1450.4 meeting minutes – 01/14/10

Attendees: Jim O'Reilly, Ernie Wahl, Markus Seuring, Ajay Khoche

Not present: Bruce Parnas

Agenda:

- **NOTE: Summary includes discussion at the meeting, as well as a number of followup emails which were sent through the P1450.4 email reflector).**
- IEEE Meeting Preamble (No discussion of proprietary information).
- Discussion items
  - Review syntax document to-do list.
    - Double<->Boolean conversion
      - Conversion by direct assignment not allowed.
      - Conversion as two-step assignment (double-integer-boolean or boolean-integer-double) is allowed (with all the caveats regarding double->integer conversion)
      - Conversion by result of logical expression involving double allowed.
      - Operators and data types
        - ==, !=, !, &&, || (boolean)
        - ==, !=, <, >, <=, >=, %, +, -, *, / (integer)
        - ==, !=, <, >, <=, >=, +, -, *, / (double)
        - ==, !=, <, >, <=, >= (enum)
      - Need to construct a table similar to Table 7 of IEEE 1450.1-2005, listing all variable types, allowable operations, and type of result.
    - Integer-double conversions
      - Integers can be converted to doubles directly.
      - Doubles can be converted to integers with usual (potential) loss of precision).
    - Integer-boolean conversions
      - Boolean->Integer: False = 0, True = 1
      - Integer->Boolean: 0 = False, value other than 0 = True.
    - Integer-enum conversion
      - Compare enums to enums
      - Assign enum to int
      - Assign int to enum (as long as int within enum range)
      - Enums can be used as index for array.
      - Enum.size operator
    - Operators and data types
      - ==, !=, !, &&, || (boolean)
      - ==, !=, <, >, <=, >= (integer)
      - ==, !=, <, >, <=, >= (double)
    - Add Optional keyword to *var_attributes*. Only has meaning for Parameters. Any optional keyword, if it has a value of None, will be ignored by the test.
    - *var_attributes (add comments describing the purpose of each regarding variables (global, local, parameters).*
      - *Description applies to all*
      - *ReInitializeAt applies ONLY to global variables*
      - *Owner and Permissions attributes – do these apply to all variables and Parameters, or only to global variables? Need to think about these.*
    - 2nd form of spec declaration (spec-var-category)
      - Disallow unless we can find evidence to allow it in previous meeting notes. Also, ask tool providers whether both forms are currently being used.
    - Incremental definition of spec blocks
      - Allowed, but not recommended.

    - Discuss scoping rules for local variables, spec variables, global variables.
        - No discussion – ran out of time.
- Open issues - are there other open issues that should be considered? A review of the open issues list can guide us here.
    - http://spreadsheets.google.com/ccc?key=pEI1-gPUmt2ZTw_kcCTgnKw&inv=jim_oreilly@ieee.org&t=93304845348855187 1&guest.
    - If logged into your google account, can edit. If not, can only view.

- Next Meeting 01/21/10.

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