

Why, How, When Xroot?

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Data
Management

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- Several different goals
- XROOT I/O server for CASTOR
 - Motivation:
 - more scalable I/O server for analysis
 - using XROOT server framework to implement a de-coupled CASTOR disk pool management (w/o LSF scheduling)
 - Time-scale: now (2.1.8)
 - aim at LSF free disk pools with next CASTOR release 2.1.9
- XROOT as potential common protocol
 - Motivation:
 - fewer file access protocols to support by users / providers
 - no intrinsic performance enhancements expected
 - Time-scale: unlikely that consolidation could finish before 2009/10 run
 - but planning / evaluation should start

- CASTOR
 - Secure RFIO has been released in 2.1.8
 - deployment impact in terms of CPU may be significant
 - Secure XROOT is default in 2.1.8 (Kerb. or X509)
 - Expect to lower CPU cost than rfio due to session model
 - No plans to provide un-authenticated access via XROOT
- DPM
 - support for authentication via xrootd is scheduled start certification begin of July
- dCache
 - XROOT protocol docs have been updated by A. Hanuchevsky
 - in contact with CASTOR/DPM team to add authentication/authorisation on the server side
 - evaluating common client plug-in / security protocol

- XROOT is strategic for scalable analysis support with CASTOR at CERN / T1s
 - will support other file access protocols until they become obsolete
- Preparations for (protocol) consolidation with DPM and dCache are starting
 - useful, but a different activity
 - co-ordinated between storage providers
 - careful evaluation of advantages / problems will take time and should start at T0 / T1
- Feedback on consolidation priority welcome