1450.4 meeting minutes - 03/05/09

Attendees: Jim O'Reilly, Ernie Wahl, Bruce Parnas, Ajay Khoche

Not present:

Agenda:

- Preamble:
  - Dial in number: 1-800-332-7350 (toll free). Participant passcode: 37525964
    - Because of change in conference call number (now being hosted by Advantest), there is no recording capability for the calls. Please read these minutes for meeting details.
  - IEEE Meeting Preamble (No discussion of proprietary information).
- Review scope of ITC paper. See Jim's email sent out about an hour prior to the meeting. Black text is Jim's initial thoughts, blue text is Ajay's comments.
  - Capabilities of the extension (what does it bring)? (Agreed)
    - Designed to be easily mappable to most existing current- and recent-generation ATE software.
    - User-defined test and flow types.
    - Object-oriented approach. Can build user-defined types (flows or tests) based on other previously-defined types.
    - TestBase – allows adaption to the particulars of different test systems.
    - Hierarchical bin maps.
    - Extensions to dot1's variables. More types, arrays allowed. Added attributes to variables to assist test generation software.
    - Where does dot4 end and dot5 start? Hard to show how to use dot4 portably without SOME predefined tests. Will provide examples of tests for the following: Functional test, DC test, AC test. Much discussion about this – how far does dot4 need to go to be useful?
    - Access mechanisms for spec/category variables, and for bin axes and bins.
    - Complete compatibility with dot0, dot1, dot2.
  - Design rationale (why did we do things the way we did) (Not so sure that we need to justify).
    - Will need to keep records of these discussions somewhere – but not in this paper. For dot0/dot1, Greg/Tony wrote a book.
  - Content of the extension (what are the syntax and semantics) (Yes, with small examples for each in the respective sections).
    - Detailed explanation.
  - Examples of use (A full example).
    - Yes – must include this.
  - Next steps (In terms of our future plans for ballot, phase II etc.)
  - We'll also want to make clear how the standard development has evolved since the publication of the 2004 paper. (2004 was along time ago, I am not sure if we need to elaborate a lot on it).
    - Agreed.
  - Scope, limitations (Is/Is Not – what does the standard include, and what does it NOT include, cover, or support – i.e. in-depth multi-site support).
    - Agreed.
  - This portion of the agenda took up a significant portion of the meeting; however, it was worthwhile in helping us to clarify the scope of not only the paper submission, but the scope of the standards effort itself.
- Review updates to syntax document. New syntax document is posted on the web (D27, dated 03/04/09, with changes shown in red). I'd like to finalize these today, so we can move forward to other issues, and begin drafting these sections of the full ballot document. See below for Ernie's comments (which will be addressed at next week's meeting).

- Continue review of open issues list
  - (http://spreadsheets.google.com/ccc?key=pEI1gPUmt2ZTw_kcCTgnKw&inv=jim_oreilly@ieee.org&t=933048453488551871&guest)
  - If logged into your google account, can edit. If not, can only view.
- Other?
- Next Meeting 03/12/09.

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

line 259: follow "initial_value_element": does this make sense in this context ?
e.g., what is "real_expr", "BLOCK_NAME" ?
a. need to systematically follow each syntax element tree to make sure each element has a definition
b. need to make sure that each syntax element definition makes sense where it is used

line 280: typo: the Microsoft reference should be "#pragma once" (fixed)

line 343, 353: get Size usage in line with Category/Selector syntax, e.g.,
group_property =
<
Axes.Size | // Unsigned - number of axes. If no axes, returns 0
>
axis_property =
<
Bins.Size | // Unsigned
>
This and other Binning changes require group consensus

line 343: should 0 Axes be a legal state ? 0 Axes implies that there are no Pass and/or Fail Bins

line 366: should OnSiteStart remain in Phase I ? if so what are the semantics ? (fixed - removed)

line 373 - 384: should this be about syntax alone or should there be an explanation per property ?
Applies to other parts of document also. (should be an explanation of what property is intended to be used for)

line 397: Typo: Category[I] does not return a Name
line 397, 400, 403: SPEC_NAME should be optional and Category should be Categories as per previous consensus,
i.e., (SPEC_NAME.)Categories[I] (fixed)

line 392: missing iteration semantics: if a spec has two+ Categories, under dot0, under dot4:
1. under dot4, all Categories must have the same set of variables as per previous consensus
2. under dot4, Variables[I] should produce the same variable for each Category (my assertion, no consensus)
what happens when the variable list sequence is different under each category ? illegal ?
line 395: should Size return an unsigned integer ? (it does according to the Binning document)