1450.4 meeting minutes – 04/08/11

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

Agenda:

- IEEE Meeting Preamble (No discussion of proprietary information).
- Discuss changing day of week for WG meeting (teleconference)
- Continue work on section 7.6 "Variables and Expressions".

Summary:

- Those of us who are able to find time to participate have expressed a preference to have the teleconference at the same time of day on Wednesdays. If there are no objections, the next teleconference will take place on 4/13/2011.
- We have a quorum to support functions min, max, and abs.
- For now, we recommend supporting functions eval and possibly cat (see next bullet item) and leave others (trig functions such as sin, cos, etc.) if required for phase II.
 - Ajay is looking for a way to consistently interpret the behavior of mathematical expressions across STIL.0 and STIL.4 that provides the required functionality (tracking, non-tracking, const, mutable) without the eval function and without modifying STIL.0.
- Regarding the confusion produced by using the dot (.) operator for both hierarchical instance access and string concatenation, we recommended that for string concatenation, STIL.4 code use function cat with a variable length argument list or operator +. Regardless, STIL.4 still accepts the dot string concatenation operator because by definition, the STIL statement includes STIL 1.0. While visually confusing, the dot operator is unambiguous by way of context, i.e., the parser knows when it's expecting a string or a spec variable (remember: STIL.4 doesn't allow quoted variable names but STIL.0 does, including for Spec/Category/variable names).
 - Operator + can take either mathematical expression or string arguments whereas function cat can only take string arguments, literal or represented by id. We'll decide on our preference at our next teleconference, i.e., I think we agree we don't want both.

Actions:

- All WG members: If the new proposed day (Wednesday, same time as currently 8 am Pacific, 11 am Eastern, 5 pm Germany time, 6 pm Israel time) will not work for you, please let the others on the WG know. We'll consider all inputs, but go with majority decision. For next week, the meeting WILL be held on Wednesday, 4/13.
- All WG members: Please consider whether a concatenation operator other than "." (which currently has a dual use for string concatenation, and for hierarchical access to objects/subobjects) is needed, and whether that should be a function (cat()) or an operator (+).
 - In considering this issue, please note that STIL.0 (and all other extensions, by definition) DO include the "." as a concatentation operator; this will not change. We're only proposing to add another either cat() or "+" which will be used to avoid possible confusion with the "." operator.
 - O Also recall that one of the reasons for including the concatenation operation "." in dot0 was because strings are limited to 1024 characters, and signal names coming from simulation (especially those signal names which include a design hierarchy embedded in the signal name) could easily exceed 1024 characters. We need to consider whether this situation is likely to occur in STIL dot4 (i.e., is there really a compelling need to introduce yet another means of concatenation?).
 - o Jim to query Greg Maston about this issue.

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#gid=0
- Scratchpad "Word" doc: https://docs1.google.com/document/d/1zVu2M8nTJsrm0nFbBhiuM8-YRt4ErYqdy_uSa3x3_T4/edit?authkey=CLrgwrsG#

Next meeting: 04/13/11

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