SCons Status December 10, 2008

Minutes

Release Manager Backend

Navid reports that the RHEL5 boxes have been updated with MySQL and the RM bulids have been started up again. Navid discovered a bug which has since been fixed.

No word concerning the Mac boxes - Navid will inquire again.

Science Tools 64 bit unit tests: Navid communicated with Eric and John V and discovered that their problems were unrelated to ours. While SCons generates its list of packages automatically, the FSSC creates their by hand and were missing some.

ST Release builds stage one have been enabled. Now that Navid has checked those are working, he can enable stage two which detects what needs to e built and then which O/S to submit. So we should have ST tag builds soon.

Navid will start up the RHEL3 builds on RM, this requires updated about 20 entries in the database.

Heather inquired whether someone else other than Navid (or Toby) could look at updating the *.i files in pointlike and skymaps.

Richard mentioned that Babar is considered hopping to RHEL5 and gcc4, he will inquire about a schedule for that leap. The batch farm will likely go the way of Babar. Richard also mentioned Babar's desire to utilization virtualization, where they might have a RHEL5 container that can run code in RHEL5 on a RHEL8 box, which those earlier versions are no longer available and supported. Discussed whether CMT might handle RHEL5 and gcc4, and we are not sure. There were troubles with CMT and the Mac going into infinite loops. We hope SCons will be in production before that becomes an issue.

Release Manager Front End

Since Karen's move of the new RM2 outside the firewall, there have been a few more comments. Karen has committed some changes to the new RM to CVS, and those modifications just need to be brought out to glast-ground. Karen hopes all changes will be in by Friday or early next week.

RMViewer

Navid has released version 0.4 of the RMViewer which no longer uses the RM libraries to achieve a sizable speed up by collected queries into one query. The most recent bug fix affected windows and displaying the packages under the "Tag Collector" tab - this is now fixed using a work around. Navid may contact the Qt folks for suggestions. hopeing to add new features and add the ability for the tag collector to write by the end of the week.

SCons

There is a more recent production release of SCons but there are no features or bug fixes that affect us. Navid can install this newer version on AFS and we can migrate at will.

GoGui

Override and supercede stuff is working. Current release is 0.9.1 For Windows Joanne will continue to build with dynamic libraries since the static version would still require at least one additional library as well.

Concerning Emmanuel's report of troubles running GoGui remotely via an xtern from a Mac - Joanne cannot reproduce the trouble, however she did find mention of a similar problem on the web which may be associated with distance, where more hops as Emmanuel may be doing could be triggering the issue. It would be helpful if another East Coaster gave this a try as well, where O/S should be irrelevant. As a result of that search, Joanne has suggested Emmanuel try running GoGui with the -synch option. He has not had time for that yet, as he's focusing on getting the GR v15r49 tags in place..

CHS

Next up, Joanne will be working to finish up the updates necessary for the CHS package, including the mootBuild package.

Joanne does hope to use a newer version of FSW which Owen has not quite tagged yet. But this does bring up an issue that modifying the externals could be made more flexible - something to keep in mind.

Windows Support

By early next week, Joanne will be ready to tackle the Windows issue. Tracy will be available as well. The plan is to start playing with a small subset of packages. When Tracy initially worked with SCons a couple of years ago, he was unable to get beyond one package.

GR

Emmanuel has made the updates for the SConscript files for GR v15r49, and has completed the code changes required. In principle, it should now be possible to check out the GlastRelease-v15r49 tag of GlastRelease-scons to try it out.

Navid and Emmanuel have started to discuss handling the OBF external to prepare Emmanuel for tackling that problem.

Migrating the JO files
Navid might have to provide a code modification in an #ifdef in the Gleam app for the case where we run with a JO specified via an env variable rather than as a command line argument. The JO files themselves may require some modification when referring to other JO files, but the references for XML files, etc are already ready to go.

New Tagging Convention

When do we make the move?

Joanne will be making a command line version of the facility already available in GoGui to tag packages such that developers are informed if they provide an ill-formed tag.

