

---- Core software - WBS 2.2.1

- Vakho will retain responsibility for GeoModel (~10% effort), but not ancillary detector geometry work

- athenaMP work is an extremely high priority, work assignments in this area should reflect that
- ditto for performance optimization

- Paolo (WBS 2.2.1) takes responsibility for Douglas Smith's work, which is in athenaMP at 20% level. Estimated that the work will go on for ~6 months, then reevaluate

- several work areas could be good candidates for common collaborative projects and external funding, beyond the multicore project already underway:

- Gaudi

- python (PyROOT, CPyPy)

- CPyPy

- Gooda?

External funding opportunities should (continue to) be explored. Lalli Chatterjee is the right agency person to approach.

---- Event store, Database, Data management - WBS 2.2.2

- Jack moves to working on event store and persistence (athena I/O, bytestream etc), freeing up Peter's time

- Jack also works on data access and I/O performance in analysis, including post-Athena, drawing on local synergies with analysis support/T3

- we accept Philippe/ROOT proposal that we assist in ROOT I/O work, in selected areas that are ATLAS priorities

- Peter focuses on the extremely high priority of multicore I/O (50%), as well as ROOT I/O (25%), and M&O (25%)

- tag (& related) effort in WBS 2.2.3 shrinks to 1 FTE,

- Marcin takes primary responsibility for absorbing POOL code into ATLAS code base in the short term, evolution away from POOL in the longer term

- major part of the effort expected to be in the event store aspects of POOL. Not a lot of time should be devoted to event collection aspects; if substantial effort is needed, non-US (UK?) effort should be sought

- Sasha has taken on major responsibilities in ADC Grid Data Processing. His GDP work and the importance of metadata to GDP presents the opportunity to couple GDP metadata interests to ANL's existing metadata responsibilities. Sasha (if willing) will be supported to continue his GDP work until the end of 2011, then the situation will be re-assessed following the conclusion of fall 2011 reprocessing and outcomes of metadata architecture planning on the same timescale.

- Sasha's GDP work has not left holes in WBS 2.2.2 milestones and deliverables, because Sasha had transitioned out of his conditions database operations responsibilities. We do not seek to recover these responsibilities in the future.

- ROOT is also a strong candidate for common project and external support. Should be pursued. eg. R&D proposal on ROOT I/O between ANL, BNL, FNAL?

- post-POOL persistency system should be operational by the 2013 shutdown, and in production by the end of the shutdown.

- developing the post-POOL persistency system offers the opportunity to also address how best to handle I/O optimized for athenaMP, and merging/avoiding small files.

- support for local caching for efficient remote ROOT I/O over the WAN is an important priority for the facilities

---- Distributed software - WBS 2.2.3

- critical parts of the dist sw work are covered by a single, heavy loaded developer (Tadashi,

Paul). Efforts should be made to broaden participation (particularly from outside the US) in these areas to provide redundancy of expertise and reduce load on the experts.

- in the case of the pilot a promising individual has recently started work (Gabriele Chiodini, working with Johannes Elmsheuser)
- OSG collaboration is successful and fruitful. Indications are that this is well recognized by the agencies.
- Panda monitoring now has a workable effort level, since Valeri Fine joined the effort last fall.
- broadened participation on DAST shifts is a high priority, to offload computing professionals from front-line shifts so they can focus on other priorities. PS&C should raise this issue in US ATLAS (it will be a topic at the Boston meeting).
- there is a perception (and reality?) that the training and expertise threshold to join the DAST team is high enough that many candidates are deterred from participating. DAST should be made more accessible through better educating the community on the requirements and/or lowering the requirements.
- US-based noSQL work proceeds at BNL, targeting Panda

#### ---- Application software - WBS 2.2.4

- the plan developed by Mark, Bob and Fred to allow Sami to continue to work on the Gatherer through FY12 but ramping the effort down through that period, reaching a level of ~10% by end FY12, is accepted
- beyond FY12, project managers should be kept informed of 100% of Sami's work, i.e. including the ongoing low level of Gatherer work
- beyond FY12, quarterly reports on Sami's work should cover progress on his principal activities, i.e. not including the ongoing low level of Gatherer work
- the plan to transition Sami into core software performance work as the Gatherer work ramps down is accepted. For this aspect of his work, Sami will report to Paolo (WBS 2.2.1). Target effort level for the performance work is 50%.
- work on missing Et cannot be supported by the project -- it is too far from our scope (too close to physics), and anyway would never be prioritized by us ahead of core software performance work.
- Vivek, Ed and Walter continue to do excellent work and we commend them on the recognition they have received for this in the important ATLAS positions they have attained. It is important that the project allow sufficient flexibility for such appointments, valuable to US ATLAS as well as to the individual, to be made.
- the project has a responsibility (and self interest) to monitor the career status and trajectory of these and other university-based computing professionals in the project to ensure that our very good developers have a path forward in their careers.
- career considerations, as well as job effectiveness considerations, can in some cases present a very good argument for a 50/50 split between project-supported computing professional work and base-supported research work. We should monitor our software (and analysis support) efforts to identify any such cases and address them.

#### ---- Software infrastructure support - WBS 2.2.5

- some aspects of the description of tasks under this WBS indicates confusion with analysis support WBS activities; managers in the two areas should sort this out
- managers should also ensure that the software infrastructure work (and analysis support work) is directed towards and relevant to US ATLAS, not just the BNL T3
- Mark should review David Adams' project activities as to whether they better belong under application software.
- David Adams' work is not strongly defensible as project work. The move of 50% of David's effort to BNL base program lessened this issue but did not eliminate it. BNL should seriously

address moving the remaining 50% of David's work to base program, before budget concerns within the project force the issue.

---- Identified change control actions

- Sami Kama's 50% time fraction on core software performance optimization
- migration of Doug Benjamin's Tier 3 support work from the facility integration program to analysis support