

GRID STORAGE

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RECAP

- We have grid storage which is mounted on naf-luxe under /pnfs/desy.de/luxe.
- In which:
 - /pnfs/desy.de/luxe/tape-data: mounted on disk and replicated on tapes, meant for test beam and other valuable data e.g. E320 etc.
 - /pnfs/desy.de/luxe/tape-simulation: not mounted by default but instead replicated twice on tapes, meant for MC simulation dataset used in the TDR.
 - Other folders disk-only.
- Read-only to everyone on naf-luxe, but writing requires special access.

WRITING TO GRID

- ILC VO moved from DESY to CERN.
- Workflow to obtain write access has changed: <https://confluence.desy.de/display/LUXE/LUXE+storage+on+grid>
- Probably someone other than me should have a go and check if they could also write on grid.

INSTRUCTIONS FOR GETTING WRITE PERMISSION

1. Get a grid certificate from your preferred certification authority (e.g. <https://ca.cern.ch/ca/> if eligible).
2. Extract from it userkey.pem and usercert.pem in .globus.
3. Register at <https://ilc-auth.cern.ch/start-registration>
4. Confirm your registration and send the `cert_public.pem` file created out of your certificate with the command
`openssl pkcs12 -in certificate.p12 -out cert_public.pem -nokeys`
to ilcdirac-support@cern.ch
5. Wait until request is approved.
6. Join the group ilc/luxe and ilc/luxe/production.

INSTRUCTIONS FOR TESTING/WRITING

- Once this is all done, you can ssh to naf-luxe and set up grid and generate a proxy:
 - `source /cvmfs/grid.desy.de/etc/profile.d/grid-ui-env.sh`
 - `voms-proxy-init --voms ilc:/ilc/luxe/Role=production`
- There are several ways to write, some examples below with gfal2:
 - `gfal-mkdir srm://dcache-se-desy.desy.de:8443/pnfs/desy.de/luxe/dirname`
 - `gfal-copy file://`filepath` srm://dcache-se-desy.desy.de:8443/pnfs/desy.de/luxe/dirname/`
 - `gfal-copy --from-file files.txt srm://dcache-se-desy.desy.de:8443/pnfs/desy.de/luxe/mc21/`
(files.txt should contain list of files in file://`filepath` format)