

Building large-scale automation frameworks for Embedded projects

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Abstract text Jenkins is one of the most popular automation servers. It's being widely used in Embedded and Hardware areas thanks to its numerous plugins, flexibility and open-source origin. There is not so many specific plugins available for Embedded/Hardware toolchains, but it can be effectively used it as a general-purpose framework in order to setup Continuous Integration and Delivery flows.

In this talk I'm going to present best practices related to creation of large-scale automation systems for Embedded projects with Jenkins. I'll address common use-cases like integration with development tools and hardware peripherals, usage of computing grids, reporting of build, test and coverage reports. In particular, the following items will be covered: Jenkins Pipeline, System scripts, Custom Tools, parallelization and project templates. I will also share an automation war story from one of the real projects and talk about lessons learnt.