



Contribution ID: 300

Type: Poster

Code health in EOS: Improving test infrastructure and overall service quality

Tuesday, November 5, 2019 4:15 PM (15 minutes)

During the last few years, the EOS distributed storage system at CERN has seen a steady increase in use, both in terms of traffic volume as well as sheer amount of stored data.

This has brought the unwelcome side effect of stretching the EOS software stack to its design constraints, resulting in frequent user-facing issues and occasional downtime of critical services.

In this paper, we discuss the challenges of adapting the software to meet the increasing demands, while at the same time preserving functionality without breaking existing features or introducing new bugs. We document our efforts in modernizing and stabilizing the codebase, through the refactoring of legacy code, introduction of widespread unit testing, as well as leveraging kubernetes to build a comprehensive test orchestration framework capable of stressing every aspect of an EOS installation, with the goal of discovering bottlenecks and instabilities before they reach production.

Consider for promotion

No

Primary authors: SINDRILARU, Elvin Alin (CERN); BITZES, Georgios (CERN); LUCHETTI, Fabio (CERN); PATRASCOIU, Mihai

Presenter: PETERS, Andreas Joachim (CERN)

Session Classification: Posters

Track Classification: Track 5 – Software Development