1450.4 meeting minutes – 05/18/11

Attendees: Ernie Wahl, Paul Reuter, Ajay Khoche
Not present: Oleg Erlich, Markus Seuring, Jim O'Reilly

Agenda:

- IEEE Meeting Preamble (No discussion of proprietary information).
- Continue work on section 7.6 "Variables and Expressions".
- Discuss the rule that one parameter may not reference another. Current status does not allow this. Should this rule remain in place? Considerations we are presently aware of are listed below under PRO, CON, and NOTE. Please inform the group of additional considerations, if any.

    - PRO (desirable effect if it stands):
        - no Test instantiation initialization sequence problems
        - regardless of parameter initialization list order, two tests with the same parameters behave identically.
    - CON (undesirable effects if it continues to stand):
        - Counter-intuitive code behavior:

```
1 Variables {
2           Const Seconds s0 = 5ns;
3 }
4 TestType XXXX {
5           Parameters {
6                       In Seconds s0 = 10ns; // Default
7                       In Seconds s1 = s0/2; // Default
8           }
9            ...
10 }
```

- At line 7, the s1 default value is set to 2.5ns, or if line 2 didn't exist, the parser would presumably report an error.

Unable to implement useful code:

```
1 TestType Histogram {
2           Parameters {
3                       In Limits lims;
4                       In Compound increment { Units lims.Units; } // Illegal
5                        ...
6            }
7            ...
8 }
```

- Line 4 is illegal under current restrictions therefore compile time check for matching units between args lims and increment is not possible. The test intent is to start at the low limit and increment until the test value is no longer within limits.
- NOTE: if we decide that one parameter may reference another, then we need to specify the sequencing mechanism. These are the choices I see:
    - sequence is as read at the point of instantiation: same test-type with same parameters may act differently depending on sequence
    - sequence is as specified in the TestType: same test-type with same parameters will perform the same but TestType definition must anticipate potential interdepencies or lose some utility.

Summary:

- Accepted – One parameter may refer to another from the same test-type or test. Exact wording in document text to be reviewed next week.
    - Rules:
        - The test-type definition parameter order is the order in which parameters are initialized at instantiation. When a test is instantiated, parameter initialization statements shall be specified in test-type definition parameter order. Optional parameters may be omitted. With regard to inheritance hierarchies, TestBase parameters are initialized first, followed by the derived test parameters in order of derivation.
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- Accepted: Line 1950: Consensus on accepting keyword Level to represent a low current reference voltage for SigGroup attribute StaticType.

Actions:

- All WG Members: Please review wording of test/flow parameter initialization rule for next week. If you have changes to suggest to the wording, be prepared to offer alternatives.

Reference documents (If logged into your google account, can edit. If not, can only view.)

- http://spreadsheets.google.com/ccc?key=0AoKiPr1I9LY9dF95dkhSTVVqOU5GbWJyWFNhY0JPX0E&hl=en
- Namespace resolution examples document: http://docs.google.com/Doc?docid=0AYKiPr1I9LY9ZGY4dmNjNTNfMGZkOGJ2bmZy&hl=en
- Scratchpad spreadsheet: https://spreadsheets0.google.com/ccc?key=tQ93VDnAZ-Cl9RFKpPrPDzw&authkey=COzyro8K&hl=en&authkey=COzyro8K#gid=0
- Scratchpad "Word" doc: https://docs1.google.com/document/d/1zVu2M8nTJsrm0nFbBhiuM8-YRt4ErYqdy_uSa3x3_T4/edit?authkey=CLrgwrsG#

Next meeting: 05/25/11

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