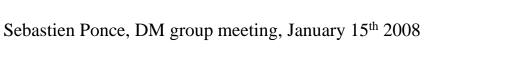




# CASTOR known features & outstanding bugs

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### Outline



#### CASTOR

- software status
  - 2.1.4 issues
  - why deploying 2.1.6?
- deployment for the CCRC
- plans until the next CCRC

#### SRM

- software status
- deployment for the CCRC
- plans until the next CCRC





### Castor software status



- 2 major versions of the software coexist
- 2.1.4 :
  - first release in September 2007
  - stable and deployed widely...
  - but has a number of known problems
- 2.1.6 :
  - first release end of January (2 weeks ago)
  - provides many improvements...
  - but only deployed for 12 days







## Why switch to 2.1.6



- Some of the 2.1.6 improvements
  - introduces scheduling of internal replication
    - avoids killing diskservers and then a full pool
  - much improved internal consistency checks

# Workarounds and cleanup scripts exists for 2.1.4 but put significant load on operation teams

- introduces policies for migration and recall
  - aims to improving tape efficiency
- introduces disk checksums
  - prevents data loss in case of bad disks
- Gain experience







## 2.1.6 status as of today



- Deployed on CMS for 12 days and Atlas for 7 days
- A couple of non critical problems have been found and fixed
- So far, no known remaining problems with 2.1.6
  - all workarounds have been dropped







## Castor deployment



- Tier 0
  - Atlas and CMS run 2.1.6-10
  - Lhcb, Alice and public run 2.1.4-10
    - plans to upgrade to 2.1.6 as soon as possible
- Tier 1s (CNAF, RAL, ASGC)
  - run 2.1.4-10
  - all have plans to upgrade after the CCRC







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## Castor's next step



- Next version (2.1.7) planned for beginning of April
  - in time for deployment mid April, before CCRC
- Foreseen improvements :
  - addressing the potential issues of first CCRC
  - scheduling optimizations
  - more scalable garbage collection
  - fix load balancing for all daemons







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### SRM software status



- Version 1.3-12 has been released few days ago
  - last iteration of a set of bug fix releases
  - fixing all known problems, including srm-copy
- version 1.3-10 is the minimum recommended for CCRC
  - it addresses issues around GET requests without space tokens
  - sites using 1.3-10 will not be able to use srm-copy





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## SRM deployment



- Tier 0
  - running version 1.3-12
  - all space tokens are setup
- CNAF
  - running version 1.3-11
  - finalizing the definitions of space tokens
- ASGC
  - running version 1.3-10
  - finalizing the definition of space tokens
- RAL
  - running version 1.3-8, currently upgrading to 1.3-12
  - all space tokens are setup





# SRM's next step



- By end of March
  - remove the restriction on number of daemons
  - improve database garbage collection
  - provide more admin tools if required
- By end of May
  - implement purgeFromSpace



