P1450.4 meeting minutes - 12/06/06

Attendees: Doug Sprague, Ernie Wahl, Tony Taylor, Jim O'Reilly

Not present: Bruce Parnas, Carol Dowding, Greg Maston, Jose Santiago, Ajay Koche, Daniel Fan, Yuhai Ma, Bob Roberts, Oscar Rodrigues, Jim Mosley, SB Thum

Agenda/Summary:

- Preamble:
  - Record Meeting (*2)
    - Call the (US) dial-in numbers 1-877-421-0003 (toll free) or 1-770-615-1374 (toll)
    - Enter the passcode code 747464
    - Once dialed in with the proper access code, enter *3 (star 3)
    - Then enter the file number 81018201 for this conference (this number will change each week).
    - Press 1 to listen to the conference.
  - IEEE Meeting Preamble (No discussion of proprietary information)
- Status on update of PAR for new 1450.4 ownership (Doug)
  - PAR update submitted to IEEE office.
- Status on new members for WG (Jim)
  - Contacted Inovys. They're interested in having someone participate, but don't yet know who it will be. Expect to have individual(s) identified after Jan. 1, 2007.
  - TSSI has identified a representative (Brian Johnson). Jim to contact this person and work out the details of their participation.
- Working on updates to latest spec (Doug, Jim)
  - Doug updating figures in conceptual model; developing a UML diagram.
  - Issues:
    - TestBase, TestMethod, TestFlow
      - It's generally (and fairly universally) agreed that the idea of a common base capability for all TestMethods and TestFlows is useful. The issue is how to provide for this. Do we want to
        - enforce the inheritance hierarchy of TestMethod and TestFlow being derived from TestBase to establish the desired base capabilities of these blocks, or
        - provide for the base capability via defaults, the base set of which would be specified by the standard, but which can be modified by the administrators, or (under limited conditions) by the users of the a STIL system.
- Phase 1/Phase 2 discussion.
  - Is STIL.4 intended to be a translation medium from which programs for any number of testers (with greatly varying capabilities in their languages, and greatly varying means of representing similar concepts)? Or is it intended to be a language which has enough capability to actually run on a tester?
    - Ernie – reason for considering phase 1 (translation) is to be able get something out there sooner – many more details will need to be handled for a phase 2 (run-time) approach
    - Tony – taking much longer than expected – never anticipated that "phase 1" would actually be released, but would simply be a step on the way to "phase 2". If we only do phase 1, that may limit acceptance. We're 7 years into this project, and as there are already a number of block-oriented "STIL-like" languages currently being used, if we propose as a standard a translation-only language, it would be a step backwards.

        - Jim - without runtime support, we are likely to have difficulties at ballot. Tony has stated that there are a number of companies that ask him "regularly" about the status of .4, as they'd like to use it runtime, not just translation.
        - Examining the list of "phase 1/phase 2" issues (see http://grouper.ieee.org/groups/1450/dot4/archives/Phase1Phase2InitialList08262003.xls), the only items that everyone (5 inputs) agreed were phase 2 are:
            - Datalogging support
            - Tester targeting
            - Support for C-style flow control (while, do, or for loops, switch-case statements, etc.)
            - Linkages to factory automation systems

          Of the items that at least one person identified as "phase 2"
            - Multi-site
            - Exception handling
            - Independent flows
            - Pre-defined entry points

          the language already provides at least the basics to support all of the above.
        - **Consensus – as there are already a number of block-structured "STIL-like" languages (Envision, ASAP, SmarTest, Stylus, OTPL), we should aim for phase 2. We need to explicitly outline the scope of what the standard (the language) includes and at least as importantly, what it excludes.**
        - Another issue brought up by Doug was adaptive testing (allowing dynamic reordering of flow based on current test results, in order to execute the tests which fail most often earlier in the flow). Tony asked whether or not we need to include something in the standard itself to support this, or whether this would instead be an application of the standard.
            - General agreement was that it would more likely be an application of the standard, but that the language may need some capability to support this application.
            - Ernie – persistent variables (which retain their state from execution to execution) will be likely required to support this.
- Status on updated Issues Resolution Doc (Jim)
    - Work is continuing. Will be published before the end of the week.
- New conceptual model updates over coming weeks (Doug, Jim, Ernie)
    - Work on polishing the ideas in conceptual models.
    - Much discussion about the core elements described in the conceptual model, sections 5.1 and 5.2 on pages 7-12. In particular, we spent a lot of time discussing fig 1 on p7 and the inheritance diagram on p10, to make sure we're in agreement about what we're trying to represent in (ultimately) the syntax description. We took away a lot of information, which Doug and Jim will digest, and use to revise the text of the descriptions in the document before the next meeting.
    - Comment: Please make sure that conceptual model descriptions are VERY clear regarding the difference between types and instances.
- Comments:
    - Tony (relative to multiple representations of the same idea). If you have multiple representations of the same ideas (figures, language, UML diagrams), be VERY careful about what's in the normative section (the standard itself). Any multiple representations of the same ideas in the normative section MUST agree

Next meeting:

- Next Meeting 12/13 (No meeting planned for 12/27).

For reference STIL .4 information can be found at the IEEE STIL website:
http://grouper.ieee.org/groups/1450/ (select the P1450.4 link from the table) or use the direct link
http://grouper.ieee.org/groups/1450/dot4/index.html