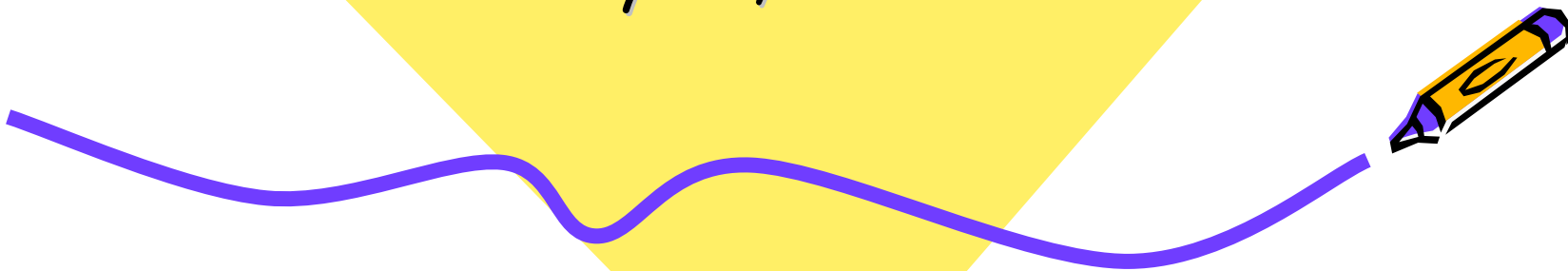




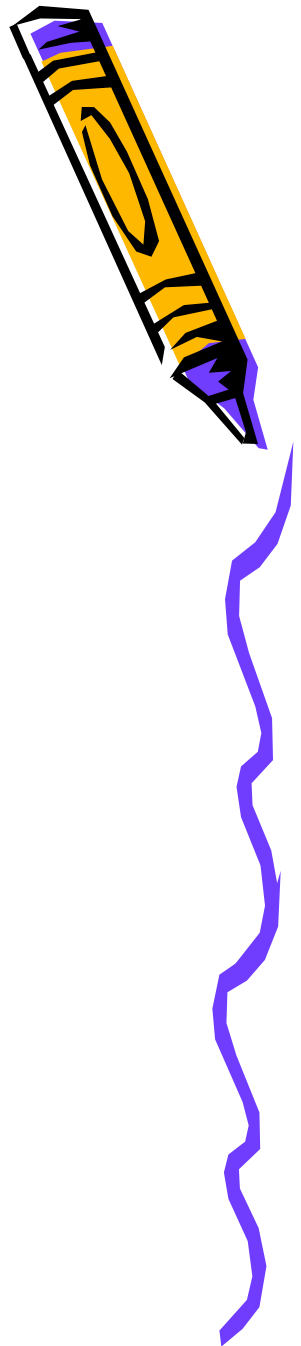
What's Up in Infrastructure And Why You Should Care

May 31, 2007



Overview

- CMT Replacement
- Event Collections
- O/S Support
 - RHEL4, VS2005, Intel Mac
- Externals
 - Gaudi, Python, ROOT
- The End of EM

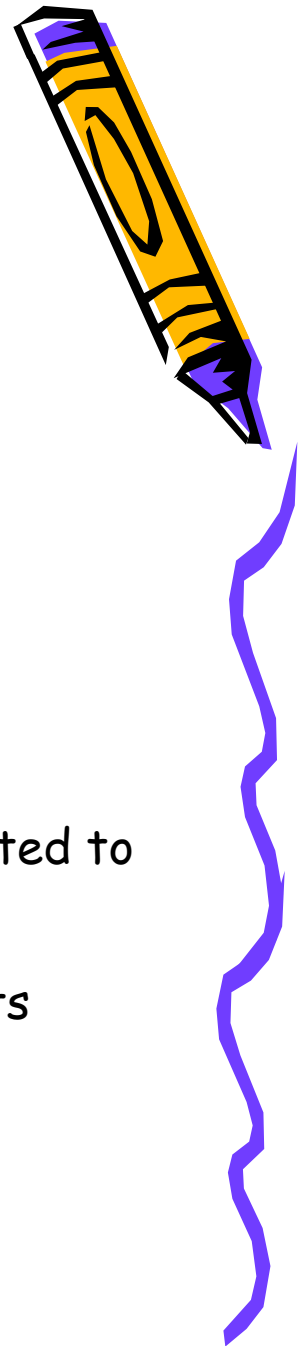


CMT's Replacement

- Current CMT standard is v1r18p20061003
- The CMT Action Committee continues...
- Why?
 - No support from CMT developers
 - As of CMT v1r18 move towards CMT projects
 - Supposedly support will continue for CMTPATH
 - Incorrect Makefile generation for Intel Mac
 - Results in infinite loops

