DIG report

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Atlas software workshop

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Agenda

- Covered:
  - Action list
  - Tools
  - Reviews
  - ASP
  - Round of domains, interfaces
  - New domains
- To be covered in workshop plenary:
  - Training
  - Platforms and releases
  - Repository
- To be covered in 2nd part of DIG meeting on Friday afternoon
  - Copyright questions
  - CLHEP

Tools

- Dependency grapher
- cvsweb, Bonsai, Light: Partly overlapping functionality
- Will check status of Light 2

Reviews, ASP

- 6 reviews recently requested, 3 actually going on.
  - How can we accelerate?
  - How can we proceed to code reviews?
  - How can we get more people involved?
- Proposal to re-consider the review procedure: main interest must be controlled high quality of software
  - How formal does deliverable (design, code) need to be?
  - How formal does the procedure need to be?

Reviews, ASP (2)

- Possible solutions:
  - Allow for walkthroughs (with a report at the end), perhaps during software workshops
  - Don’t insist in current deliverables - a few pages describing (and depicting) the design without using StP are better than nothing at all
  - Allow for code reviews without documented design (???)
  - For writing of design documents, need to offer assistance

Review, ASP (3)

- Concerns:
  - How can we ensure consistent, easily readable, high quality documentation across the system?
  - How practical are walkthroughs? Meeting? Videoconference? E-Mail?
- Feedback from users needed, decision next time
- ASP: New working document (changes to the text and to the layout), open for comments until 19 December

Round of domains

- ID: Preparing for implementation of detector description data base, testing common C++ clustering, setting up for simulation work
- Muon: Moving to cvs/srt, effort going on on muon identification and track fits in B field
- Reconstruction: Large efforts on combined reconstruction. Astra future being discussed. Xkalman++ to be put into repository, but documents to be provided. Successfully testing on NT. Track class drafted, more documentation needed

Round of domains (2)

- Magnetic field: Abstract base classes exist, services for derivatives as well. Need to check what Geant4 provides in terms of B field and intersections of tracks with volumes.
- Graphics: Wired implementation ready to go, where to store the Wired kernel? Suffering from a CLHEP bug on DEC. Ready to implement visualisation for systems, asking for help. Suggested to distinguish between “online” and “offline” scenes - histogramming are scenes

Round of domains (3)

- Control: Working on integrating the LAr prototype, trying to read events from Zebra tapes as starting point for reconstruction. Will start from a fresh copy of Arve and implement component control prototype.
- Analysis tools: Awaiting user requirements. LHC++ components being evaluated in isolation.
- Detector description: Improvements for muon, ID next on the list (required until April 99). Will consider XML only later

Domains, DIG working

- Agreed to create four new domains for combined reconstruction
  - e/gamma
  - Jets/Emiss
  - b tagging
  - muon identification
- Will try and have a weekly 1/2 hour on DIG matters, most likely before the weekly software meeting, videoconferenced

Miscellaneous

- Need clear description of policies about cvs usage, releases, prerequisites for development: try and incorporate that into the introduction to the ASP