CI operation report

LArSoft Coordination Meeting

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CI operation: status

- CI builds run for SLF6 and Mac OS 10.10 (Yosemite) platforms.
- µBooNE, DUNE, LArIAT and ArgoNeuT codes run in the CI system.
- Currently there are:
  - 188 running unit tests;
  - 53 (+10) CI tests:
    - 19 running as default; standard experiment workflow, single event, tests run in parallel.
      - **10 new CI tests (5 DUNE FD; 5 ProtoDUNE) are under testing.**
    - 19 running when a new tag of LArSoft and experiment code is released (manual trigger of the CI build); standard experiment workflow, 10 events, CI tests run in sequence;
      - these CI tests are part of the second tier of CI test suites.
- Second tier of CI test suites under development:
  - is intended to extend the existing set of CI test suites to cover more use cases.
  - Test new/more experiment's workflows?
  - **Soon I'll ask a meeting with the experiment contact person on this purpose.**

CI operation: status/issues

DUNE:

- **Mac OS and SLF6 CI builds:**

  - CI test issue in detsim stage:
    - A code change intended for debugging (zero suppression disabled) was committed; all the channels had signal. **[FIXED]**

  - Possible issue in detsim stage:
    - the random stream "***opdigi***" in module "***OpDetDigitizerDUNE***" can't be set as FHiCL parameter;
    - to guarantee the reproducibility in the detsim CI test I use:

      services.RandomNumberGenerator.restoreFrom: "DetSimRandomSeeds_Ref_dune35t.dat"
      services.RandomNumberGenerator.saveTo: "DetSimRandomSeeds.dat"

- Current reference files generated using LArSoft v6_06_00.

- 2 new CI tests suites are under testing:
  - quick_test_dunefd: includes 5 new CI tests for DUNE FD;
  - quick_test_ProtoDUNE: includes 5 new CI tests for ProtoDUNE.

CI operation: status/issues

μBooNE:

● **In Mac OS CI build the generation stage fails:** [Pending]

- CORSIKA interface uses "ifdh ls", this is not fully supported on Mac OS.
- ifdhc v2_0_0 released few days ago;
- is be able to address this issue with some change;
- use "ifdh findMatchingFiles" instead of "ifdh ls";
- "ifdh findMatchingFiles" provides the list of matching files with the filesize, it is needed to strip off the filesize
- ifdh findMatchingFiles <path> <pattern>
- /pnfs/uboone/persistent/users/mibass/corsika/sqShowers/p_showers_001002.db   88768512

● **Mac OS and SLF6 CI builds:**

- Unit test issue (production.sh and test_fcl.sh) due to a missing ":" in a FHiCL parameter in reco_uboone_mcc7.fcl

● Current reference files generated using LArSoft v6_08_00.

CI operation: status/issues

LArIAT:

- **SLF6 and Mac OS CI builds:**
  - **Issue in slicer stage:**
  - the output filename should have '%#' in it:
  - needs to be propagated to the CI tests. **[working in progress]**

  - **Issue in reco2D stage:** **[New]**
    %MSG-s ArtException: TrajCluster:trajcluster@Construction 11-Oct-2016 01:22:28 CDT ModuleConstruction
    cet::exception caught in art
    ---- Configuration BEGIN
    Invalid SkipAlgs specification
    ---- Configuration END
    %MSG
    Art has completed and will exit with status 9.

  - Seems to be related to a commit in larreco:
    commit d6b0ef7235b1a3a1c262766357adf434f4b8a721
    Author: Bruce Baller
    Date: Mon Oct 10 11:54:27 2016 -0500
    Throw an exception if SkipAlgs isn't configured properly. Ongoing development of Refine2DVertices. Add CheckWireHitRange. Work on EraseHit and CreateHit.

- Current reference files generated using LArSoft v06_07_00.

CI operation: status/issues

ArgoNeuT:

● **SLF6 and Mac OS CI builds:**

- CI tests: reco stage

  - data product size change **[New]**

● Current reference files generated using LArSoft v06_08_00.

The End