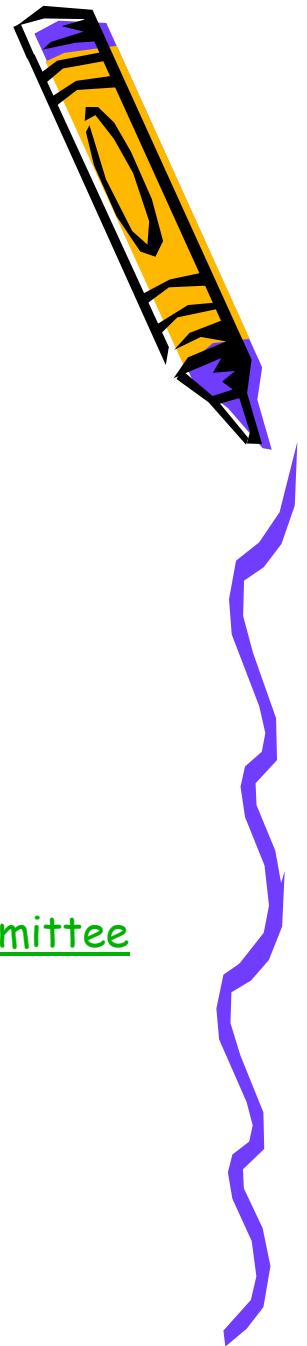


CMT's Demise Contd.



- Package Structure to be retained.
- Some CMT functions need to be replaced
 - "CMT" co
 - Determining Dependency Tree
 - Show Tags
 - Requirements files and mechanism to set cppflags etc
- Impacts MRStudio, RM, Workbook
- User distributions of SciTools very likely simplified
- There will be no migration until a complete path is demonstrated to work in full.
 - Will be in parallel to start
- Our SSC friends are aware of our potential migration (impacts hmake conversion for SciTools) - haven't heard any yelps yet.





CMT's Replacement Cont.

- The Options:
 - SCons: Python-based
<http://www.scons.org>
 - NPMS: C++ app
- References:
 - <http://confluence.slac.stanford.edu/display/SAS/CMT+Action+Committee>



Event Collections aka Pointer Skims



- Reference:

<http://confluence.slac.stanford.edu/display/SAS/Pointer+Skims>

- ROOT-based meta-data to locate all event data associated with one event.
- Level0 Interleave (MC from previously generated background data), skimming, user analysis



Event Collections



- Tracy has started a reorganization in the HEAD of RootIo to centralize ROOT reading calls.
- David is taking Tracy's start and further cleaning RootIo and moving all ROOT access into a non-Gaudi package such as commonRootData
- For now we have punted on the concept of using a DB to store run/events
- Heather to introduce a meta-data TTree.
- Tracy working out LO Interleave details, sounds as though the full event collection functionality is not necessary.



O/S Support

- RHEL4
 - GR Ready to Go as of v11r1
 - Much thanks to Navid & Joanne
- VS2005
 - Toby has exerted much energy in this direction..currently on hold until CMT replacement strategy is in place
- Intel Mac
 - Also on hold until CMT replacement is in place



Externals



- Gaudi
 - New "mini"-Gaudi v18r1-gl3
 - Eliminates POOL, SEAL, CLHEP, PI
stuck with BOOST - but only "filesystem" libraries
- Python
 - We agreed to upgrade to 2.5
 - This version does not automatically recognize
dll extension on windows



Externals Contd



- ROOT
 - Currently v5.14.00d (e waiting in the wings)
 - Our version built against Python 2.5
 - On windows we include a copy of PyROOT.pyd
 - Taught ourselves howto build on windows
 - A lingering issue with vector<Double32>



The End of EM



- Next EM tag will be the last
 - To be used in ETE2 (July 14-17) and TVAC (Sept 20)
 - Based on GR v11rX (any suggestions?) and to include the MOOT keys
- Pipeline will then use GR production versions
 - Current stable version of GR
 - Where any updates/bug fixes necessary for pipeline will occur along branches
- How to get there from here:
 - JO and eliminate LatIntegration
 - Add calibGenXXX to GR



Other Stuff on the Hopper



- Installer Debate - include *.a or not
- Unit Testing
- Ntuple Documentation
- SLAC AFS usage for application installation
- New Hire at GSFC

