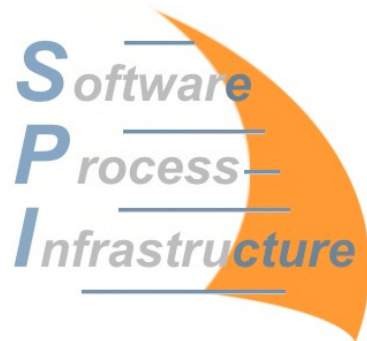


Ideas on restructuring the LCG external software service

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PH / SFT



Qt
lfc
GSL
pyQt
Boost
mysql
libxslt
oracle
lapack
HepMC
Python
gccxml
HepPDT
valgrind
autocor
globus



LCG externals

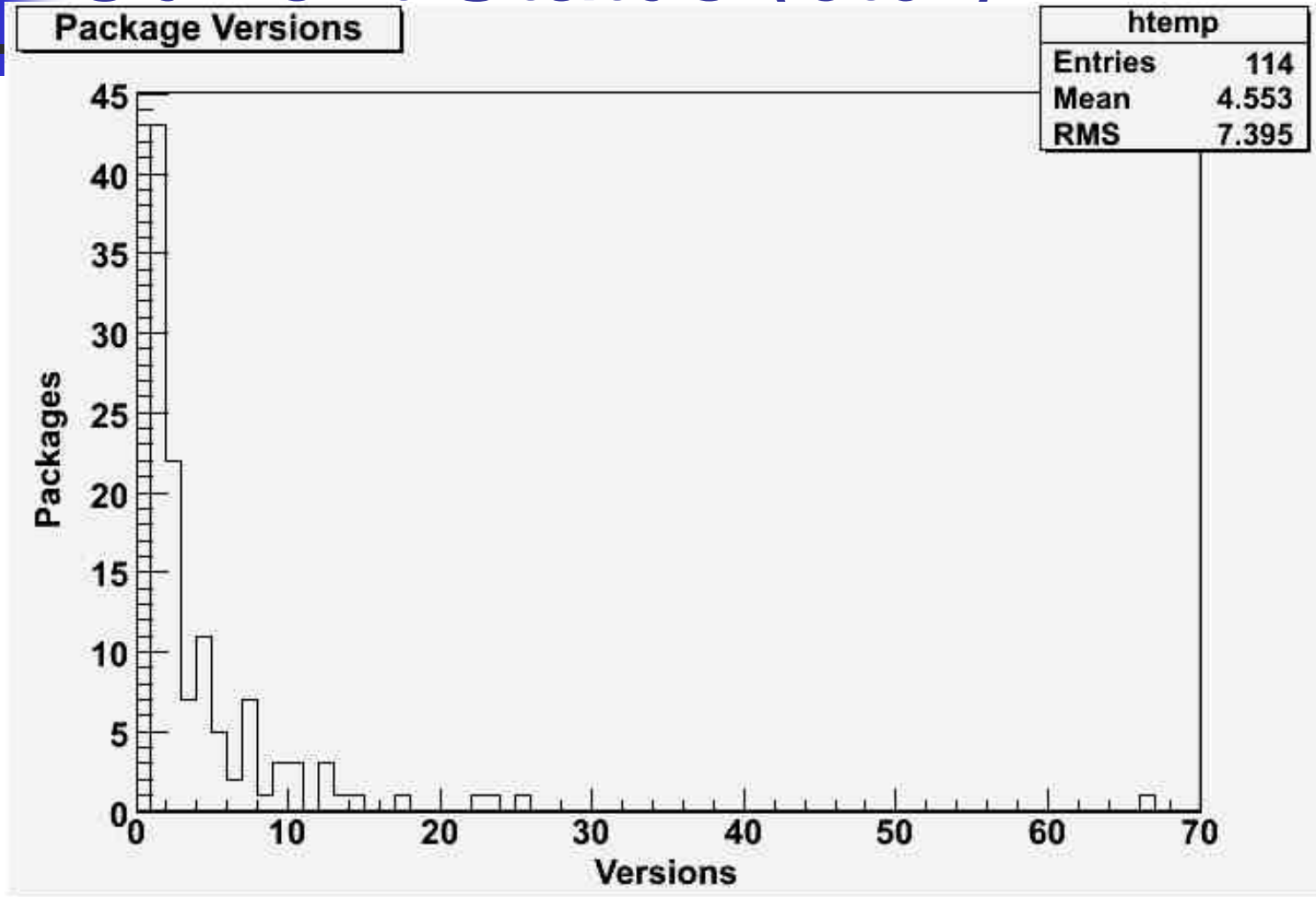
- A (huge) collection of tools and libraries used in the LCG / AA environment
- Tar balls available for each package
- We have setup this space in order to
 - Have control over the versions used
 - Provide the tools and libs in a unique way
 - Be able to provide a coherent set of binaries
 - Allow users to try out new packages



