



Token Transition common aspects

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v0.9

Common aspects (1)

- Lessons learned from DC24
 - IAM should **stop storing access tokens** in its DB – ETA Dec or early next year
 - FTS should refresh tokens much less frequently and also allow for an alternative, more efficient workflow for big customers – available since summer
 - Experiments should consider reducing pressure on FTS and IAM
 - ATLAS are using **file-scoped** tokens with **multi-day** lifetimes in production subset
 - FTS neither exchanges nor refreshes any such tokens
 - **4.3 M** concurrent tokens seen so far, no problems
 - LHCb also intend to go this way
 - CMS are using **dataset-scoped** tokens with **multi-hour** lifetimes in production subset
 - FTS exchanges and refreshes the tokens
 - **0.7 M** concurrent tokens seen so far, no problems
- Token usage for **tape** operations under discussion
 - Should be able to handle staging $O(1M)$ files over many days

Common aspects (2)

- Token **lifetime** discussions in various forums
 - **Security** considerations, depending on workflow
 - **Pressure** on services involved (FTS, IAM, ...)
 - **Fallout** when IAM is unavailable for some time
 - IAM will be **Highly Available**, but concerns exist about **staffing**
- Auxiliary services
 - For robustness and/or simplifying workflows
 - CMS intend to make use of **HTVault** developed at **FNAL**
 - Being deployed also at CERN, building on the existing Vault service
 - **MyToken**, developed at **KIT**, could be an alternative
- Next milestone would be **grid jobs** using tokens
 - Different solutions depending on workflow management system
 - IAM may see much higher token rates – guesstimate: < 10x