Installer

Probably will have SCons handle the creation of archive files for the installer. Apparently SCons already has a platform independent archive command. Richard queried further about reliability issues associated with providing one file for each checkout package, where the externals would be provided in separate files. At the very least the download manager must be made smart enough to pick up if a connection is interrupted. Navid feels that having one file per build would avoid the issues we saw where a new FTP connection is created for each package downloaded. Often these new connections would fail, and users were left with only a subset of the packages they required. Joanne would like to see us experiment to see what produces the best results. Navid and Joanne also pointed out that our archive files should be smaller if we eliminate unnecessary object and lib files.

Planning for Next Week

Note Navid will be attending the AGU conference next week and we will move this meeting to next Tuesday as the end portion of the software meeting.

Action Items

- Navid will inquire about the status of the Mac boxes
- RHEL3 builds will be started in the new RM
- ST tagged builds will be started in the new RM
- Heather will peek at the *.i files in pointlike and skymaps and see how to update them for ST v9r8p3 and v9r9
- Richard will try to pry out a schedule from Babar for moving to RHEL5 and gcc4
- Karen will update RM2 according to the various comments she has received
- Navid will update RMViewer and potentially provide a fully functional tagCollector by the end of the week
- Navid may install the most recent production release of SCons on AFS
- Navid and Heather will try out GoGui remotely from central Linux to see if they can reproduce the woes Emmanuel has experienced
- Joanne will hop into CHS-land and try to finish up getting that checkout package ready for SCons
- Joanne and Tracy will embark on the Windows support saga
- Joanne will provide a command line tagging application in anticipation of our move to the new tagging convention
- Emmanuel will being to look into handlng the OBF external for GR
- Migrating the JO files is on the to do list for Navid
- Heather just might try out GlastRelease-v15r49
- Navid will continue work on getting SCons to archive files for the installer and provide some test statistics for downloading one mungo file versus many small files
- Next meeting will be at the end of next Software Meeting on Tuesday

Agenda

- Release Manager Status
  - Backend
    - Windows - status?
    - Possible to start rh9 builds?
    - News on rhel5 boxes at SLAC getting MySQL installed?
    - News on Mac boxes getting LSF?
    - Status of fixing up ST unit tests for 64 bit builds? Did FSSC provide a list of failed unit tests?
    - Start up Release builds of ST?
      - can poike and skymap updates be tagged for v9r9?
        - Hoping Toby will care and feed those .i files from here on out
- Front End - Karen
  - Web Front End - Karen
    - http://glast-ground.slac.stanford.edu/rm2/
  - TagCollector - Navid
    - 0.4 released with improved speed - started up in 8 seconds on my win laptop 🙂
    - available for testing from ftp://ftp-glast.slac.stanford.edu/glast.u05/RMViewer/
    - Next up tag collecting

- SCons
  - Any new versions on the horizon?
  - Need to upgrade version available on SLAC AFS?
- GoGui
  http://confluence.slac.stanford.edu/display/SAS/GoGui+Status+and+Laundry+List
  - Alpha version available from u05/GoGui/0.9.1
  - overriding packages debugged by Joanne and Navid - about ready to roll with SCons updates?
    - Updates to SCons backend -- Navid & Emmanuel
    - Updating GoGui to make use of those updates -- Joanne
    - Did Emmanuel's trouble running via xterm on Mac get sorted out?

- ST Builds
  - g2c versus f2c - any news in terms of ditching it for GR?
  - Possible to tag pointlike and skymaps
- 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
  - Migration of JO files to top-level

- CHS - Joanne
- Windows Support
- Installer
    - Any further progress - go the SCons route for packaging up the zip files? - Navid
    - Any stats concerning downloading a mungo file versus many small ones?
- Externals
    - ape 2.4 is ready
    - LDF v07-01-01 is ready
    - Working on ROOT upgrade to v5.20 - new patch obtained yesterday
    - 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
    - Update the page -- Heather
      http://confluence.slac.stanford.edu/display/SAS/SCons+Introduction