



Data Transfer and Data base

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ILL side

- Local PC
 - Raid disk with 2 To
 - PC on the instrument network (10 Gbytes/s), not accessible from outside → need an ILL account
- ILL Serdon server
 - Double secure disk server
 - no problem to save 70 To
 - Structure of the data is the standard ILL one
 - by cycle, the OFF belonging to the previous cycle
 - The change occurs 2 days before the start on the new cycle
 - to be adapted for STEREO
- Transfer from local PC to LPSC is supported by ILL
 - Local PC → SERDON with rsync
 - SERDON → LPSC with rsync

ILL side

- Access data via the ILL Data portal

The screenshot displays the ILL Data Portal interface. At the top, there is a navigation bar with the ILL logo, 'Data Portal' text, and links for 'Experimental Data', 'Reactor Shutters', and 'Help'. The user is signed in as 'Anne STUTZ'. The main content area is divided into two columns. The left column contains search filters: 'Global Search' with a search box and a 'Search' button, and 'Advanced Search' with dropdown menus for 'My role in the experiment', 'Member', 'Cycle', 'Instrument', and 'Proposer', along with checkboxes for 'Attached documents' and 'Data Metadata or Numor'. The right column shows the 'Experiments list' for 'Experiment ST-4', with tabs for 'Proposal', 'Members', 'Data ranges', and 'Data folders'. Below the tabs, there are two folders: '161/stereo/exp_ST-4' and '162/stereo/exp_ST-4', each containing subfolders like 'histo', 'logfiles', 'processed', and 'rawdata'. At the bottom, a 'Data' section lists individual files with checkboxes and file names such as 'data_20160822_085226.root416 MB'.

LPSC side

- Data transferred to LPSC:
 - Nomad logfiles :
 - /stereodata/stereo/stereoill/**cycleID**/exp_ST-4/logfiles
 - Monitoring data:
 - /stereodata/stereo/stereoill/**cycleID**/exp_ST-4/histo
 - 1 xml file per day (50 Mo)
 - Python script to fill the DB (J. Lamblin)
 - Rawdata files:
 - /stereodata/stereo/stereoill/**cycleID**/exp_ST-4/rawdata
 - DAQ parameters files: param_YYMMDD_hhmmss.txt
 - Scalers files: scalers_YYMMDD_hhmmss.txt
 - root file with DAQ param and scalers included : data_YYMMDD_hhmmss.root

LPSC side

Data produced at LPSC

- DB filling with monitoring data: (J. Lamblin):
 - HV + sensors data
 - Python script xml2database.py running every 30 s
- Preprocessing (V. H elaine):
 - Perl script preprocess.pl running every second
 - Preprocess files at the end of each run
 - For all type of runs, fill the DB with:
 - Run infos and DAQ parameters
 - scalers data :
 - single PMT rates above CFD threshold
 - trigger rates by FE board
 - Output of the preprocessing depends on the type of run:
 - PE Runs: produce PE fits and fill DB
 - Single LED Runs: fit and fill DB
 - Other runs: produce ppd files: ppd_YYYYMMDD_hhmmss.root
 - /stereodata/stereo/preprocessed/**cycle_ID**/exp_ST-4/ ppd_YYYYMMDD_hhmmss.root

CCIN2P3 side

Data transferred from LPSC to CCIN2P3

- Rawdata files
 - Transfer files (>20 Mo) using iRods on HPSS → /ccin2p3/home/sterprod
 - Generic unix account @ ccin2p3 : sterprod
 - Perl script « transfert2CC.pl » running every 5 mn (A. Stutz)
 - Same data structure than at ILL and LPSC :
/ccin2p3/home/sterprod/stereoill/**cycle_ID**/exp_ST-4/rawdata/data_.....root
 - Request on HPSS for 2016 was 22 To
 - **Access to the data via RFIO or XROOTD : to be tested**
- Preprocessed files
 - For the time being, files are too small to go on HPSS
 - rsync from LPSC to CIN2P3: preprocessed → /sps/hep/stereo/ILL_DATA
 - Request on /sps for 2016 was 10 To
 - only 2 To available up to now, request for extra 8 To
 - Access with standard unix command

Data base

- DB contains
 - Infos on runs (liste of run and DAQ parameters)
 - Monitoring data
 - Calibration data
- DB was transferred from LPSC to ccin2p3
 - Read only account (only SELECT and EXECUTE)
 - user : stereo_ro
 - p-w-d : fUW2AMbYKa8c
 - base : stereo
 - host : ccmyga02.in2p3.fr (134.158.107.189)
 - port : 3319
 - For Read/Write ask me
- Direct access possible from the following IP adress
 - 134.158.xxx.xxx (interactives, workers, machines de services, postes de travail, ...)
 - 172.17.xxx.xxx (cloud des VM du CC)
 - 193.48.97.xxx (cluster WEB des sites hébergés au CC)
- Access via phpmyadmin
 - <https://database.in2p3.fr/phpMyAdmin/>