SCons Status April 29, 2009

Minutes

Release Manager

Windows fix for EOL character is in. Unfortunately due to a bug in external.scons the build on all oses is currently failing, so it has not been tested yet.

Navid will patch externals.scons and getting the builds going again.

Mac - AFS token issue still a problem. Unix-admins have sent details to Navid. The long and short of it is that we will continue to generate Mac builds by hand.

As we discussed last week, it would be nice to grab the attention of developers when there are SCons failures. The automated build failure notifications have not done the trick. We discussed last week the possibility of flagging SCons failures in the current RM pages. Navid has checked into it, and it is not feasible. Alternatively, he is looking at flagging CMT failures in the SCons RM.

ST Builds

New facilities tag updates setting of environment variables to address case of TIMING_DIR. If user has already set TIMING_DIR, that value is used, rather than setting it at runtime. Tag has not yet been tested, due to the above mentioned external.scons bug. Once facilities has been tested, Navid will run it by James Peachey to look over. Then he'll pursue getting it into ST (and GR). This should fix a number of failing unit tests.

Swig .in and .i files

Ongoing issue keeping the .in and .i files in synch for our swig builds. Currently our CMT builds use the .in to generate a .i with hardcoded paths. The SCons builds can use the parse the .i files in CVS directly. Jim Chiang suggests we use a script to convert the .in to a .i file SCons, to alleviate the burden on developers to maintain two files. Heather and Navid would prefer modifying the CMT builds to use the .i directly, and thus still allowing the developers to maintain one file. Navid is looking into this possibility. Alternatively we will continue to maintain the two files. Richard asked why we would prefer not to use Jim's suggestion and convert the .in to .i file - Navid points out this would require modification to the SConscript files for all affected packages, and the introduction of a new builder to deal with the .in files. As it stands, SCons (and obviously swig) recognize the .i files and deals with them appropriately. Joanne suggests an email alert when an .in is updated in CVS. Navid will look into that, as well as issuing a warning to the person doing the CVS commit, if the associated .i file is not updated as well.

Dumping RH9

No particular with dumping RH9 and SCons, though Navid points out it brings us closer to rhel5. We need to consider how to handle f2c.

Heather asks if our source distributions and doxygen generation are only being done for the rh9_gcc32opt builds. Navid confirms that is the case, though it is easy to change. We agreed, to go ahead and update the RM, to use the rhel4 builds for source and doxygen. In fact, as of this writing, Navid has already made the change for Doxygen. This should have no impact on Chuck and the workbook, as the Doxygen is copied into an O/S indepedent location.

Emmanuel asked if we could discontinue creating rh9 externals when upgrades become necessary. Heather answers, not quite yet, as we still officially support RH9. However, test builds, such as python 2.6.2 need not be built for rh9.

Installer

Navid is in email discussion with Tony concerning the new web based installer.

RM front end

Joanne sent some comments to Karen, who agreed toi look at making modifications later in the week. In particular, Joanne asked about the making the output for test programs more accessible, by providing output on a per-package basis.

Windows support

Joanne is grabbling with trouble with rootcint and the commonRootData package, both within SCons, and at the command line. Heather can execute the same command on her laptop without errors. Joanne requests a copy of Heather's env to see if any differences are noted. Heather will install VC9 on a box like glast05 (after getting Tony's permission), so we have an independent playground.

CHS

Bryson will be leaving by the end of May. We need to obtain some closure on outstanding CHS errors. Navid will notify Bryson (and Jim P) about upcoming updates to CHS, and offer to make the commits, or have Bryson/Jim do it themselves.

Fred and Fox

Emmanuel has rebuilt fxRuby, the same error with Fred v0r100 and rhel4 persists. Emmanuel tried withholding the ior file from HepRepCorba, and in that case Fred does launch.

Heather asked if Emmanuel has tried out Fred v0r99 or v0r99a?? a version of Fred that Joanne had modified some time ago to make things work on rhel4. Joanne notes that she likely still has the binaries and will provide them to Emmanuel if he wants to try them out.

Agenda

- Release Manager Status

- Backend
  - Windowsl
  - Automatically notify package owners of build failures -- done, some suggestions from Toby
  - Any possibility of noting RM2 failures in RM1?
  - Mac -token issue
  -
  - Other Issues?
- rh9 need to dump by summer
- Installer/ RMviewer /Tag Collector - Navid
  - Contact Tony
  - user releases are good to go
  - developer release status
  - Version 0.5 current test release
  - available for testing from ftp://ftp-glast.slac.stanford.edu/glast.u05/RMViewer/
  - status of current RM binary installs?
  - To Do List
    - Installer for Developer Releases
    - Contact Tony concerning web based installer
    - Tag Collecting
- Front End - Karen
  - Web Front End - Karen
    - http://glast-ground.slac.stanford.edu/rm2/
      current test version is: http://glast-tomcat03.slac.stanford.edu:8080/rm2/
    - How to get checkout and compile output like RMViewer?
    - Joanne made some recent requests for test program and compile output

- SCons
  - 1.2.0 is now installed on SLAC AFS as is a more recent developer version with additional Windows support.
- GoGui
  - GoGui Status and Laundry List
- Windows Support
  - SCons and Windows - a Log
  - trouble with commonRootData running rootcint
    also need to handle creating rootmap files

- stag command line tagger now available
  - available for download from u05/stag
  - Pop in "EOH" End of Header 🙂 into release.notes for those package that do not have it
  - Migrate to new tagging convention
- ST Builds
  - release for upcoming reprocessing
  - setting TIMING_DIR and update to facilities
- GR Builds
- GlastRelease-scons v15r49 build status
  - Need to check out using GlastRelease-15-49-00
    Gleam package creates test_Gleam app, no Gleam. I think we need to add a definition for the Gleam application into the Gleam SConscript file?
- GlastRelease-scons build status
  - obf restructuring - Emmanuel,Navid,Joanne
  - Migration of JO files to top-level
  - FRED and fox library
- CHS
  - Last tag built, but with errors
- Externals
  - ROOT upgrade v5.20 ready to go
  - Fred & Fox
    - Need to build for 64 bit machines and on the Mac. Wouldn't hurt to contact Riccardo about that.

The Big To Do

- RM
  - Automatic email notification of build failures - DONE but not having much effect yet
  - Migrate to new tagging convention
    - What is the status of providing the ability for RM to catch and apply tags for either old or new style?
  - Start using u35 -- DONE
  - Fix up Windows builds
  - Automate Mac builds again once LSF is fixed
  - Doxygen generation
  - Generation of calibration and geometry files
- Installer/TagCollector/RMViewer
  - Provide Developer Releases
  - Contact Tony to start work on web based installer
  - Tag Collector
- ST
  - Fix up Windows issues and get more developer support
- GR
  - Update 15-49-00 SConscript files for the head of GR
  - Fix up OBF handling
  - Migrate JO files to top-level directory
- CHS

- Test and work out remaining issues before Bryson departs
- Windows
  -
  - Externals for VS9.
    ROOT - DONE

- Externals
  - ROOT v5.20
  - Fred & Fox
  - Gaudi