



LHCb user job workflows

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When do users read/write

- User jobs run at Tier-1s and a few Tier-2s with storage, and a few Tier-2s where user jobs are enabled
 - About 20 sites in total
- Users usually read files from storage at site the job runs at
 - But can failover to another copy at any other site
- Users have write access to space within LHCb_USER storage at Tier-1s
- Most reading/writing done with xrootd, but DIRAC logical file handling hides this
 - So typically users deal with LFNs
 - Underneath they are talking to SRM and then xrootd
 - (or RFIO or GridFTP)

What credentials and permissions apply

- DIRAC pilots get user payload jobs using DIRAC production credentials
- When payload jobs are submitted, the user has a proxy delegated to DIRAC proxy service
- DIRAC pilot does a pull delegation to get a proxy for that user on the execution machine
- This proxy is then given to the payload job when it runs
- So users access storage, file catalogue etc with their own identity
 - Production roles have write access to public files
 - Users only have write access to user files
- This is only done properly in VMs, where users and pilots have separate Unix accounts