LArSoft Librarian's Meeting

Erica Snider
Lynn Garren
Gianluca Petrillo

Fermilab

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Today's agenda

- Release policies

- Status of releases

- Projects and issues update

- Root compression and LArSoft (Gianluca)

- AOB

Releases

- **Release policies** (will post all these to the wiki)

  - Clarifications and decisions made the last stakeholders / partners meeting

  - Using vM_mm_pp for all releases

    - M = major number, mm = minor number, pp = patch number
    - Will append something to 'pp' if (and only if) the release is a fork
      - "Fork" there is no commit on the 'develop' branch that represents the content

  - Clarified the numbering policy

    - Will increment patch number for routine integration releases / bug fixes
    - Increment minor number for new features, changes of functionality
      - Includes new data members to existing data products, interface extensions
    - Increment major number for changes that break backwards compatibility or involve changes to important components of the infrastructure
      - Changes to data products that are not backwards compatible (e.g., the ROI code)
      - Changes to "user-level interfaces"
        - *This is distinct from interfaces that can be considered part of an implementation*
      - Changes to any of the important external dependencies (e.g., root, gcc)
  -

Releases

- **Release policies** (cont'd)

    - Production releases will have a single tag applied across all repositories

        - The tag will indicate the **larsoft version** and the target experiment

            - e.g., uboone-v1_00_05 for the one existing production release

    - Release retention policy

        - Production releases

            - Will keep indefinitely
            - Will be archived and deleted in coordination with the target experiment

        - Integration releases

            - Will delete as space is needed.
            - Expect the lifetime to be on the order of a month
            - Will send email to 'larsoft' list one week prior to deletion
            - Exception: will keep the last in a series indefinitely
                - *e.g., v1_00_08*
                - *Treat the same as production releases in terms of retention policy*

Releases

- **Release policies** (cont'd)

    - Other policy discussions at the next stakeholders / partners meeting

        - Experiment-specific branches

        - Documentation requirements (more on this later)

Releases

- **Status of releases**

  - v1_01_00

    - Major changes to external dependencies

      - See release notes:

    - **Waiting for validation** from the experiments before merging into develop

      - Noted in the meeting that v1_01_00 has a bug that needs to be patched first, so...

  - Next release: v1_01_01

  - Then v2_00_00

    - Includes ROI changes

    - Chose to deprecate old data format for recob::Wire, so a new major version

    - Requires v1_01_01 to be completed / merged into develop first

  - Experiment requests?

Projects and issues update

- LArSoft testing/validation/algorithm workshop

  - Proposed for Tues June 17 (afternoon), Wed June 18 after FIFE workshop

  - Major goal will be to build out the continuous integration system, make it do useful things

  - Agenda will include

    - Testing/use of the CI system

    - Demonstration of existing test/validation modules

    - User coding of new tests and validation modules

    - User led discussion of algorithm improvements

    - Community discussion of future development and needs from LArSoft

  - Working with spokes, offline coordinators to put together a detailed plan / agenda

  - **Please fill out doodle poll at http://doodle.com/t7uuey9pk8zp6kaq**

Projects and issues update

- **Random number handling (Gianluca)**

  - Agreed to develop / adopt a random number seed service at last LM

  - Integrating with GENIE is the main (known) technical hurdle

    - Requires changes to GENIE interface layer in nutools + wrapping CLHEP generators in TRandom interface
    - Currently still in planning stage for this: waiting for v1.01.00 before coding starts

- **Optimization (Gianluca)**

  - Working to understand / reduce size of LBNE geometry description

    - Pursuing several ideas

  - Estimate savings could be about half of the ~1 GB currently used

Projects and issues update

- Documentation

  - A technical writer has been working on the LArSoft wiki pages

    - Badly needed...

    - Have comments on a handful of pages so far

    - Expect changes to begin to appear soon

    - Would welcom any feedback that you have either before or after

  - Stakeholders / partners have agreed to develop a documentation standard for all code that appears in release

    - Still working on the details

    - Will basically require code authors to contribute some documentation for all modules, services, algorithms

    - The documentation will with/alongside the release, so will have appropriate versioning

Projects and issues update

- No significant change in status on the following

  - Make existing code work for both uBooNE and LBNE

    - Fix the hit/clustering workflow

    - Will schedule a meeting to work on it this week

  - Track interface changes

The rest of the meeting

- Root compression and LArSoft

- AOB