



# Storage issues

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# CASTOR news

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- CASTOR 2.1.8-10
  - Released, looking for an appropriate time to upgrade at CERN
  - Fixes serious xrootd bug (failed transfers looked OK to xrootd)
  - Many other bugs addressed
- SRM 2.8 being stress-tested, close to release
  - Improved logging
  - *srmLs* returns file checksum
  - Asynchronous SRM requests are processed in time order
  - *srmStatusOfBringOnline* works correctly



# dCache news

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- See Patrick's presentation



# StoRM news

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- Collecting wish list for next release. Examples:
  - SL5 support
  - Checksum calculated in background on *srmPutDone*
  - Better dynamic info provider
  - Group-based and user-based quotas
  - Better logging



# DPM news

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- Latest version in production is 1.7.2
- Next release in the works
  - Fix a bug which makes the SRM 2.2 daemon to crash
  - New xrootd code to increase the stability of the xrootd access for ALICE



# FTS

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- FTS 2.2 still under certification
- Want to add the patches for the “SRM busy” logic and the checksum support
- Checksum support needs to be validated by the experiments



# GFAL/lcg-util

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- GFAL 1.11.8-1 and lcg-util 1.7.6-1 just certified for SLC4
- Fixed a bug serious for CMS (could not copy a file using a GridFTP TURL as destination)
- Better BDII failover



# SRM implementations

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- Objective
  - To document how the storage providers implement the SRM protocol
- Motivation
  - SRM is often ambiguous  $\Rightarrow$  specification not enough to define actual behaviour
  - A description of the implementations is unavailable / incomplete / scattered around
  - Useful for clients and data management frameworks
  - Useful to make discussions on SRM more focused on facts
    - Pointless to re-interpret again and again the specs
- Realization
  - “Living” document, best as Wiki
  - From existing documentation, input from developers on a “best effort” basis





# Next: addendum to SRM MoU

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- Check with the experiments what is really needed among what is still missing from the MoU addendum
  - VOMS support in CASTOR
  - Space selection for read operations in dCache
  - srmLs returning all spaces where a file exist not available in CASTOR
  - (“Client-driven” tape optimization not available anywhere)
    - Irrelevant
- Ranking
  - 0 = useless
  - 1 = if there, it could allow for more functionality in data management, or better performance, or easier operations, but it is not critical
  - 2 = critical: it should be implemented as soon as possible and its lack causes a significant degradation of functionality / performance / operations

