

dCache at Tier 1 Sites plans for setting up SRM 2.2

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dCache 1.7

- Includes some SRM 2 features
- SRM service on separate machine, higher resources needed
- better monitoring for SRM
e.g. SRM Watch
- VOMs rules for storage plans

SRM2.2 requirements



Summary of S2 SRM v2.2 basic test -
 Wednesday 17 January 2007 07:52am CET *dCache*
 WLCG MoU SRM v2.2 methods



Ping	Not Out Log
PrepareToPut	Not Out Log
StatusOfPutRequest	Not Out Log
PutDone	Not Out Log
PrepareToGet	Not Out Log
StatusOfGetRequest	Not Out Log
BringOnline	Not Out Log
StatusOfBringOnlineRequest	Not Out Log
Copy	Not Out Log
StatusOfCopyRequest	Not Out Log
AbortRequest	Not Out Log
AbortFiles	Not Out Log
Ls	Not Out Log
Mkdir	Not Out Log
Rmdir	Not Out Log
Rm	Not Out Log
Mv	Not Out Log
ReserveSpace	Not Out Log
StatusOfReserveSpaceRequest	Not Out Log
ReleaseSpace	Not Out Log
GetRequestSummary	Not Out Log
GetRequestTokens	Not Out Log
GetSpaceTokens	Not Out Log
GetSpaceMetaData	Not Out Log
GetTransferProtocols	Not Out Log
ExtendFileLifeTime	Not Out Log
ReleaseFiles	Not Out Log
ChangeSpaceForFiles	Not Out Log
StatusOfChangeSpaceForFilesRequest	Not Out Log

Latest Results are at:

[http://grid-deployment.web.cern.ch/
grid-deployment/flavia/basic/s2_logs/](http://grid-deployment.web.cern.ch/grid-deployment/flavia/basic/s2_logs/)

Almost Ready

A bit more work

dCache SRM
 Timur Perelmutov, Fermilab

dCache workshop
 DESY, Hamburg 6

SRM 2.2 in dCache 1.8

- dCache 1.8 will be deployed in April 2007
- Storage classes independent of PNFS path, will be done in the background
- Planning for Tier 1 Sites
 - Different storage classes
 - Planning for experiment resources
 - Admins still don't know details how to setup
 - Need dCache 1.8 for update plans

Storage classes

Disk0Tape1

- Input Write Buffer for raw data (select via routing)
 - Sizes according to expected input stream
 - separate input buffers from output buffers
 - Small size (depends on throughput required)

Disk1Tape0

- Large volumes distributed on several servers regarding to the aggregated throughput required

Disk1Tape1

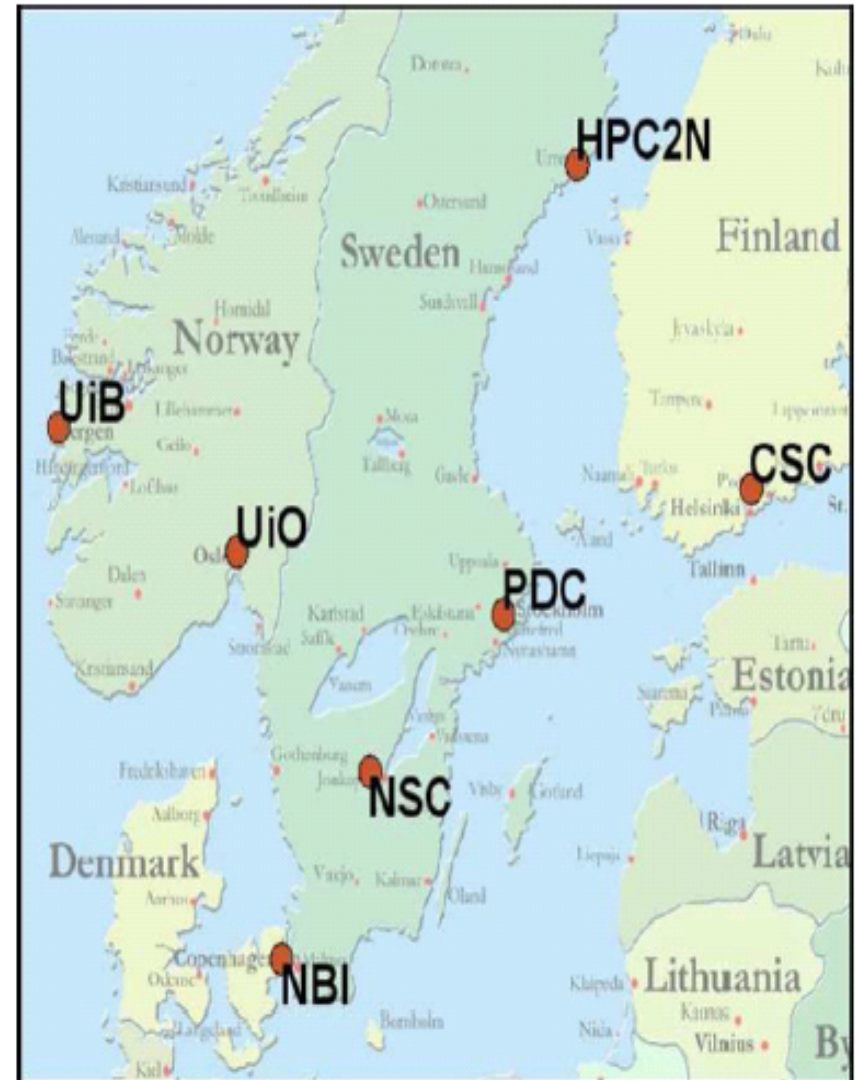
- Input and output buffer for T1 and T2 inter-traffic (e.g. AOD from T2, replicas to T1)

dCache 1.6.6 Tier 1 sites

- BNL
 - Running version 1.6.6-5
 - Update to 1.7 in approx. two weeks
 - Testbed for 1.7 in place and new features are tested
 - Want SRM overwrite feature (not included in 1.7)
 - Aim is to avoid simultaneous read/write operations on disk to improve the total throughput.
- PIC
 - dCache 1.6.6 disk-only
 - Castor for tape storage
- TRIUMF
 - Still running 1.6.6-5 update
 - Update to 1.7 in approx. two weeks
 - Testbed for 1.7 in place on virtual machines is doing all right

NDGF distributed Tier1

- Performance
 - No network model
e.g. SRM door assumes all GridFTP doors are equal
(except for current load)
- Functionality
 - Heterogenous access to HSM
 - Tape0Disk1 -> Tape1Disk1
may require file migration to another pool
 - User friendly view of logical name space



dCache 1.7 Tier 1 sites

- FZK GridKa

- Running 1.7-24 since 8th January
- 3 machines for headnode

- IN2P3

- Updated to 1.7 in November 06 with initial problems
- Now patch level 24

- Sara

- Running 1.7-18
- Still partial problems
- Next patch update soon

Summary

- Lots of confusion
- Lots of work to be done
- Exiting future
- But not much time left