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# Applications Area News

- ◆ Releases and Configurations
- ◆ Source Code Indexing
- ◆ Platforms
- ◆ Python Modules

AA meeting, 20 January 2010

P. Mato/CERN (with the help from S. Roiser)



# Releases and Configurations

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## ◆ End-of-the-year releases

- [Geant4 9.3](#)
  - » Several physics model improvements
  - » Decrease of memory footprint
- [ROOT 5.26.00](#)
  - » Including major optimizations for I/O

## ◆ LCG Configuration 58

- [Based on ROOT 5.26.00a, CORAL 2\\_3\\_6, COOL\\_2\\_8\\_5, POOL\\_2\\_9\\_5, RELAX\\_1\\_2\\_1](#)
- [To be announced today or tomorrow](#)

# Source Code Indexing (OpenGrok)

- New source code cross referencing page for AA software available at <http://cern.ch/lcgsource>
  - » Provides information for the last 3 LCG release series (56, 57, 58)
  - » Easy to maintain
  - » Offline (java) application for browsing available

The screenshot shows a web browser window displaying the OpenGrok search interface. The search term is 'MemberTemplate'. The results show two files: 'MemberTemplate.h' and 'Kernel.cxx'. The search was completed in 16 milliseconds. Three blue callout boxes with red arrows point to specific features: 'Different search possibilities' points to the search input field, 'Select LCG Configuration' points to the project selection dropdown, and 'Extremely fast' points to the completion time.

```
Full Search: MemberTemplate
Definition: MemberTemplate
Symbol:
File Path:
History:
Project: lcg_56, lcg_57, lcg_58

Searched defs:MemberTemplate (Results 1 - 2 of 2) sorted by null

/LCG_58/ROOT_5.28.00a/root/cint/reflex/Ine/Reflex/
1 // (#)root/rolien@id: MemberTemplate.h 29289 2009-07-01 13:03:35 axel 9
25 * #class MemberTemplate MemberTemplate.h Reflex/MemberTemplate.h
30 class REFLEX_API MemberTemplate {
35 MemberTemplate(const MemberTemplateName * memberTemplateName = 0);
39 MemberTemplate(const MemberTemplate src);
43 ~MemberTemplate();
47 bool operator ==(const MemberTemplate &rb) const
    (all...)

/LCG_58/ROOT_5.28.00a/root/cint/reflex/src/
26 #include "Reflex/MemberTemplate.h"
375 const reflex::memberTemplates
376 reflex::dummy::MemberTemplate() {
378 // when in wrapper: use an empty MemberTemplate
379 return GetReflex

Completed in 16 milliseconds
```

# Platforms

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- ◆ New compilers installed in AFS
  - [gcc 4.5\\_20100112 \(snapshot\)](#)
    - » Including support for “graphite” loop optimization and link time optimization (lto)
  - [llvm 2.6 \(with gcc frontend\)](#)
    - » Running also in the LCG nightly builds (dev2 slot)
- ◆ Port to Mac OSX 10.6 - Snow Leopard
  - [Finishing up on porting of external packages](#)
  - [Nightly builds to be started soon](#)

# Re-organizing python modules

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- ◆ Many Python add-ons requested by LHC community
- ◆ Partitioning the modules into bigger “chunks”
  - [pyanalysis](#) : numpy, scipy, matplotlib
  - [pygraphics](#) : pyqt(\_compat), sip, pydot, pyparsing
  - [pytools](#) : processing, ipython, pypy, mock, scons, 4suite, pyxml, cx\_oracle, mysql\_python
- ◆ Advantages:
  - Less changes in the user configuration
  - Shortening PYTHONPATH, LD\_LIBRARY\_PATH, etc.
  - Easier integration of new modules
- ◆ Available with next LCG Configuration
- ◆ Single modules (+ CMT Interfaces) will be deprecated and removed with next-next configuration (LCG 60)