

SCons EndGame

Step	Description	Who	Status	Est. Duration	When	Comments
Migration to new tagging convention						
Provide ability for RM1 and RM2 to apply tags of the appropriate form, depending up what format tag is applied (i.e. old style virjpk, versus xx-xx-xx)	Will discuss at the upcoming evo software meeting. Developers who tag will start using stag, and apply the new style tags, which will also automatically update the SConscript files. CVS will reject old-style tags, and users will be informed to use stag.	Navid	+	1 day	2 weeks	We have switched over to using the new tagging convention, where RM applies the oldstyle CMT tag for us. The only acceptable tag to be applied, is the new-style
Developer Tools						
Developer Installs	We have agreed on what will be included (at July 2009 core meeting), no object files. Navid has a version that handles developer installs in development	Navid	-	2 weeks		
Source Code Distributions	For now source code can be obtained via a call like: cvs co -r ScienceTools-HEAD-1-720 ScienceTools-scon	Navid	+	2 days		Now available through RMViewer 0.8?
Tag Collecting	Available in RMViewer 1.0RC1	Navid	+	2 months		
command line tagging application	stags supports new tagging convention available from u05/stag	Joanne	+			Satisfies all requirements I'm aware of
Mechanism to tag external.scons for HEAD and Releases		Navid	+			(jrb)The new externals scheme takes care of this
Distribution of SCons	Hopefully there will be a production release including the patches we need, otherwise, we have to package up the branch and make it available		-			We are actively considering taking this updated version for VC90 and distributing it. Navid will test it out on Linux - Joanne has been using it for some time.
Command line use of SCons						
		Navid, Joanne, Emmanue I	+			SCons is a command-line tool; is the task then just to document all the options and typical use cases?
Support for package overrides		Joanne, Navid	+			
Container support		Joanne, Navid	+			
GoGui	See GoGui guide	Joanne				
Support for package overrides		Joanne, Navid	+			
Container Support	packages like celestialSources	Joanne, Navid	+			
Windows Support						
Provide support for full Visual Studio Projects including use of the debugger		Joanne	+			
Support various types of ROOT packages		Joanne	+			
Gaudi Support		Joanne	-			pending availability of Gaudi
Obtain/Compile all externals for VC++ 2008						
ROOT, ape, CLHEP, cppunit, cfitsio, fftw		Heather	+			
xerces 2.8.0		Navid	+			Need to update CMT builds to use this version
f2c		Navid and Joanne	+			Decided to leave this as a SCons-only external, as we do not support RHEL5 builds in CMT anyhow
ape 2.5.1		Navid	+			Windows still needs to be compiled
MySQL		Heather	-	2 days		
Gaudi		Heather	-	miracle		
Geant4	May need an upgrade to handle VC9	Tracy	-			
LDF	for VC9		-			
OmniOrb			-			
Release Manager						
Binary Release for ST	Replacement for RM1 generated ST binary release	Navid				
command line interface to RM triggering and deleting builds	scripts in ~glast/infraBin/ReleaseManager	Navid	+			Deleted builds can't be re-triggered currently. Trigger builds isn't fully tested
Doxygen Generation	RM2 will generate Doxygen documentation rather than RM1	Navid	+			

