

LArSoft priorities for the next 6 months

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The next six months

- Operations

- On-going demand for effort across a number of areas
 - Release and distribution management
 - No significant issues
 - Continuous Integration support, experiment tests and monitoring
 - New (short term) effort recently added to assist with experiment tests and monitoring
 - Bug fixes, product and infrastructure support
 - Rely heavily on prioritizing with experiment input in order to smooth required effort

- Architecture revision project: 5 prioritized areas of work

- 1) Experiment / detector Interoperability
 - 2) Decoupling framework from algorithms and services
 - 3-5) Maintenance / modularity, missing interfaces, optimization / thread safety
- Led by Gianluca, and the majority of his time + fractions of Saba and Erica
 - A long-term project. Aiming for (1) and (2) by end of calendar 2015

The next six months

- LArLite “integration” project
 - Complementary to architecture work item (2). Focused on framework side.
 - Expect completion in approximately 6 months, barring unforeseen issues
 - Project in early phase of planning and execution
- LArSoft CI system v2 upgrade and support
 - Scheduled for production release by May 1. Currently on schedule.
 - Adding effort to help stimulate creation, support of well-designed test suites (noted under “operations”)
- LArSoft software profiling and optimization effort
 - Early success with very modest effort on reconstruction chain. Experiment is leading follow-up.
 - A new effort will focus on simulation, more detailed work on reconstruction
 - Organizing that now
 - Need a similar effort to improve speed of builds experienced by users

The next six months

- LArSoft class and workshop planning
 - Class planned for August, workshop for June
 - Developing course outline and content now
- Software integration coordination
 - On-going effort with adequate outcomes so far. Any significant change in demand will overwhelm ability of the project to manage this
- BNL build tools (worch) evaluation
 - Investigating a proposed alternative build system from BNL
 - The system intended to address a number of short-comings identified by LBNE/DUNE collaboration
 - Ultimately will remain coupled to art build system
 - Now just trying to determine suitability for LArSoft needs
 - Will facilitate further discussion with art team
 - Project now in early phase

The next six months

- Documentation

- A continuing source of annoyance to new and seasoned users, but has received little attention
- Need a common technical document repository
- Need to implement previous agreement on source code documentation