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Integration and Deployment of a Distributed and Pluggable Industrial Architecture for the PERFoRM Project

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Abstract

To meet flexibility and reconfigurability requirements, modern production systems need hardware and software solutions which ease the connection and mediation of different and heterogenous industrial cyber-physical components. Following the vision of Industry 4.0, the H2020 PERFoRM project targets, particularly, the seamless reconfiguration of robots and machinery. This paper describes the implementation of a highly flexible, pluggable and distributed architecture solution, focusing on several building blocks, particularly a distributed middleware, a common data model and standard interfaces and technological adapters, which can be used for connecting legacy systems (such as databases) with simulation, visualization and reconfiguration tools.

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