LArSoft Coordination Meeting

Erica Snider Vito di Benedetto Lynn Garren Gianluca Petrillo Saba Sehrish

Fermilab

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Today's agenda and speakers

- Release and project report (Erica)
- CI operation report (Vito di Benedetto)
- Proposed change to ExternalTrigger (Karl Warburton)
- LArSoft simulation of the DUNE 10kt dual-phase TPC (Slavic Galymov)
- Changes to GaussHitFinder (Tracy Usher)
- Changes to optical hit reconstruction (Kazu Terao)
- Change to radon and supernova generators (Gleb Sinev)
- Recent changes to LArSoft build times (Marc Paterno)
- AOB

LArSoft Workshop

- Will have a LArSoft Workshop on "usability" issues
 - Includes all aspects of using the code
 - Building
 - Installing / porting
 - Interfaces
 - Learning / documentation
- Will come immediately after the FIFE workshop (like last year)
 - Tentatively scheduled for Wednesday, June 22
 - The week after the Fermilab User's Meeting

Send ideas, comments, suggestions, complaints to erica@fnal and ruth@fnal.gov

Releases

- Last week
 - v04_35_00
 - New art versiont: fixes build speed and library size issues from previous version
 - Some new code that will be discussed today
- This week
 - Merge requests from today

LArSoft version 5

- The major changes described in an email to larsoft list
 - Include file paths
 - Library name change
 - Core service architecture changes

Script provided to make most changes needed for code on branches, private code

Note: for service changes, may be easier to check out and merge tagged code.

All changes will be introduced to the head of develop

- Need to start today if this week, or on another Monday/Tuesday
- uBooNE wants to wait until after MCC7 simulation release
- Many developments depend on these changes
- Would like to agree on a schedule today
- Discussion??

Major product changes

• GEANT4.10

- LArIAT has officially requested that we support GEANT4 v10
- Plan to pursue at earliest opportunity
 - "this after the LArSoft version 5 release
- Initial strategy
 - Provide builds for both v9 and v10
 - Drop v9 after a transition period
- May result in LArSoft major version increase if interface changes are significant, or not backwards compatible

Major product changes

- GENIE v2.10
 - Have been advised that we should migrate to GENIE v2.10.4 for physics reasons
 - NOvA has already elected to migrate
 - Has implication for nutools
 - A new qualifier may be needed
 - Discussion? Should we migrate? If so, how soon?
 - Absent objections, plan to do this immediately after GEAN4 v10

Major product changes

- root v6
 - Required by LArSoft / LArLite integration
 - art v1.18 is built against root v6

Please test it!

- How should this be prioritized relative to other changes on the table?

Repository re-structuring

- Plan to re-structure some of the LArsoft repositories
 - Again driven by LArSoft / LArLite integration effort
 - Will isolate data products, uitlities, then minimize dependencies
 - larcore
 - larcdata
 - larsim
 - Similar change will be needed to art, nutools
 - The plan is to do art first
 - Should be ready during the next two weeks
 - Changes to nutools will follow those in art
 - Will have little effect on users other than changing include paths
 - Discussion??

OS preference survey results

- Summary of survey of OS preference sent around last week
 - Received 47 responses
 - The bottom line: 23 of 47 stated that they would prefer to use Ubuntu
 - Includes developers currently using a supported platform AND those who are not developing but would if Ubuntu were supported
 - Second most popular OS choice: Mac OSX El Capitan

Status of on-going sub-projects

- Architecture / usability project report
 - No update this week
- CI system operations
 - Vito di Benedetto
- LArLite integration project
 - No update this week
- Profiling and optimization project
 - No update this week
- Common document repository
 - No update this week

The end