



## Quotas in Light weight Disk Pool Manager (proposal)

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June 2007





# VOMS integration



- DNs are mapped to virtual UIDs: the virtual uid is created on the fly the first time the system receives a request for this DN (no pool account)
- VOMS roles are mapped to virtual GIDs
- A given user may have one DN and several roles, so a given user may be mapped to one UID and several GIDs
- **Secondary groups are now supported (1.6.4)**
  - Authorization in name space is done using primary and secondary groups
  - Disk pool selection is done using primary group



# Proposal for DPM quotas



- Unix-like quotas
  - Quotas are defined per disk pool
  - Usage in a given pool is per DN and per VOMS FQAN
  - Primary group gets charged for usage
  - Quotas in a given pool can be defined/enabled per DN and/or per VOMS FQAN
  - Quotas can be assigned by admin
  - Default quotas can be assigned by admin and applied to new users/groups contacting the DPM



# Proposal for DPM quota interfaces



- Unix-like quota interfaces
  - **User interface**
    - dpns-quota gives quota and usage information for a given user/group (restricted to the own user information)
  - **Administrator interface**
    - dpns-quotacheck to compute the current usage on an existing system
    - dpns-repquota to list the usage and quota information for all users/groups
    - dpns-setquota to set or change quotas for a given user/group



# Proposal for DPM quota implementation



- Unix-like quota structures

```
struct dpm_quota {  
    char        poolname[16];  
    char        q_type;  
    int         q_id;  
    u_signed64  maxbytes;  
    u_signed64  curbytes;  
    u_signed64  rsvdnotused;  
    u_signed64  maxfiles;  
    u_signed64  curfiles;  
};
```