Repository and Releases Technical Group Issues

Status and Plans

ATLAS Software Workshop

May 2000

M. Stavrianakou

Repository (I)

Repository policy

document updated http://atlasinfo.cern.ch/Atlas/GROUPS/SOFTWARE/HELP/cvs_srt/repository_policy.html

Highlights

- The official ATLAS CVS repository is the unique media through which ATLAS software (both fully validated and in development) should be exchanged between developers and between developers and users.
- The repository consists of 2 main areas:
 - Official ATLAS software
 - External software
- A (new) developer wishing to contribute to an existing package at any level (either by committing changes or by importing one or more subpackages) should contact the corresponding coordinator who will then instruct the librarian to grant commit access at the appropriate level(s).

The coordinator will at that time or some later stage decide whether tag access is also to be granted and instruct the librarian accordingly.

Repository (II)

External software

- inside the repository
 - external packages in the repository are either of the shareware type (e.g. software downloaded from an ftp site) or "pseudopackages" for truly external software
 - the latter are meant to allow version control for the external software and provide an SRT interface so that this external software can be used by the ATLAS packages in a seamless and straightforward fashion
- outside the repository
 - under /afs/cern.ch/atlas/offline/external, following agreed procedure, see http://atlasinfo.cern.ch/Atlas/GROUPS/SOFTWARE/HELP/librarian/External_Pr oposal.txt
- Contributed software (Contrib/ package)
 - obsolete and removed from releases

"Supported" platforms

• Now HP, DEC, SUN, LINUX

- HP-UX 10.20 with aCC 1.21
- DEC-OSF 4.0 with Digital C++ 6.1
- SUN-SOLARIS 2.5.1 with SUN CC-4.2
- LINUX RedHat 6.1 with egcs-1.1

Dropped

- IBM-AIX January 1st, 2000
- LINUX RedHat 5.1 starting from release 1.1.0

To be dropped?

- DEC(?)
- HP(?)
 discussion on RISC (FOCUS and ATLAS proposals) to be introduced by
 N. McCubbin (?)

Releases

• Fortnightly (developers') releases

- 42 releases in ~23 months

• Nightly builds

- complete build (incl. self-tests) from scratch
- essential in order to facilitate early problem detection as well as overall integration
- automatic developer e-mail notification in case of errors to be implemented

• Possible improvements

- tag submission via WWW interface
- possibility of using packages from previous release(s)
- see also discussion on ART issues introduced by S. Fisher(?)

Production Release

• Release 1.0.0

(see http://atlas.web.cern.ch/Atlas/GROUPS/SOFTWARE/OO/dist/1.0.0/) made end April 2000 after extensive but incomplete validation (see http://www.cern.ch/Atlas/GROUPS/SOFTWARE/HELP/testing/)

- => given that the validation is incomplete, it is recommended to test the software with a few events before embarking on any large scale production.
- includes only "production" software i.e. packages used for various TDRs
- only archive libraries built and used (except for external and system software)

reminder:

production releases are labelled as x.0.0 or x.0.z, where the non zero z signifies bug fixes in production packages

Repository, Build and Release Tools

WE NEED TO ADDRESS SUPPORT (incl. further development) ISSUE NOW!

Several tools installed and maintained by L. Tuura until end April 2000

- SRT now 0.3.2f
- CVS server
- Build server
- Build logfile analyser
- Browsers
- Automatically updated list of package coordinators
- Dependency Grapher
- FAQ

most of them available via the ATLAS Software Server http://atlas-sw.cern.ch/

Technical group issues

http://atlasinfo.cern.ch/Atlas/GROUPS/SOFTWARE/HELP/TechnicalGroup/index.html

Issues being addressed:

- Documentation for users and developers (H. T. Phillips and M. Stavrianakou)
- Support for Java (S. Fisher, J. Hrivnac)

Several issues forwarded to CSG/ATeam/QC; discussion foreseen at next CSG

- Naming conventions and namespaces, Package names
- Garbage collection
- Setup scripts for ATLAS offline
- Exceptions

Problems: mandate not entirely clear, lack of commitment (open group, no official members) => to be discussed with Comp. Coordinator, CSG etc