



# **SPI**

## **Software Process & Infrastructure for LCG**

### **Migration of the LCG repositories to the IT CVS Service**

Application Area Meeting  
4 February 2004

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- Central CVS repositories managed and available to all projects
  - 15 projects (21 repositories) as of today
    - Using (not very secure) “pserver” access
  - About 600 MB of disk space
    - simu, lcgdeploy, infrastructure > 100 MB each
  - Nightly backups of all repositories
    - About 220 MB as tgz

# Status of present CVS service

- CVS service on **lcgapp** server
  - Created as a *temporary* measure until IT CVS service could be used
  - In parallel to web and savannah service
  - Running on 2 mirrored disks for safety
  - Tools for automatic clean up of locks, etc

# New IT CVS service for LCG (I)

- Several machines for load balancing
  - No AFS on request of LCG projects
  - Aliases in own sub-domain "cvs.cern.ch"
- Three layers of security
  - Mirroring to another machine (15 min)
  - Regular copying to AFS as backup
  - AFS backup
  - No checks for consistency (obviously)
- Automatic lock removal
  - As we had on lcgapp

# New IT CVS service for LCG (II)

- Available for testing since fall 2003
  - Several tests have been done by SPI team
    - Report on tests is in preparation
- Old SPI tools are working on new service
  - ViewCVS, lxr, doxygen
    - <http://pool.cvs.cern.ch:8180/>
    - Old pages will be forwarded
  - Mails for commit and tag

# Features of the new CVS service

- Fine-grained access control within repository
  - Using *commitavail/tagavail* in *CVSROOT*
  - *Controlled by librarian*
- New names for the repositories
  - *:ext:<user>@<project>.cvs.cern.ch:/cvs/<project>*
  - *:kserver:<project>.cvs.cern.ch:/cvs/<project>*
  - SPI will provide script to change files in CVS/ for existing checkouts (updating the repo name)

# Migration to new CVS Service

- Extensive documentation available from <http://cern.ch/lcgcvs> -> "How To"
- New access methods:
  - Removing insecure *pserver* protocol
  - Only *kserver* and *ext/ssh* on default ports
    - For security reasons
    - Keys can be imported to `.ssh/authorized_keys`
      - Locally on **sundev**, not in (AFS) home dir!
      - See documentation
    - ***Users need account at CERN*** (\*PLUS) !
  - SPI will help project leaders with user issues

# Migration time scale

- Migration will take place “by repository”
  - Will start with SPI next week
  - Time slot from mid Feb until end March
- Project leaders, let us know when ready for migration
  - Expect a “downtime” of order an hour without access to repository
    - Move of files from lcgapp to new repository
    - No cvs operation will be available
    - Need to run script in checked out areas to change CVS repository name
    - Timing to be validated with migration of SPI