

SCons Status December 3, 2008

Minutes

RM backend

There was a problem with the unit tests where the shared libraries of the externals were not being found. This turned out to be a bug in the RM backend which is now fixed for rhel3, rhel4 and 64 bit builds, rhel5 is on hold pending installation of the mysql libraries. Navid has contacted SLAC unix-admin.

Windows builds have been turned off due to problems that need to be addressed. Fixing those issues is on the todo list.

64 bit build unit tests are causing LSF machines to crash. John V reported that some of the unit tests were gobbling memory. Richard stated that the LSF machines will reboot due to excessive memory use. Navid will turn off the 64 bit builds for now and will contact Eric and John to get a list of affected unit tests. Developers will be notified in the hopes that those unit tests can be patched.

Navid will start up the rhel3 builds, they should already be set to go.

g2c versus f2c

Navid summarized the result of discussions in the software meeting and via email. On rhel5, according to the SLAC admins, libg2c is not provided. We can eliminate its use in GR, and hope to do the same in ST. For now we will have to distribute the library.

Navid has committed the fixes necessary to allow an overriding directory in ST. Navid has tested this out in the simple case, and Joanne will continue trying it out. Once Joanne gives the ok, Navid will commit the changes for GR and CHS as well.

RM frontend

Karen has uploaded the new RM to CVS. Tony will put the new RM into glast-ground sometime this week. In the meantime, Karen asks that we take a look at what is on tomcat03, and provide feedback.

Navid has released RMviewer 0.3 which is now multi-threaded. Next up is to improve the speed of the application by ditching the RM libraries and write RMviewer specific code to connect to MySQL. After that, Navid can add in the actual tag collecting functionality.

GoGui

Alpha version 0.8.8 is now available.

Excluding packages is now all working. Explicitly excluded packages are crossed out in the gui, which non-explicitly excluded packages are grayed out. Users are prevented from building excluded packages.

Packages are marked with T (tag), H (head) similar to what we have in MRvcmt.

Emmanuel has been signed up as a GoGui user and has reported trouble running GoGui on a mac via an xterm. After further discussion and googling by Joanne, it seems there is a known issue associated with running some applications via an xterm.

ScienceTool builds

Navid has updated the pointlike and skymap *.i files (which are the SCons equivalent of the *.in files for python). The updates have been tagged v9r8p2. Unfortunately, the package owner (Toby) is not maintaining the *.i files, so each time there is an update to the *.in file - Navid has to make an update. In fact, there are further changes for ST v9r8p3 that Navid has to implement.

GR builds

Emmanuel has successfully performed a global build on GR v15r49 and is now working committing the changes to the SConscript files. He is hoping to have them all committed and tagged by this afternoon. Next up, Emmanuel plans to continue experimenting with GoGui.

SCons

The bug fix for handling recursive copying of the include files has been implemented. There are other Bryson updates for CHS that Navid plans to migrate over into GR and ST, such as the option for package owners to define environment variables in wrapper scripts. Also OBF has multiple include paths, and Bryson had a workaround for that as well.

Transitioning JO files to the top-level directory is on hold pending completion of other higher priority items.

Navid has not yet contacted Tony about the new installer. First Navid wants to determine the mechanism for creating the tgz files that the new installer will be delivering. While RM could be made to create those files, as was done for CMT, there is interest in having this step handled through SCons. This would allow developers to create their own tgz files. This feature has been desired in CMT-land. Richard also had a question concerning the use of a single tarball for each build, rather than providing separate files for each package. Navid confirmed that this is his intention, where the mechanism to continue with the download in case of interruption needs to be available. Joanne (and Heather) expressed some concern that downloading a single large file may be impractical. Navid believes that a single file would actually be less prone to download troubles than many small files, due to the elimination of numerous file download initializations. Navid will try to gather some statistics to demonstrate.

