Applications

LCG GDB, June 10th 2009

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From Last Month Summary

- ▶ CMS, LHCb and ALICE expect to run SL4 binaries in SL5/64bit systems smoothly
- ▶ ATLAS requires to disable (partly) SELinux in order to run in compatibility mode
 - I guess this is a GDB issue
- ▶ Remaining issues still to be tackled
 - Distribution of SL4/SL5 compatibility libraries
 - gcc-4.3 compiler installation (or distribution of runtime libraries)
- ▶ As long as the experiments primary platform is SL4, the interactive services (e.g. lxplus), Grid UI, build servers need to be maintained (and the ‘alias’)
 - They do not plan to build/prepare SL4 binaries on SL5 systems

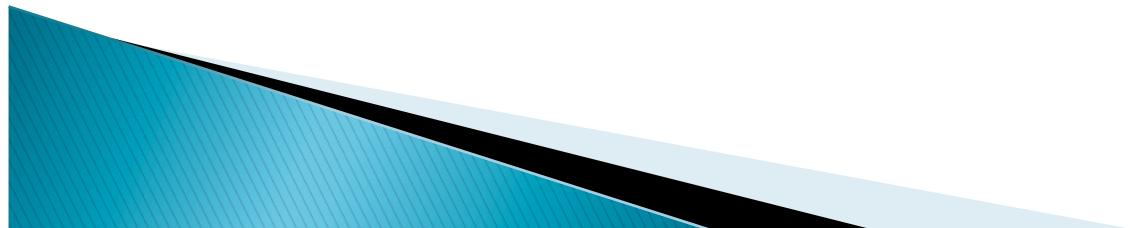
SELinux

- ▶ I understand that it has been agreed to partially disabled SELinux (bit *allow_execcheap*)
 - Still needed for the Oracle client for both SL4 and SL5 native builds
 - Not only needed on the ‘worker nodes’ but also in the interactive and build services
- ▶ As soon as the Oracle client library is available and no old versions of ATLAS, LHCb software is run cab be reverted



Compatibility Libraries

- ▶ To allow execution of SL4 binaries on SL5
- ▶ The complete list of all needed ‘system’ libraries ha been produced and circulated
 - Impossible to provide the ‘diff’ with respect ‘standard’ SL5 installation because there is no ‘standard’ installation
- ▶ In hands of IT-GD to prepare and distribute meta-RPMs with all these missing compatibility libraries



GCC 4.3 compiler

- ▶ Just after the last GDB the RedHat version of GCC 4.3 was installed → problems started
 - Binaries made with the GNU gcc 4.3 didn't work
 - Incompatibility with libstdc++ version (6.0.8 instead of 6.0.10 to be compatible with system compiler gcc 4.1)
 - Unable to compiler packages such Boost 1.39/32bit
 - Cannot really complain to RedHat
 - No business case
- ▶ Experiments (3 out of 4) decided to ship the standard GNU gcc 4.3 to worker nodes and interactive services
 - The compiler is packaged as any other 'external' package (~60)

Summary

- ▶ As soon as the changes in SELinux are implemented and the compatibility libraries deployed, the experiments will be able to use SL5/64bit resources with SL4 binaries
- ▶ Experiments have made the first native releases of their software for SL5/gcc43
 - Starting to validate them
 - Decided to ship the compiler with the experiment software
- ▶ On the list of pending problems from AA
 - CERNLIB libraries (2006) have been made available for SL5 (gfortran)
 - Waiting for the Oracle client library