The SRM MoU

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Some background

- The CCRC08 exercise uncovered some of the <u>missing features</u> of SRM v2.2 implementations
    - Some of them were already known (GSSD)

- A first meeting was organized on February 4th between developers and experiments to understand how to overcome some of the uncovered limitations

- The dCache developers proposed to compile a document describing the set of new features requested and the use cases for them

- J. Shiers proposed to make an addendum to the WLCG SRM v2.2 MoU

The CCRC08 SSWG

- The CCRC08 Storage Solution Working Group goal is to finalize the SRM v2.2 MoU addendum and to verify that what described is actually provided.
  - The addendum would be "lightweight"
  - It would detail what has to be changed, with this being based on operational experience
  - This would then be checked by the technical people

- Members of the group are storage providers developers, experiment representatives, storage experts.

- A first meeting was organized on February 11th and a list of issues to comment and prioritize has been compiled.

Draft List of SRM v2.2 Issues

Priorities to be discussed & agreed:

- Protecting spaces from (mis-)usage by generic users
  - Concerns dCache, CASTOR
- Tokens for *PrepareToGet/BringOnline/srmCopy* (input)
  - Concerns dCache, DPM, StoRM
- Implementations fully VOMS-aware
  - Concerns dCache, CASTOR
- Correct implementation of *GetSpaceMetaData*
  - Concerns dCache, CASTOR
    - Correct size to be returned at least for T1D1
- Selecting tape sets
  - Concerns dCache, CASTOR, StoRM
    - by means of tokens, directory paths, ??

ATLAS

- Top priority based on our current experience:
  - Protecting spaces from (mis-)usage by generic users
  - … followed by implementations fully VOMS-aware
- Our next top priority cannot be enforced properly without the points above in place:
  - Tokens for PrepareToGet/BringOnline/srmCopy (input)
- Selecting tape sets:
  - Unclear, assuming we will either use directories or tokens
    - but nonetheless, we first need to be able to enforce and protect them
- Correct implementation of GetSpaceMetaData
  - T1D1: Total vs Used

LHCb

- Tokens for PrepareToGet/BringOnline/srmCopy (input)
  - Top priority. Should not allow to get a file recalled from tape into a T0D1 space, for T1D1 only if the file was put there in a first instance
- Protecting spaces from (mis-)usage by generic users, Implementations fully VOMS-aware
  - Both are closely linked. LHCb wants to set ACLs such that users do not pollute controlled space
- Correct implementation of GetSpaceMetaData
  - Should be for TxD1: total space and used space
- Selecting tape sets
  - LHCb would be happy with space token assignment. Important that the SAPath be not connected to the space!

CMS

- Protecting space from (mis)-use
  - Top priority

Warning: Not official CMS statement

- Tokens for srmBringOnline
  - (Almost) top priority; CMS needs improved prestaging
- Implementations fully VOMS-aware
  - (?) I'm sorry, I don't understand what is lacking. (B. Bockelman)
- Correct implementation of GetSpaceMetadata
  - Low Priority
- Selecting tape sets
  - Medium priority; most sites have not complained heavily about the current abilities.

Conclusions reached

- The top two issues are:
  - protecting spaces from misuse combined with implementations being fully voms aware
  - handling space tokens for 'more than write'

- VOMS awareness has been defined to mean:
  - access control on spaces based on voms groups and roles via the primary FQAN in a VOMS proxy.

- Storage developers would quantify the amount of coding effort and report to the group

- The planning is to fix all known problems by May leaving the misuse protection/voms awareness and tokens on recall till later (next year ?)