



Storage-ware Status

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Outline



- Current issues
- Storage Baseline Versions for CCRC08 in May
- Report from Storage Solution Working Group

Current issues



- FTS error:
 - Failed DESTINATION error during PREPARATION phase: [FILE_EXISTS]
 - **Problem observed by CMS (GGUS/Savannah tickets open by CMS, ATLAS, LHCb, ALICE)**
 - **It is due to original file creation srmPrepareToPut request failing and subsequent srmAbort/srmRm requests failing as well**
 - **Next retry fails because the file was not properly cleaned up**
 - **Discussions ongoing both in SSWG and in specific developers phoneconf –**
 - **A workaround+solution should be available soon**

Current issues



- CMS request to “ChangeSpaceForFiles” from T1D1 to T1D0
 - Allowed transition but not supported through SRM at the moment.
 - **dCache is currently trying to document the administrative procedure to do that (assisting PIC).**
 - **Is this something for which we should reconsider priority at least at the administrative level ?**

Current issues



- ATLAS reports poor performance for file deletion operations for all implementations but one (StoRM). The goal is to be able to delete file at a rate of 1Hz centrally via SRM
 - Check the presentation by V. Garonne
 - **The problem should be studied with the storage developers.**
 - **D. Litvintsev – dCache: “On Friday I put a fix that should alleviate issues observed with bulk deletes using srmrm. Next week release of dcache will contain this fix”**
 - **S. De Witt – CASTOR: “I am currently working on a more performing version of srmRm to support bulk deletion. This may be available in time for the May CCRC”**

Current issues



- ATLAS reports problems staging files from tape with both CASTOR and dCache.
 - **B. Koblitz has the details:**
 - **CASTOR:** “First at some point you will not see any longer any updates of the status of the files and then finally timeout. And second, the files always get staged into the DEFAULT pool, although the ATLASDATATAPE token is used.”
 - **dCache:** Does the problem really exist ? – FZK: “This suspended mode that these files have is not a strange one. When files are requested from tape and there is a dCache time out issue the files go into suspended mode and Doris has to manually restart the request.”
 - **Has the problem be observed by LHCb ?**
 - **The problem reported is under investigation both by dCache and CASTOR developers.**

Current issues



- Need for monitoring metrics and tools
 - **Monitoring the load of the SRM server**
 - **Checking the status of the storage backend**
 - are delete operations correctly executed ?
 - Is the file in the right pool ?
 - Is the file on disk or on tape ?
 - ...
 - **Input from experiments and site admins needed**
 - **Under investigation in several fora**

Storage Baseline Versions for CCRC08 in May



- **CASTOR** : SRM v 1.3-17, backend 2.1.7
 - Removed a couple of possible database deadlock scenarios
 - srmLs return structure now conforms to that of other implementations
 - Various minor database fixes
 - Fix for leaking sockets when srmCopy attempted
 - Added correct user mappings when executing PutDone
 - Various corrections to log information level
- Better bulk deletion (?)

Storage Baseline Versions for CCRC08 in May



dCache : 1.8.0-15 in development. Releasing date not yet known. A patch branch will be created for CCRC08.

For a list of fixes outside of the CCRC08 branch, please look here:

<http://trac.dcache.org/trac.cgi/report/11>

The dCache team does not force sites to upgrade. The decision is left to sites and experiments

Storage Baseline Versions for CCRC08 in May



DPM : 1.6.10 is being certified and will probably be the release available for CCRC08 in May.

The list of fixes/features can be found here:

<https://savannah.cern.ch/patch/index.php?1605>

- Group writable directories when SRM started with umask 0
- Support for MacOSX
- IPv6 support

Storage Baseline Versions for CCRC08 in May



StoRM : New release 1.4.0 in the first week of April 2008

The list of fixes/features can be found here:

http://storm.forge.cnaf.infn.it/doku.php?id=documentation:storm_release_plan

- Support for SL4/32bit
- New thread management
- GSOAP 2.7

Report from Storage Solution Working Group



- A meeting was held yesterday.
- **Priorities** on the features to be implemented agreed:
 - Protecting spaces from (mis-)usage by generic users
 - Selecting spaces on Get operations
 - Proper implementation of GetSpaceMetaData
 - Selecting tape sets
- It was agreed to produce a draft of the SRM v2.2 addendum to the WLCG MoU to be discussed among the developers by April 14th. The goal is to finalize the document with the experiments possibly in the week 14-18 April and pass to the implementation planning phase.