

## dCache and SRM 2.2 The basic building blocks of space token management Prepared by Martin Radicke and Owen Synge





- Where we start
- How to enable Space management
- Writing to Reserved Space
- Implicit Space Reservation
- Space Reservation for non SRM transfers



- We have to start with
  - Virtual maschine with a running dCache
- What we are going to do now.
  - Create a space reservation
    - Enable space management
    - Create a link group





- Enable space Management
  - dCacheSetup
    - Contains the settings for dCache
      - Enabling space management
      - Disabling implicit space management (for now)
  - PoolManager
    - Controls how files are treated by dCache
      - Hierarchical module used to steer file storage
      - Pools -> Pool Groups -> Links -> Link Groups
      - Add only one pool to the Link which goes into the Link Group.





- Test the space Management
  - Client
    - getting space metadata from the client side.
    - Srm write, using a Space Token.
    - Delete File from the name space.
      - Effectively removing a file from a space as well.
      - Check space size.
    - client commands: get all tokens by Space Token Description
      - get metadata for each Space Token.





- Test the space Management
  - Server
    - resize the space
    - reserve a second space with the same description





•Implicit Space Reservation.

- enable implicit Space Reservation in dCacheSetup
- srmcp with Access Latency and Retention Policy.
  - srmcp with AC/RP witch doesn't match any LGs
    - should fail

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•Enable Space Reservation For Non SRM

- srmcp writes into managedSpace,
- gridFtp writes into unamangedSpace
- enable SpaceReservationForNonSRMtransfers in dCacheSetup
  - redo a gridftp write
    - Transfer should now go into managed space
    - Does not work for (gsi)dcap and xrootd