

Build and test system for FairRoot

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One of the challenges of software development for large experiments is to manage the contributions from globally distributed teams. In order to keep the teams synchronized a strong quality control is important.

For a software project this means that it has to be tested on all supported platforms if the project can be build from source, if it runs and in the end if the program delivers the correct results.

This tests should be done frequently which results immediately in the necessity to do these checks automatically.

If the number of different platforms increases it becomes impractical to have installations of all supported platforms at one site. To overcome this problem, the best way is to use a client server architecture, which means to run the quality control at the place where a specific platform is installed and used (client) and only the results are send to a central server responsible for the processing of the data.

The scheme used within FairRoot to fulfill this requirements will be presented.

The configure, build and test framework is based on CMake an open source tool to generate standard build files for the different operating systems/compiler out of simple configuration files.

To process and display the gathered data the open source tool CDash is used. From the generated web pages information about the status of the project at a given time can be obtained.

Presentation type (oral | poster)

oral

Primary authors: Dr UHLIG, Florian (GSI Darmstadt); Dr AL-TURANY, Mohammad (GSI Darmstadt)

Presenter: Dr UHLIG, Florian (GSI Darmstadt)

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