Action Items

- Navid will turn off the 64 bit builds, and contact Eric & John V to obtain a list of ST unit tests causing troubles in LSF. Those package owners will be contacted to address the problems.
- Navid will start up the RHEL3 builds as they are ready to roll.
- Navid will look into eliminating the use of g2c in GR.

- Navid will release a new faster RMviewer by next week's SCons meeting.
- Navid will work up some statistics to see what is more reliable, downloading one mungo tgz file or many smaller tgz files.
- Tony will get the new RM into glast-ground by the end of the week.
- Joanne will test out the new over-ride directory code provided by Navid and then start updating GoGui accordingly.
- Joanne and Emmanuel will discuss the issue of running GoGui through an xterm on Mac.
- Emmanuel will completely commit the SConscript files for GR v15r49 and send email when it is finished.
- Emmanuel will continue trying out GoGui, perhaps running it locally on his linux machine, as well as sorting out the issues with running remotely on the Mac.
- Heather will send out email to core and softlist reminding interested developers that the SCons-store is open for testing.
- Heather will make sure to include Tracy in next week's reminder for the SCons meeting.

Agenda

- Release Manager Status
 - Backend
 - Windows - status?
 - RHEL5 up and running
 - Possible to start rh9 builds?
 - 64 bit builds just need to be turned on?
 - Head builds of ST now activated - is it possible to trigger a build of ST v9r8p3? can pointlike and skymap updates be tagged?
- Front End - Karen
 - Web Front End - Karen
 - <http://glast-tomcat03.slac.stanford.edu:8080/releasemanager/releaseManager-NEW.jsp>
 - Status of getting it outside the firewall
 - TagCollector - Navid
 - 0.3 released which is multi-threaded
 - available for testing from <ftp://ftp-glast.slac.stanford.edu/glast.u05/RMViewer/>
 - The need to make this a multi-threaded app timeline?
- SCons
 - After talking to SCons-developers, Navid has set up builds to carry on even if there are problems some packages
- GoGui
 - <http://confluence.slac.stanford.edu/display/SAS/GoGui+Status+and+Laundry+List>
 - Alpha version available from u05/GoGui/0.8.8
 - overriding packages by allowing two paths that contain packages - discussion results?
 - Updates to SCons backend -- Navid
 - Updating GoGui to make use of those updates -- Joanne Guess 1-2 weeks from time SCons backend is ready
- ST Builds
 - g2c versus f2c
 - Possible to tag pointlike and skymaps
 - Any further words from those interested in 64 bit builds?
- GR Builds
 - <https://confluence.slac.stanford.edu/display/SAS/GlastRelease-scons+v15r49+build+status>
 - <https://confluence.slac.stanford.edu/display/SAS/GlastRelease-scons+build+status>
 - obf restructuring - Navid
 - Fix for recursive search of public header files is done
 - Migration of JO files to top-level
- Installer
 - Any words from Tony?
- Externals
 - python is now in GR v15r50
 - OmniOrb to be in v15r52
 - ape 2.4 is imminent
 - LDF v07-01-01 is imminent
 - Working on ROOT upgrade to v5.20
 - How do we get rhel5 builds done?
 - Some linux externals are available for download from <ftp://ftp-glast.slac.stanford.edu/glast.u05/extlib/scons/>
- Feeble Schedule Needs to be updated
 - <https://confluence.slac.stanford.edu/display/SAS/Schedule>
- Documentation
 - Externals upgrades "how to" documentation -- Emmanuel
 - <https://confluence.slac.stanford.edu/display/SAS/Documentation+for+Installing+External+Libraries>
 - GoGui Guide -- Joanne
 - <http://www.slac.stanford.edu/exp/glast/ground/software/notes/GoGui/GoGui-use.shtml>
 - Get the GoGui guide linked into the workbook through Advanced section Splash page -- Chuck
 - Update the page -- Heather
 - <http://confluence.slac.stanford.edu/display/SAS/SCons+Introduction>