Geomtry and materials file creation	RM2 will generate geometry and materials summary files rather than RM1	Navid, Joanne	⊖			Programs RM needs to call are in detModel; Joanne is package owner.
Automated Builds on Supported Platforms						
RHEL4		Navid	⊕			
RHEL4-64		Navid	⊕			
RHEL5-32	Need f2c extlib and current ROOT	Navid	⊕			
RHEL5-64	Finishing up the remaining externals, then update DB		⊖			
Windows	Builds are occurring, need automated builds for releases	Navid	⊖			
Mac (tiger) for ST		Navid	⊕			Automated, Limited to one build at a time
RM2 web interface	try it	Karen				
Provide links to checkout output	Available in test version on tomcat	Karen				
Provide links to compile output	Available in test version on tomcat	Karen				
RM2 stand alone app interface	RMViewer. See User's Guide	Navid	⊕			
Provide checkout output		Navid	⊕			
Provide compile output		Navid	⊕			
Display status of unit tests		Navid	⊕			
End User Needs						
User Installs	Available via RMViewer and web based installer (see below)	Navid	⊕			
Need user installs for Windows	Need to create zip files and have RMViewer unzip them	Navid	⊖			
command line installer	Needed by those using cron jobs	Navid	⊖			
Environment set up to run applications stand alone		Navid, Joanne	⊕			Wrapper scripts, _setup
Environment set up to run applications with python	PYTHONPATH is now set up appropriately		⊕			This one might be done also (see above)
Bootstrap method to determine paths to GLAST_EXT and binaries using appropriate variant and compiler strings		Tom, Navid, Joanne				
Web Based Installer	Try it					
add a new column to the os table in MySQL which listed the OsType	(for example Windows, MAC OS X, Linux) and OsVariant (32/64) I want to show users only the releases which are compatible with the machine they are running the installer on but it is hard at the moment without building in a lot of assumptions concerning mapping osName to osType.	Navid?				Need to have a talk with Tony
Fix the mapping between downloaded file name and unpacked name to make sure they are always consistent	ScienceTools is unpacked into ScienceTools-09-11-00/ Ape (and other externals) unpack into ape/2.3-gl1/					Need to talk with Tony
the 64/32 bit and debug/optimized files are difficult to tell apart because they only differ far down the install path	If it was possible to add some consistent tag file to all of the zip/tar files that would make things easier? Would it be possible for example for all zip/tar files to contain a <package></version></variant></os>.tag					Need to talk with Tony
Science Tool Specific						
Provide setup of environment for ASP	Proposal (in progress)	Navid, Joanne				
Provide setup of environment for user analysis		Navid, Joanne	⊕			
GlastRelease Specific						
Migrate GR v15r49 to SCons		Emmanue I	⊕			
Migrate GR HEAD to SCons		Joanne				
Migrate JO files to top-level directory		Navid				
Update System Tests to use SCons		Leon, Liz				
Provide SCons support for Gaudi		Joanne, Heather, Navid				pending availability of new Gaudi
OBF reorganization	See proposal	Tracy, Joanne, Navid				
Provide setup of environment to run Gleam and other apps						
ft2Util						
Migrate to SCons	Pending migration of GR related packages like digiRootData					
ASP						
SConsify	[http://confluence.slac.stanford.edu/display/SAS/ASP-to-SCons+conversion+status+by+package]	Joanne				
RSP						
Consider reorganization to avoid dependency on both ASP and ST		Joanne				

SConsify		Joanne and friends				
CHS Specific						
Migrate CHS packages to SCons		Bryson, Navid, Joanne, Jim Panetta	+			
relocatable RPM's creation needs to use SCons	(FOS) uses the CHS checkout package to build relocatable RPM's that we install in SLAC AFS space for our various software 'platforms'. We use glastpack.pl to extract a suitable source tree from offline CVS, and then build with CMT. This process needs to use SCons.	Jim Panetta				
Migrate regression testing to use SCons builds rather than CMT builds	We rely on the RM HEAD and release build processing to perform the regression tests on the event-decoding software portions of CHS. However, to my knowledge there are no customers of the RM-created CHS build directory hierarchies in NFS	Jim Panetta				
External Libraries						
Utilize native or non-CMT builds of all externals where appropriate (LDF, OBF, G4)						
RHEL4-64						
Gaudi						
Geant4						
LDF						
OBF	Work is involved to get FSW to build	Tony Waite				
OmniOrb						
RHEL5-64						
FOX						
Gaudi						
Geant4						
LDF						
OBF	Work is involved in getting FSW to build	Tony Waite				
OmniOrb						
Documentation						
Workbook needs to be updated to introduce SCons	A start is available in Confluence	Chuck, Heather				