Status of SRM

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LHCC Referees meeting 10th May 2005

Agreement on functionality

Basic understanding

- SRM V1.1 is not sufficient
- Full functional set of SRM V2.1 and later is not required
- "LCG-required" functionality agreed Baseline services group and Storage Management workshop
- For SC3
 - V1.1 is sufficient
- For SC4

- LCG-set is required
- Workshop put in place a group (developers and experiments) to plan and monitor progress

LCG-required SRM functions

- SRM v1.1 insufficient mainly lack of pinning
- SRM v3 not required and timescale too late
- Require Volatile, Permanent space; Durable not practical
- Global space reservation: reserve, release, update (mandatory LHCb, useful ATLAS, ALICE). Compactspace NN
- Permissions on directories mandatory
 - Prefer based on roles and not DN (SRM integrated with VOMS desirable but timescale?)
- Directory functions (except mv) should be implemented asap
- Pin/unpin high priority
- srmGetProtocols useful but not mandatory
- Abort, suspend, resume request : all low priority
- Relative paths in SURL important for ATLAS, LHCb, not for ALICE

SRM status at Tier 1 sites

CERN

- Castor in production; update to new Castor for SC3
- FNAL
 - In production; dCache
- BNL
 - dCache in production, used in SC2. ??? status ???
- CC-IN2P3
 - dCache under test; planned for SC3
- PIC

- Castor in production; update to new Castor as CERN
- CNAF
 - Castor in production; update to new Castor as CERN

FZK

- dCache testing; not yet in production - planned for SC3
- ASCC
 - Castor not yet in production install this month on new hardware.
- RAL
 - dCache used in production (disk only). Tape backend used successfully in SC2. This should be production for SC3.
- NIKHEF/SARA
 - dCache/SRM on test cluster. Expect production in SC3.
- NDGF
 - No information

CASTOR SRM

- New implementation of SRM v1.1. needed for the new stager
- Two parallel implementations ongoing:
 - Re-use of RAL SE
 - RAL efforts working on the porting
 - Re-use of LCG SRM framework written for the LDPM
 CASTOR dev team working the porting
- Progress checkpoints
 - Mid-May: Demonstrate some minimal functionality (beyond 'ping'), e.g. 'get'
 - End-May: demonstrate fully functional SRM
- Interoperability tests with other clients should be coordinated by LCG and carried out in June

dCache SRM

- Pinning is available
- Provides durable (resilient) space but needed to allow other VO's access to space
- No space reservation
- Roles ACL's
 - Integration with VOMS and implementation of permissions planned
- Directory operations
 - Some implemented, others (rm, mv) need clarification
- Getprotocols is implemented
- Abort is implemented, but not suspend/resume
- Relative paths