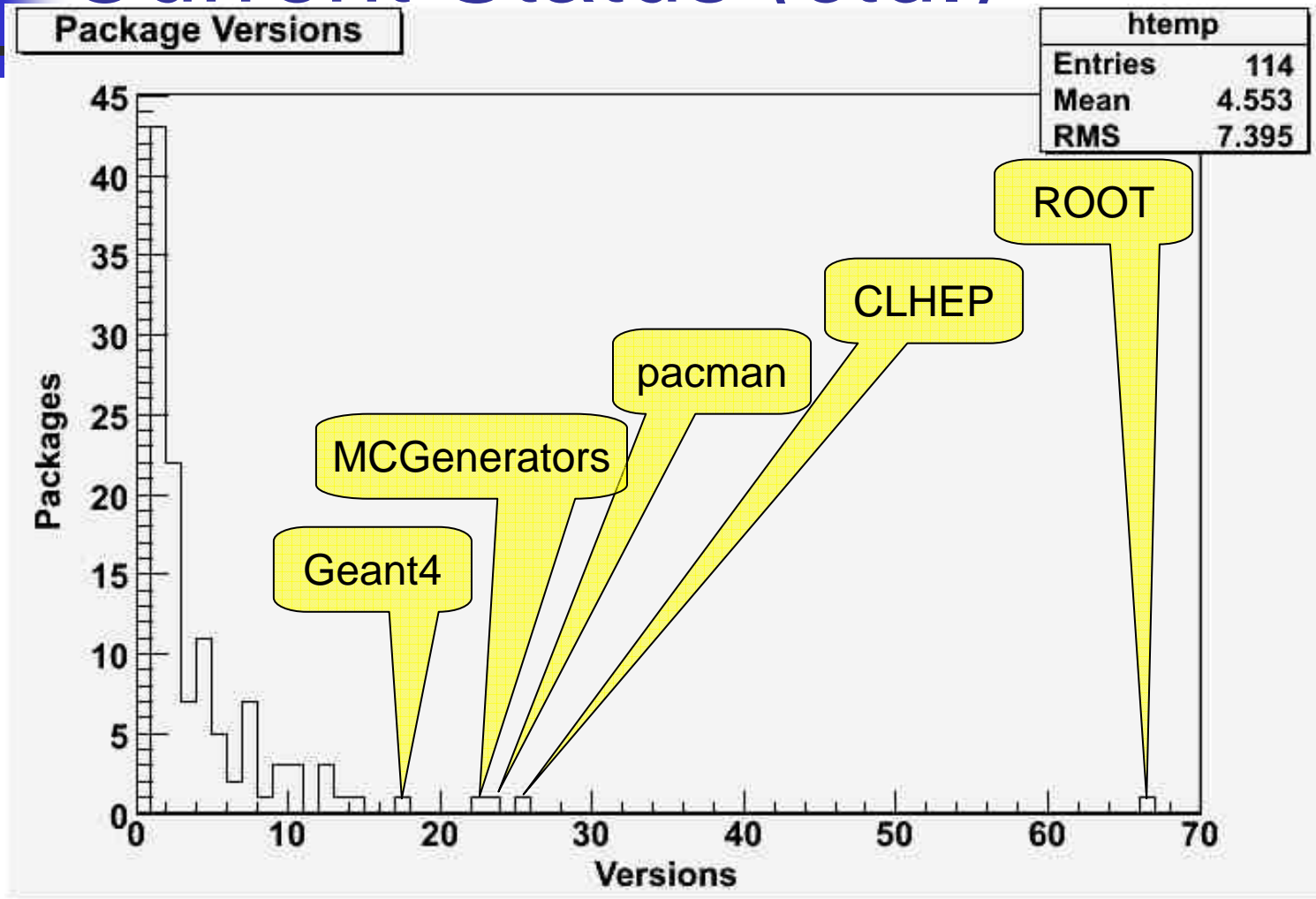
Current Status

- All LCG / AA external s/w available in a flat dir structure in `/afs/cern.ch/sw/lcg/external`
- Currently (Mar '07)
