

CI operation report

LArSoft Coordination Meeting

September 27, 2016

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CI operation: status

- CI builds run for SLF6 and Mac OS 10.10 (Yosemite) platforms.
- μ BooNE, DUNE, LArIAT and ArgoNeuT codes run in the CI system.
- Currently there are:
 - 188 running unit tests;
 - 53 CI tests:
 - 19 running as default; standard experiment workflow, single event, tests run in parallel.
 - 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?
 - Some experiment needs a specific CI test to be implemented?
 - These CI tests can be executed on demand/nightly/per release/...

CI operation: status/issues (cont'd)

DUNE:

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

- Unit test issue:

- geometry_iterator_loop_dunefd_test and geometry_iterator_dunefd_test unit tests were configuring their own geometry instead to get the geometry configuration from the FHiCL file.

- Current reference files generated using LArSoft v6_06_01.

- CI tests - current processing workflow:

stage	Base FHiCL file
gen	AntiMuonCutEvents_LSU_dune35t.fcl
g4	standard_g4_dune35t.fcl
detsim	standard_detsim_dune35t.fcl
reco	standard_reco_dune35tsim.fcl
ana	standard_ana_dune35t.fcl

- Is this processing workflow still valid?

- There are more processing workflow to test in the CI?

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 b2_0_0 (beta) available in UPS, should be able to address this issue. Test is in progress.
- **Mac OS and SLF6 CI builds:**
 - No issues since last report.
- **Current reference files generated using LArSoft v6_05_00.**
- **CI tests - current processing workflow:**

stage	Base FHiCL file
gen	prodgenie_bnb_nu_cosmic_uboone.fcl (*)
g4	standard_g4_uboone.fcl
detsim	standard_detsim_uboone.fcl
reco1	reco_uboone_stage_1.fcl
reco2	reco_uboone_stage_2.fcl
ana	standard_ana_uboone.fcl

(*) for this stage the flux files are not used, but it is used an histo with flux distribution

- Is this processing workflow still valid?
- There are more processing workflow to test in the CI?

CI operation: status/issues

LArIAT:

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

- Issue in Reco2D stage, the output of this processing can't be processed by eventdump.fcl

```
cet::exception caught in art
---- LogicError BEGIN
  Principal::getForOutput
  A product with a status of 'present' is not actually present.
  The branch name is ldp::AGCounters_agcounter__LArIATFullReco.
  Contact a framework developer.
  cet::exception caught in EventProcessor and rethrow
---- LogicError END
%MSG
```

- disabling FastCloning the output can be processed by eventdump.fcl
- Issue in slicer stage – stderr reports: [\[New\]](#)

The following specification is no longer supported:
services.scheduler.fileMode: NOMERGE

It has been replaced with the following configurations:

```
outputs.out1.fileName: "lariat_r006099_sr0504_Current_slicer_%#.root"
outputs.out1.fileProperties.granularity: "InputFile"
outputs.out1.fileProperties.maxInputFiles: 1
```

- output file name has “_1” appended.

CI operation: status/issues

LArIAT:

- **SLF6 and Mac OS CI builds:**
 - Current reference files generated using LArSoft v06_06_01.
 - CI tests - current processing workflow:

stage	Base FHiCL file
slicer	multiple_input_output_slice_job.fcl
blreco	beamline_fullreco_lariat.fcl
Reco2D	Reco.fcl

- Is this processing workflow still valid?
- There are more processing workflow to test in the CI?

CI operation: status/issues

ArgoNeuT:

- **SLF6 and Mac OS CI builds:**
 - No issues since last report.
- Current reference files generated using LArSoft v06_06_01.
- CI tests - current processing workflow:

stage	Base FHiCL file
sim	standard_sim_t962.fcl (*)
reco	standard_reco_mc_t962.fcl

(*) for this stage it is used a mono-energy flux configuration

- Is this processing workflow still valid?
- There are more processing workflow to test in the CI?

The End