

Migrating CTA Frontend from XRootD/SSI to gRPC

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The CTA Frontend serves the physics workflow event requests made by the disk system buffer, for example EOS or dCache, and cta-admin commands submitted by operators and automated scripts. Communication with the frontend is currently based on XRootD/SSI. However, not all disk front-ends support the SSI extensions to XRootD, which creates a constraint for sites using CTA as a tape backend. As a result, we have decided to migrate CTA to a more widely-supported protocol.

This talk will present the ongoing work on migrating from XRootD/SSI to the industry-standard gRPC framework. We will present the implementation of the rpc methods, discuss how authentication works with gRPC vs XRootD/SSI and finally discuss the roadmap for completely switching to gRPC.

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