

## 1450.4 meeting minutes - 03/20/08

**Attendees:** Doug Sprague, Jim O'Reilly, Ernie Wahl, Bruce Parnas, Jose Santiago

**Not Attending:** Ajay Khoche

- Preamble
  - Record Meeting (\*2)
  - To Listen to recording of meeting:
    - Call the (US) dial-in numbers 1-877-421-0003 (toll free) or 1-770-615-1374 (toll)
    - Enter special playback passcode: 747464
    - Once in, enter \*3
    - Enter file number for this specific meeting: 70044401
    - Enter 1 to listen to the conference call
  - IEEE Meeting, no discussion of proprietary information
- Reviewed previous action items
  - See updates below in Action Items list
- Quick updates from sub-teams 1-4 (team at end of this document)
  - Teams 1,2 (Jose) covered in action items review (see below)
  - Team 3 (Doug) Identifying work item task list to be sent to Jose, also added Jim to this team related to his work related to spec/category traversal/access as it pertains to the binning requirements
  - Team 4 (Ernie) Just moved into continued Binning discussion at this point since it was on the agenda
- Binning Continuation (Ernie)
  - Reviewed starting with pg 8 figure 2 of Ernie's "Binning.pdf" sent in email on 3/20
  - Discussed this proposal on BinMap block syntax.
    - Comparing to dot1 and the NameMaps block, this block does not use the "->" notation but rather whitespace to separate the mapping from/to tokens. So adopted this for consistency
    - The NameMaps block does strictly violate the statement structure in dot0 where it specifies (pg 67) that STIL statements all start with a keyword. So, added a keyword "Map" to start of each bin mapping statement within each BinMap block structure
    - There was discussion about whether to go with the convention used for the NameMaps block, or to lean towards dot0 compliance and use the "Map" keyword
    - Discussed issues with the dot0 on token separator. How does dot0 do this and how do you represent token separators in bnf when more than 1 item is listed.
    - Doug to address how we access arrays as part of the Variables block, so for not keeping that independent of this discussion, this also need to account for the proper way to identify token separators within the array bracket notation, for now using whitespace.

- Jim suggests we should lean towards looking at dot0 and dot2 for modeling how we develop dot4 spec seeing that these are the specs most closely related to test program and flow constructs.
- Jim brought up the idea that more attributes may need to be associated with BinMap block statements. Lengthy discussion along these lines
- Jim referred to previous binning work where softbins had 5 or 6 elements
- Jim to post referenced binning related document to the dot4 website under quicklinks in docs for working group meetings
- Ernie to take this document into account for future binning document changes
- Discussion of other languages as to how other languages do this binning. Need to discuss more with concrete examples/syntax.
- Group voted to accept this Map statement syntax as stated in Ernie's Binning.pdf document, pg 8, figure 2. Group recognizes that there may be still issues to resolve when Doug addresses the Variables block.
- \*\* ended meeting here, start here next meeting with agenda items below
- Standard Test Types (Ernie)
  - Did not get to this item
- Variables Block issues comparing to other standards (Doug)
- Next meeting 03/27/2008

#### **Action Items:**

- 02/28: Each sub-team lead to send task list for their team to Jose for inclusion in the project plan.
  - Ernie has sent task list, others still need to do so
- 02/28: Jose to merge current documents into new MS Word master document.
  - Still in progress
- 02/28: Jose to migrate reviewed issues into a new issues list, update based on previous discussion
  - Still in progress
- 03/06: Ernie to move Standard Test Types documentation toward becoming an Annex in dot4 which would be a Proposal for Test Types
  - No master document yet to put this in as an Annex
- 03/06: Jim to update syntax related to WG24/WG11 to indicate that Inherit TestBase is allowed and recommended, but not required. Also, remove the UseDefaults keyword as an option on Line 265 & 284 of D18.
  - Jim to review 3/6 minutes and update
- 03/06: Doug to address syntax of FuncExec (WG24b) and ensure consistency with STIL statement rules, as part of and integrating with other 1450 standards.
  - On Doug's task list, will send to Jose
- 03/06: Doug to address WG25 as part of Runtime Variables

- On Doug's task list, will send to Jose
- 03/06: Doug to address new WG30 issue (Define before Use for Variables and BinDefs) as part of integration with other specs.
  - On Doug's task list, will send to Jose
- 03/06: Jose to add new WG30 issue to current issues list.
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- 03/06: Jose to add a "Look Ahead" work item to the project plan timeline to ensure extensibility for phase 2 capabilities.
  - Jose attacking from both ends with project plan, will add this item at the end of the timeline for dot4.
- 03/06: Jim to send latest updated syntax and issues/resolutions docs to Jose for updates to master documentation.
  - Jim needs to make changes mentioned above, then will send update
- 03/20: Doug to address array specification/indexing syntax as part of the Variables block issues to be resolved. Needs to account for the proper way to identify multiple tokens and how they are separated within the array bracket notation.
- 03/20: Jim to post previous binning work document to the dot4 website under quicklinks in docs for working group meetings. Shows other attributes which may be required for binmaps.

For reference STIL .4 information can be found at the IEEE STIL website:

<http://grouper.ieee.org/groups/1450/> (select the [P1450.4](http://grouper.ieee.org/groups/1450/dot4/index.html) link from the table) or use the direct link <http://grouper.ieee.org/groups/1450/dot4/index.html>

----- Latest Prioritized High Level Dot4 Todolist -----

NOTE: First person in list is sub-team lead

Phase 1 (Must Have for ballot!!)

- 1 Process (Jose, Doug, Jim)
- 2 Documentation (Jose, Doug, Jim)
- 3 Integration with Other 1450 Specs (Doug, Jim, Bruce)
- 4 Binning (Ernie, Doug)
- 5 Runtime Variables (Doug, Ernie)
- 6 PatternExec constructs (Jim, Ajay)
  - Don't force to a 1-1 relationship with test methods
- 7 TestBase (Jim, Jose, Bruce)
- 8 Standard Predefined Test Types (Ernie, Ajay)
  - Production Test Methods only for now
  - Need a basic functional test at a minimum
  - Tag to mark this as a functional test

Phase 2 (Can work around, but may pull some stuff into phase 1 if we have time)

9 MultiSite (??)

Issues...

- Have similar concept we have in
- How many different sites? Also, iteration and access to them
- Synchronization between sites for shared resources

- parallel vs serial
  - Allow for different flows per site?
  - Need to Suspend, Disable, Enable sites
  - Need to specify what program runs on what sites (assumes different dies being tested)
  - Does this even belong in Test Flow??
- 10 Datalogging Interface? (Ajay)
- 11 Bypass (in PreActions) syntax and semantics (Jim)
- Package only, Wafer only issues
- 12 Interfacing to Shmoo Plotting (??)
- May want to do this as a high level construct that you associate with an instance of a test
- 13 Input/Output Interface? (Ernie??)
- 14 Writing/Reading to/from screen, files (??)