

12 GeV Software Review Planning

Jan 2, 2012

Purpose of the review: To ensure that detector software will be ready for science.

If we can “prove” this to an external review committee, we can have greater confidence that we are on the right path. And to prove it means that we expose enough information that the committee members are able to provide feedback to us that can improve the quality of our efforts, yielding a better final result.

Defensive view: if we do our own Q/A, then it will not be imposed upon us. And at whatever point there is a 12 GeV readiness review, this software readiness review process will provide important products to make that review easier.

What does an external committee need to see?

1. Requirements: Information about the detectors, the science, the observables, triggers and data rates. Detailed enough so that an expert in detector software can understand the challenges.
2. Management
 - a. Management structure, with names in all key positions
 - b. Work breakdown (major components)
 - c. Manpower and budgets to get the job done, with MOUs for all external labor, with well defined tasks and deliverables
3. Current state of the software
 - a. State and progress on all major components
 - b. Areas needing additional research, problem areas, plans to address
4. Computing capacity requirements & plans (simulation, analysis)
5. Milestones
 - a. Dates when software will have certain capabilities, performance
 - b. Dates when stress tests will be conducted, including analysis of simulated events