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OPSCONF - CONFIGURATION MANAGEMENT FOR NON-DEVELOPERS

Abstract

Since 2021, CNES operates its new satellite missions with its new generation of control centers, based on the ISIS Product Line. An important effort was conducted to have homogeneous processes and tools between all the new missions, when possible across functional teams. To have safe and successful operations, one key element is configuration management. It must be possible to re-deploy the software in the exact state of day one if needed and, above all, to keep tracks of all changes, especially those of day-to-day operations.

This paper will describe the journey of configuration management on these control centers. It will start with a very brief history of CNES elder systems, using CVS, and what was planned as a replacement in the newer systems. It will then describe how git was introduced has the state-of-the art tool for all configuration management, for all teams and built upon, with tools implementing workflows that enabled a controlled and efficient integration of the control center. When non-developers operators came in, it was clear that this tooling was not matching the day-to-day needs and had the opposite effect of putting them in stress and out of control. We finally describe the new tool CNES built around git to put operators back in control: a file-oriented version management that fits more their needs and implement a process they really master.