Workshop/ACOS/DIG decisions

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Atlas Software Workshop

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DIG meeting (to be continued)

- Tools: Dependency grapher, cvsweb, Bonsai, Light
- Reviews: Propose lighter procedure
  - Less formal design documents
  - Walkthroughs to be tried, eg. during software workshops
  - Still insist in full formal design document later (eg. at the time of code review)
  - No compromise in objective of controlled high-quality software
  - Decision: Next DIG

DIG meeting (2)

- Domain interfaces: track fits in B field, track class, histogramming to be discussed
- Four new domains for combined reconstruction (e/gamma, jets/Emiss, b tagging, muons) created, approved by ACOS
- Weekly DIG discussion on Thursdays from 15.30 h till 16.00 h Geneva time (videoconference)

Physics TDR software

- Software for physics TDR: Some areas with ongoing work. Generally in good shape, changes well under control
- Migration to cvs/srt almost completed
- Recommendations needed for mixing Fortran and C++

CHAOS: Atlas Simulation

- Working group formed in November
- Based on Geant4, HEPODBMS, Arve. Modular
- Tight milestones: Jan 99 release of prototype framework; Dec 99: First alpha release, detailed comparisons with Geant3
- Very active central team, but help from system communities required

Arve

- Recent changes: Graphics separated from geometry; cascading menus; 2D display capabilities
- Next: Implementation of object networks, port to new platforms, interface iPatRec and other rec. modules, try as simulation framework; Aravis being brought into line with other Atlas visualisation packages
- Later: Interfacing to analysis components

Graphics

- Active work on Atlantis, Wired, Aravis
- Want to consider more histogram choices (JAS, HippoDraw, Root)
- XML being developed
- Many packages lack maintenance
- Some design changes planned
- Ready to implement systems; expect help from their communities

MC productions

- Gone / going well, waiting for final reconstruction program
- Improvements (descriptions to be provided):
  - Statistics (number of events, size/CPU, manpower)
  - Physics requirements and priorities
  - Technical management: running and monitoring
  - Manpower allocation
  - Strict, rigorous reproducible testing
  - Automation, documentation
  - Collaboration with other expts?
  - Data transfer from/to CERN

Repository and releases

- Current build on HP, AIX, DEC
- Need to trace and encourage process of obtaining ASP compliance
- Carry on with HP, AIX, DEC; next Linux (much wanted) and Solaris; less priority: SGI, NT
- New version of SRT
- Speed improvements for builds required

LCB issues

- Next week's meeting:
  - Geant4 (final report, MOU)
  - Event filter farms (new PEP)
  - Spider / SRT (new PEP)
  - Videoconferencing (presentation and referee report)
  - Monarc (presentation and referee report)
  - LHC++ (referee report)
  - RD45 (referee report)
- Flexibility in replacing LHC++ components is a very important issue

Spider project

- Software development environment
- Coding standards, software testing, SRT
- Work done earlier in Atlas has significant impact on project
- Nothing comes for free…
- Discussion about SRT

Analysis tools

- No user requirements yet, but educated guess…
- Need also system requirements, ASP compliance, interfacing with other domains
- Some projects going on in Atlas
- Controversial issues (eg. Explorer) - contingency
- Alternative histogram storage
- Availability and releases
- More and better communication with community
- Interim solution needed by April

Training

- Nobody taking care at present
- Existing offers (CERN ED, IT-IPT, IT-US)
- Need to address training in home labs, just in time, …Training plan to be established (CTP)
- Complemented by ‘help desk’?
- Meeting on training today at 14.00 (1-1-025)

Event, 1 TB milestone

- Working hard...
- 1…2 TB Zebra data on tape, object model exists for digits of ID, LAr, parts of muon
- Converters (a la BaBar) between persistent and transient model, offers flexibility for persistent model (compression etc.)
- Same application for Zebra and Objy input
- Writing 1 TB will take ~ 1 week
- To be done later: user writing into data base, interface to LHC++ analysis tools, ...

ACOS decisions

- Dates for 1999: Software workshops, 19/02, 30/06, 06/10 (if needed)
- Milestones for Atlas-wide scheme until end 1999: simulation, reconstruction, analysis tools, general, infrastructure (see planning for next cycles)
- Communication to be improved (eg. system representatives to their communities), documentation to be made more concise and complete. Weekly report (edited by Chris Onions) much appreciated

ACOS decisions (2)

- ACOS, DIG improvements: No major changes during the internal review; term of office ending soon anyway
  - representative of event filter to ACOS
  - four new domains, weekly DIG interactions
- Supported platforms: discussion about NT, low priority for the time being; no offers to help supporting