

DAQ Configuration and Conditions

Configuration procedure

- CODA run gui selects **global** config file
- This configuration file path is loaded into the CODA run configuration database
- All ROC's have access to the information in this database

Questions:
How large can the SVT configuration be?
(Thresholds, filter coeff., etc.)

SVT configuration

- Link to SVT configuration file is included in the **global** config file e.g. "#include "svt_hps.xml"
- At prestart step SVT control ROC "parser" will access the xml file (mounted nfs filesystem?) and configure the SVT

Conditions logging

- Configuration
 - The CODA run configuration database DO NOT keep track of runs
 - Opt. 1 Data stream: evio bank in event header keeps a record of configuration filename and it's full content)
 - Opt. 2 Run-time database (manpower needed)
- Environmental variables
 - All EPICS variables are stored via the "archiver" to a database which we can access later (check with Hovanes)
- Offline analysis
 - We will have a (mysql?) HPS conditions database that is used in simulation and reconstruction.
 - Opt 1. Process data stream and archiver database to populate this database
 - Opt 2. Process run-time database and archiver to populate this database
 - This setup js not unusual: a responsible person will also do sanity/data quality checks when doing this.

Calibrations

- CODA run gui selects different run modes (different config files) to configure the SVT calibration run
 - Threshold calibration: SVT needs fixed interval triggers with controlled rate
 - Gain, linearity, etc. calibration: SVT needs to use internal triggers...more work needed
- Looping back threshold calibrations:
 - Stand-alone scripts process evio file and builds new SVT xml configuration file to be "included" in global **config** file