Massively Reengineering Architectures With Automated Tools

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Abstract

Architectures are intended to be structuring principles for applications. However, with legacy systems they are often based on assumptions which have long since changed, and are now an obstacle. We believe that the fluidity of an architecture is a function of the tools available for massively modifying systems. In this talk, we will briefly sketch a tool, DMS, for making massive changes, and focus on how its fundamental mechanism, program transformation, is being applied to reengineer the architecture of a very large-scale, distributed avionics software system coded in C++.