Automated Testing Infrastructure for LHCb Software Framework Gaudi

Monday 23 March 2009 08:00 (20 minutes)

An extensive test suite is the first step towards the delivery of robust software, but it is not always easy to implement it, especially in projects with many developers. An easy to use and flexible infrastructure to use to write and execute the tests reduces the work each developer has to do to instrument his packages with tests. At the same time, the infrastructure gives the same look and feel to the tests and allows automated execution of the test suite. For Gaudi, we decided to develop the testing infrastructure on top of the free tool QMTest, used already in LCG Application Area for the routine tests run in the nightly build system. The high flexibility of QMTest allowed us to integrate it in the Gaudi package structure. A specialized test class and some utility functions have been developed to simplify the definition of a test for a Gaudi-based application. Thanks to the testing infrastructure described here, we managed to quickly extend the standard Gaudi test suite and add tests to the main LHCb applications, so that they are executed in the LHCb nightly build system to validate the code.

Presentation type (oral | poster)

oral

Author: CLEMENCIC, Marco (European Organization for Nuclear Research (CERN)) Presenter: CLEMENCIC, Marco (European Organization for Nuclear Research (CERN)) Session Classification: Poster session

Track Classification: Software Components, Tools and Databases