INTT Weekly Meeting

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CDB Overview



- This will be brief, as Chris provided most of this information directly in his reply to the INTT mailing list
- Some of the resources he provided are below:
 - https://wiki.sphenix.bnl.gov/index.php/Calibrations-db
 - https://github.com/sPHENIX-Collaboration/macros/tree/ master/CDBTest
 - https://arxiv.org/abs/1901.05429
- Bear in mind this tool is still being developed and functionality may be added or changed
 - This includes updates and revisions to the documentation

What it is



- The CDB is a file server located on cvmfs
- There is another path under /sphenix/cvmfscalib to allow quicker access in case cvmfs runs garbage collection
 - (Garbage collection can take hours)
- Available over the sdcc network
- The timestamping resolution is 64 bit
 - Allows beamclock resolution timestamping
 - We do not plan on things of this scale but they exist

Basic Workflow



- CDB file access is done by specifying a global tag, a 64 bit timestamp, and a domain
 - The global tab and 64 bit timestamp are set using a recoConsts instance
 - The domain is specified in the CDBInterface::getUrl call
 - https://github.com/sPHENIX-Collaboration/macros/blob/ master/CDBTest/TestCDBRead.C
- New calibrations files need to be added under the sphnxpro account
 - In general users cannot push or commit changes to the CDB through codes they run locally as their own account

Testing



- There are instructions for setting up a version that can be edited locally to test writing and retrieving
 - https://wiki.sphenix.bnl.gov/index.php/Test_Setup
- This involves
 - copying the .json file for the sPHENIX cdb locally
 - appending a local directory to the read list
 - changing the write directory to the same local directory
 - Changing an environment variable to point to the local .json (every login)
- Allows you to verify retrieval works the way you expect