

14th Technical Meeting on Control Systems, Data Acquisition, Data Management and Remote Participation in Fusion Research

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Updating the Build, Test, and Deploy systems for MDSplus

Monday, 15 July 2024 16:00 (20 minutes)

In order to better support development efforts on MDSplus, we needed to improve the Continuous-Integration/Continuous-Deployment (CI/CD) systems building MDSplus. To that end, we have created a new Jenkins server, utilizing the new scriptable Jenkinsfile method and modern security principles. Additionally, we have moved off of autotools, and on to CMake for our build system. Existing tooling and scripts were rewritten in modern Python as well.

This enabled us to revisit the existing test suite and find areas that needed improvement. For example, infrastructure for running IDL and MATLAB tests has been added. Tests can now run in parallel, allowing for faster local development and automatic testing for Pull Requests (PRs). New versions will now be tested against themselves, and against older versions of the client and server.

This will allow us to focus on better packaging and improved code coverage in the near future.

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