

Creating Federated Data Stores For The LHC

Introduction
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Motivation

- Became obvious in the April Atlas SCW
 - Federated xrootd in 3 of 4 LHC experiments
 - Alice, US Atlas, and US CMS
- While approaches differ
 - Trajectory and end-point roughly the same
- Why not get all three together?
 - Discuss similarities and differences
 - Three heads are better than one (usually).

Envisioned Format

- Technically focused 2 day meeting
 - Presentations from people doing the work
 - Initial date (September 13-14) became problematic
 - Today's date was the last best bet for 2011
 - In the mean time, the world continued to move
 - E.G. WLCG TEG's started
- While federated xrootd is the motivator
 - Format loose enough for associated topics
 - Federated storage impacts many other systems
 - But we didn't want it to become a free-for-all

Proposed Meeting Topics

- All things federated
 - Data Access Models
 - Name Space
 - Monitoring
 - Security
 - Support
- This proved to be too aggressive!
 - Required rethinking motivations and approaches
 - More importantly, I suppose, brand new presentations

The Actual Topics

- Remarkably, many fit into original idea
 - Data Access Models & Monitoring
 - Unfortunately, only somewhat so in name spaces
- Some topics untouched
 - Security and Support
 - Are these really solved?
- Bulk of presentations in associated impacts
 - But some associated topics are missing
 - E.G. File systems and protocols
 - Perhaps inevitable for the 1st such meeting

Goals

- Identify impediments to successful federation
 - But successes should not be ignored
- Outline broad technical solutions
 - Actual approach is part of ongoing investigation
- Establish framework for technical co-operation
 - Reduce redundant effort
 - Elimination is likely too optimistic at this point
- Ideally, spur the adoption of federated storage

The Really Important Stuff

- Fire exits
 - Use the front doors, go upstairs and exit either side
- Bathrooms
 - Out in front and to the left of the spiral staircase
 - Additional ones upstairs and also in the far right corridor
- Wireless
 - Connect to ccin2p3 and use posted key
 - Though we highly encourage you to always be engaged!
- Lunch
 - Buffet in room 202 next to the reception desk
 - This is really on the first floor (Etage 0 in France)