
Status of LArSoft Services Factorization

LArSoft Stakeholders Meeting

Sept. 8, 2015

What's Happening?

- DUNE 35t will soon require information extracted from a database (E-field strength, purity info, etc), so LAr/DetectorProperties needs updating.
- Currently these services do not decouple the data provider from the art::service class.
- I have begun pulling the threads on these.
- LArProperties data provider class now lives in new lardata/DataProviders package. Service class lives in lardata/Utilities.
- LArProperties was pretty straightforward.
 - Dependence on DatabaseUtilities package has been completely removed. Is this safe? Are current experiments using fhicl params? Can add this back in if necessary.
 - Propose to move methods that are truly detector-specific out of LArProperties and into DetectorProperties (eg, Efield and dependencies)

Pulling the thread...

- DetectorProperties is another issue, mostly through its dependence on the TimeService class.
- Proposed:
 - TimeService → DetectorClock (and moved from lardata/Utilities to lardata/DataProviders).
 - TimeService::SimpleTimeService → DetectorClock data provider class. SimpleTimeService class will go away.
 - DetectorClock_service will live in lardata/Utilities.
- There will be many other code changes to make throughout LArSoft to migrate to these changes.
- This work should be complete by the end of this week.