

Introduction and experiment requirements



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Introduction

■ Pre-GDB dedicated to Grid Storage Services

■ Morning session

- Experiment requirements for Tier-1s and Tier-2s
- WLCG Client Tools
- Tier-2 specific Storage Solutions
 - DPM
 - StoRM

■ Afternoon session

- Dedicated to dCache
- dCache for Tier-2s
- dCache for Tier-1s
 - Starts at 3:00pm to allow U.S. sites to connect



Goals

- **Make release plans well known for each storage implementation**
- **Get configuration and management advice**
- **Share experiences and best practices**
- **Bring to the attention of the developers the most urgent issues and missing features needed in order get ready for LHC operations**
 - Hints on logging and monitoring
 - Organization of support
 - New features



Experiment requirements

- **Derived from what experiments have asked the sites to configure + their immediate needs (to be discussed)**
- **General characteristics:**
 - Use of explicit space token descriptions is optional
 - Some experiments require that paths are connected to pools (for pool selection or pool protection)
 - Pools are normally used for both read and write operations
 - Tier-1s are normally used for raw data storage (coming from the T0) and reprocessing
 - Tier-1s exchange data with Tier-0 and Tier-1s
 - Tier-2s are normally used for simulation and user analysis.
 - Tier-2s exchange data with Tier-1s



Experiment requirements

- **Read/write access to pools can be restricted**
 - How is that achieved ?
- **Data are sometimes copied over the WAN twice**
 - Missing PurgeFromSpace or pinning capability
- **Specific staging buffer**
 - Accessible in write by production managers only
 - Tape access to users can be denied
 - Is it possible to select between multiple staging buffers ?
- **Support for T0D0 space for user analysis**
- **Pools used for group analysis**
 - Access restricted at country level using VOMS groups
 - Possibility to bind pools to namespace
 - Full ACLs on namespace
 - Group/User quota needed



Experiment requirements

- **Some file access requirements:**
 - Support for a large number of directory entries
 - For user analysis files can be very small. Support for this use case.
 - LAN file access via root (CASTOR?) or gsidcap or file (or rfio CASTOR)
 - Interest in xrootd
 - Used by Alice also for file transfers between T1s and T2s.
- **Report space usage in the information system for accounting purposes**



Thank You



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