

LCLS use of IRMIS

IRMIS at LCLS

Summary

"IRMIS is a collaborative effort between several EPICS sites to build a common Relational DataBase schema and a set of tools to populate and search an RDB that contains information about the operational EPICS IOC's installed at that site." IRMIS (the schema, crawler programs and UI) was developed by Don Dohan and Claude Saunders at APS.

The IRMIS Oracle database is populated by perl crawlers that find and parse IOC startup files and PV client (ALH, CAR, CW, sequence) config files. The crawlers are run nightly. The IRMIS database contains IOC and PV lists, PV info (fields and values, links, db and templates of origin, etc.), and config file structures. A java GUI allows querying of the lists.

The GUI

The IRMIS gui can be invoked in 3 ways:

- solaris and linux workstations: enter on the command line:
 - irmisUI
- XP: double click on
 - v:\cd\soft\Projects\IRMIS\IRMIS_APP\irmis.jar
- Iclshome edm display: in the Tools area click button
 - IRMIS

Report

The IOC Report http://www.slac.stanford.edu/grp/cd/soft/database/reports/ioc_report.html is run after the daily crawl. Currently lists PV counts by IOC, along with the LCLS IOC alias.

A few usage examples

- Find PVs; can use wildcards
 - Enter the PV name in the "Other Search Params" PV field. Can specify field or field value also/instead if relevant. Use * or % for wildcard character.
 - Click the yellow Search button
 - Click PV name in the resultant names list to see PV details, including:
 - fields defined in the .db/.template
 - links (click the link PV to follow the link)
 - IOC where PV is booted
 - .db or .template filename
- Find which PV clients (Channel Archiver, Channel Watcher, ALH) are configured for a PV
 - click PV Clients box beneath PV info section
- Show fields in PV list
 - Click Columns button under the PV list
 - Fill in desired fields
- Save PV list to an ascii file
 - Click Save As button under the PV list
 - Specify directory and filename and click save
 - PVs plus any specified fields will be saved to an ascii file
- Search for device (PVs) based on MADD Name
 - Make sure the LCLS IOC's are selected.
 - In the UI "Other Search Params" window, enter
 - PV: %MADNAME
 - Field: VAL
 - Value: madname (e.g. BXH1)
 - Click yellow Search button
- Examine PV Client configs (Channel Archiver, Channel Watcher, ALH, Sequencer)
 - On the desktop menu, select File/New Document/idx::PVClient
 - Select client of interest
 - Select "master file" (top level file) of interest
 - (If you like, select an individual config file)
 - Click the yellow Browse bar
 - Click filename in tree to see which PVs it contains (PV list may be multi-paged, e.g. 1/5: use < and > to navigate)

[IRMIS at SLAC](#)

[IRMIS Collaboration Home Page](#)

References

- [Oracle](#)