 - ~ 120 packages
 - ~ 520 versions
 - ~ 2000 binary installations
 - ~ 300 GB of disk space

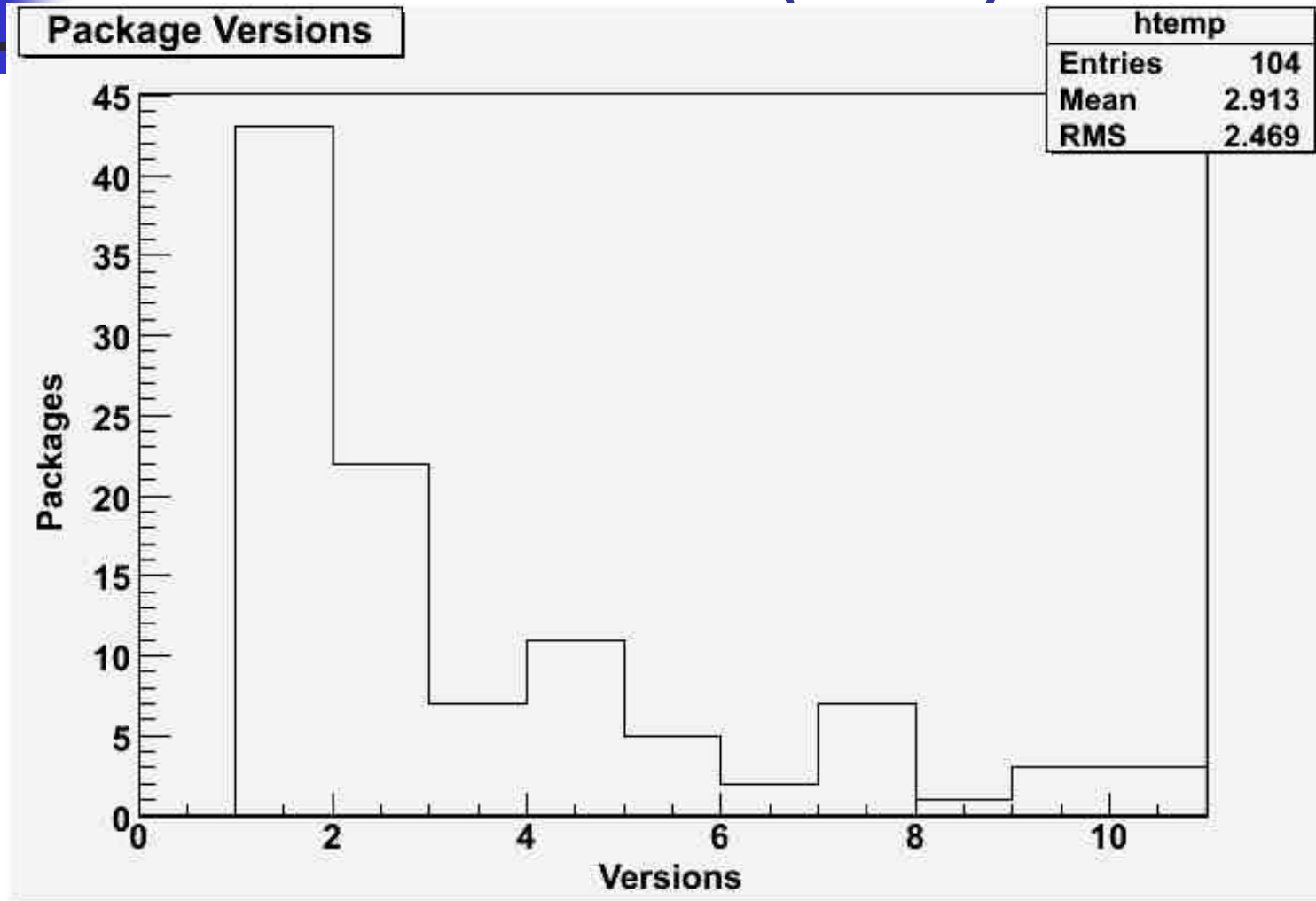
Current Status (ctd.)



