Contribution ID: **194**   Type: **poster**

Organization and Management of ATLAS nightly builds

Monday 23 March 2009 08:00 (20 minutes)

The system of automated multi-platform software nightly builds is a major component in ATLAS collaborative software organization and code approval scheme. Code developers from more than 30 countries use about 25 branches of nightly releases for testing new packages, validation of patches to existing software, and migration to new platforms and compilers. The successful nightly releases are transformed into stable releases used for data processing worldwide. ATLAS nightly builds are managed by NICOS control tool on the computing farm with 40 powerful multiprocessor nodes. NICOS provides a fully automated framework for the release builds, testing, and creation of distribution kits. The modular structure of NICOS allows for an easy integration of third-party build and validation tools. The ATN test tool is embedded within the nightly system and provides the first results even before the full compilations completion. Several ATLAS test frameworks are synchronized with NICOS jobs and run larger production jobs with the nightly releases. NICOS web pages dynamically provide information about the progress and results of the builds. For faster feedback the e-mail notifications about nightly build problems are automatically distributed to responsible developers.

Author: UNDRUS, Alexander (BROOKHAVEN NATIONAL LABORATORY, USA)

Co-authors: QUARRIE, David (LBNL, USA); OBRESHKOV, Emil (DESY, Germany); LUEHRING, Frederick (University of Indiana, USA); RYBKINE, Grigori (LAL, France)

Presenter: UNDRUS, Alexander (BROOKHAVEN NATIONAL LABORATORY, USA)

Session Classification: Poster session

Track Classification: Software Components, Tools and Databases