





FIFE Plans and Muon g-2

Muon g-2 SCD Computing Workshop 2nd March 2022 Lisa Goodenough for FIFE

Upcoming 'BIG' Changes

Jobsub_lite will be replacing jobsub

 Tokens will be replacing ceritificates for Authentication/ Authorization



Jobsub_lite

Issue

- Current jobsub code base supports many outdated use cases, along with new features and is thus cumbersome to maintain.
- Substantial rewrite required to support tokens.

Solution

- Refactor jobsub into a new server-less architecture that interacts with separate schedd, much like CMS
- Also, like CMS, allow users to use condor commands directly if they choose or want access to advanced features
- Native token support

Status

- Basic jobsub_submit client working and in testing
- Token auth work in progress
- Expected available for user testing this year.



Jobsub_lite cont.

- Small changes to the g-2 submission scripts may be needed for jobsub_lite
- No change in the behavior of job submission is expected
- Significant behind-the-scenes testing will be done before jobsub_lite becomes available for general testing
- As a jobsub_lite developer, I can be involved in testing for g-2 and can work closely with Liang who manages the submission scripts
- In short, we don't expect the transition to jobsub_lite to be a burden for g-2



Tokens

- OAuth-based JWT (JSON Web Tokens) access tokens will be replacing X.509 certificates
- Service providers are working hard to integrate tokens into their services
- Tokens are hidden from the end user just like certificates are, so users will not be greatly impacted
 - A new client: htgettoken uses a kerberos ticket to create an access token
 - If user does not have a Kerberos ticket, it can also do a Services username/password authentication
- Significant testing of token usage will be done before the transition is made the Token Task Force is organizing this effort
- With the extensive testing planned, we don't expect any significant issues with the move to tokens



Other: Offline Software

- We are aware that Muon g-2 plans to NOT make any changes to it's Offline Production event processing software (externals), beyond what is absolutely required (for security reasons, siftware end-of-life, etc)
- As Offline Software Manager for Muon g-2, I am plugged into the experiments and can work closely with Adam to respond to situations as they arise

