

FTS3: Data Movement Service in containers deployed in OKD

Thursday, 20 May 2021 16:05 (13 minutes)

The File Transfer Service (FTS3) is a data movement service developed at CERN which is used to distribute the majority of the Large Hadron Collider's data across the Worldwide LHC Computing Grid (WLCG) infrastructure. At Fermilab, we have deployed FTS3 instances for Intensity Frontier experiments (e.g. DUNE) to transfer data in America and Europe, using a container-based strategy. In this article we summarize our experience building docker images based on work from the SLATE project (slateci.io) and deployed in OKD, the community distribution of Red Hat OpenShift. Additionally, we discuss our method of certificate management and maintenance utilizing Kubernetes CronJobs. Finally, we also report on the two different configurations currently running at Fermilab, comparing and contrasting a Docker-based OKD deployment against a traditional RPM-based deployment.

Primary authors: Dr HOLZMAN, Burt (Fermi National Accelerator Lab. (US)); KARAVAKIS, Edward (CERN); LOBATO PARDAVILA, Lorena (Fermi National Accelerator Lab. (US)); TIMM, Steven (Fermi National Accelerator Lab. (US)); BRYANT, Lincoln

Presenter: LOBATO PARDAVILA, Lorena (Fermi National Accelerator Lab. (US))

Session Classification: Virtualisation

Track Classification: Distributed Computing, Data Management and Facilities