

Deployment, Customization and Case Studies of the self-hosted C++ library package manager Conan in the software plugin development for controlling the Synchronization System Segment for the Booster Injector

Wednesday 29 October 2025 14:00 (15 minutes)

The work is devoted to the implementation of the C++ library package manager Conan in the Maestro Software plugin development for controlling the Synchronization System Segment for the Booster injector. It describes the process of deploying a self-hosted Conan server, customizing existing supported libraries into the Conan package format, and automating their build and delivery using CI/CD tools. The author demonstrates the details of Conan workflows automation through custom script files tailored for Windows and Linux. The work focuses on supporting collaborative development of C++ software libraries. The author details the use of Conan in combination with the MSVC compiler and the Ninja build system in CMake projects. The proposed approach provides centralized storage, reuse, and simplified integration of the software component base.

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Session Classification: Information Technology

Track Classification: Information Technology