Current Status (ctd.)



Current Status (ctd.)





Problems

- Manage flat directory space
- Identify used packages
- Package management
 - Installation of new packages
 - Install new versions of a package
 - Install a new platform for a given version



Proposal I

Move ROOT

- ROOT is managed / treated / used as any other LCG / AA project
- The reorganization is the perfect opportunity move to the “release” area
`/afs/cern.ch/sw/lcg/app/releases/ROOT`
- Symbolic links shall be kept for some time for backwards compatibility



Proposal II

Introduce hierarchy

- Have a handful of categories e.g.
 - Math
 - Grid
 - Tools
 - Scripting
 - ...
- Easier browsing / management
 - Users browsing on the file system level
 - For dynamically produced web pages

Proposal III

Identify used packages

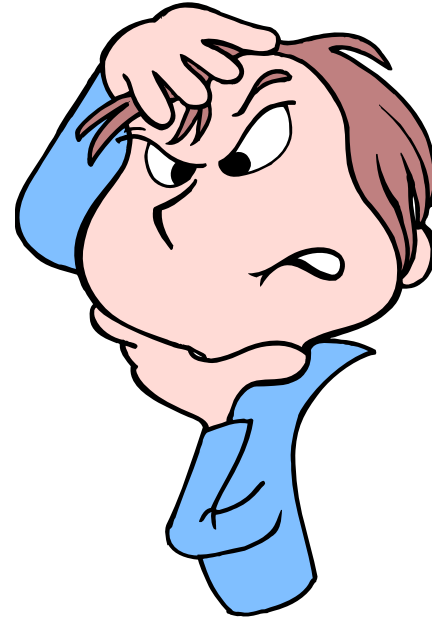
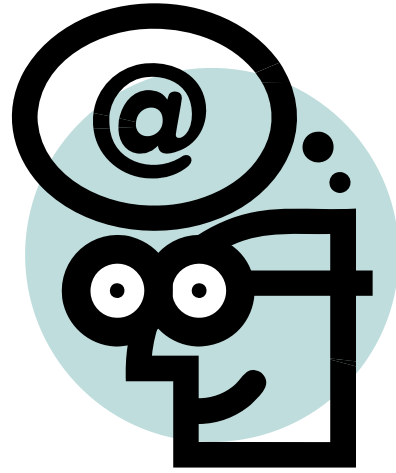
- Vers.1 (the nice one)
 - Circulate a list with all packages to all “users” of LCG / AA / externals who will select the used packages (and responsible persons)
- Vers. 2 (brute force)
 - Remove/rename packages and wait if it is still needed re-rename it (this way also responsible persons can be identified)

Proposal IV

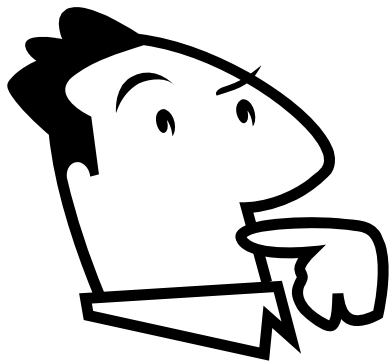
One source of information

- Currently the info about external packages is stored in two places
 - Seti: A set of xml file for building a package
 - Extsoft: A mysql database to extract the info for web-pages
- We shall have one source from which we derive all needed info
 - Build instructions
 - Web pages
 - Package dependencies
- Use / extend the existing database solution

And now ...



Brainstorming



Day 1
Python package
@C
Bill
@old
@client
@sels
@grind
@python
@red
@books
@J
@ke
@client
@cap
@SQL
@con-c
@an
@file
@uaw



Ideas

