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# CASTOR 2

## Experiment Feedback Summary

CASTOR Delta Review  
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# Palette of Usages

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- ◆ Central Data Recording (DAQ)
  - Goal sustained 1 GB/s (ALICE)
- ◆ Distributed Data Productions T1/T2 import/export
  - T1/T2 to and from CERN Castor
  - Several PB stored in the last 6 months
  - >200K files/day
- ◆ End user analysis
  - Direct client use (LHCb, ATLAS?)
  - Xroot, AliEn (Alice)

# Problems and Concerns

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- ◆ Random freezes
  - Discovered by ALICE, under investigation.
- ◆ Periodic slowdowns
  - Disk de-fragmentation?
- ◆ Service degradation
  - Over three days ending with a complete stop (ATLAS)
- ◆ Networking problems
  - Castor performance suffered (LHCb)
- ◆ Low throughput/client
  - 1/2 link speed (ALICE)
- ◆ Stuck clients, transfer failures
  - 0.5% failures (ATLAS), 0.5% transfer errors/timeouts (Alice)

# Problems and Concerns (2)

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- ◆ Requests serviced at random order
  - Later requests are executed faster than early ones (ALICE, ATLAS)
- ◆ User mappings
  - Static mappings in Griptest file complicates tasks
- ◆ Deployment/upgrade problems
  - Incompatible client versions with old and new application software (ATLAS, LHCb)
- ◆ LFC slot usage
  - Each open file occupies one slot, reaching the limit (LHCb)
- ◆ Supported client platforms
  - X-platform and support for MacOS and Windows
- ◆ Big variations in user/expert support
  - ALICE very satisfied
  - ATLAS much less satisfied

# Conclusions

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- ◆ Millions of files being imported/exported, PBs stored
  - It works
  - Small number of errors
- ◆ General worries on performance and capabilities of coping with anomalous situations
- ◆ Big variations in user/expert support