ISO/IEC JTC 1/SC 22/WG 9 N 454

Meeting Report: ISO/IEC JTC 1/SC 22 (Programming Languages, Operating Systems and Environments), 29 September to 2 October 2005, Mont Tremblant, Quebec, Canada

Reported by Jim Moore, The MITRE Corporation, 1.703.983.7396, James.W.Moore@ieee.org

I attended this meeting as a member of the US delegation rather than as convener of WG 9 because of some oddities of US rules regarding participation in JTC 1 meeting. Steve Michell of Canada was kind enough to represent the interests of WG 9 at the meeting.

WG 9 participants need not take any actions upon reading this report. I will distribute specific requests when action is required.

Prior to the meeting, like all SC 22 conveners of working groups, I prepared an annual report to SC 22. That report, distributed to WG 9 as N 452, contained several requests for action:

5.1 Confirmation of ISO/IEC 8652:2000

In the forthcoming systematic review, WG 9 requests confirmation of IS 8652:1995 Programming Languages: Ada as corrected by ISO/IEC 8652:1995/Cor.1:2001. An amendment is under development.

5.2 Withdrawal of ISO/IEC 13814

WG 9 has recommended the withdrawal of ISO/IEC 13814. Both SC 22 and JTC 1 have endorsed the request. (See JTC 1 N 7451.) However, the request has not been implemented. Instead, its status is shown on the ISO web site as 90.93 (confirmed). WG 9 requests that the SC 22 Secretariat take whatever steps are necessary to effect the implementation of the request to withdraw the standard.

5.3 Free Availability of TR 24718, Guide for the Use of the Ada Ravenscar Profile in High Integrity Systems

On March 7, 2005, JTC 1 recommended that the Technical Report should be made freely available. This has not yet been implemented. WG 9 requests that the SC 22 Secretariat take whatever steps are necessary to effect free availability of the Technical Report.

5.4 Amendment to ISO/IEC 8652

Drafting of the planned amendment to the Ada Language standard, ISO/IEC 8652:1995/Amd 1, is completed and is currently undergoing editorial review. WG 9 anticipates approving the draft before the end of 2005. WG 9 has a history of careful preparation of its documents and SC 22 has a history of approving them without comment.

Accordingly, WG 9 requests that the SC 22 Secretariat be authorized to conduct an FPDAM ballot on the amendment directly upon receiving an approved draft from the WG 9 convener.

The outcome of each of these requests will be described below along with other items of interest.

WG 9 Requests Sent to SC 22

Confirmation of ISO/IEC 8652:2000

In the forthcoming systematic review, WG 9 requests confirmation of IS 8652:1995. SC 22 decided to treat all such requests via a single letter ballot:

Resolution 05-33: Recommendations on Standards for the 2006 Periodic Review

JTC 1/SC 22 instructs its Secretariat to issue a three-month letter ballot along with the recommendations from the JTC 1/SC 22 Working Groups for recommendations for the 2006 Periodic Review:

- ...
- ISO/IEC 8652:1995 Information technology Programming languages Ada
- ...

JTC 1/SC 22 instructs its Secretariat to inform both the JTC 1 Secretariat and ITTF of these recommendations.

Withdrawal of ISO/IEC 13814

Despite endorsement by both SC 22 and JTC 1 of the WG 9 request to withdraw ISO/IEC 13814, the withdrawal has not yet been implemented. SC 22 approved the following resolution:

Resolution 05-05: Withdrawal of ISO/IEC 13814: 1998, Generic Package of Complex Elementary Functions in Ada

JTC 1/SC 22, noting JTC 1/SC 22 Resolution 01-07 and that this withdrawal request has not been completed and that this standard is listed as confirmed on the ISO website, requests that the withdrawal of ISO/IEC 13814: 1998 be implemented.

Free Availability of TR 24718, Guide for the Use of the Ada Ravenscar Profile in High Integrity Systems

WG 9 noted that ISO/IEC TR 24718 had not yet been made freely available despite its approval for that status. Apparently, this is problem affecting other documents. SC 22 approved the following resolution:

Resolution 05-01: Free Availability of ISO/IEC JTC 1 Standards

JTC 1/SC 22 instructs its Secretariat to compile a list of all standards previously requested

by JTC 1/SC 22 for free availability.

JTC 1/SC 22 instructs its Chair to work directly with ITTF to ensure that all JTC 1/SC 22 standards on this list are included in the list of freely available JTC 1 standards on the ITTF website.

Noting that this is not the first time this request has been made, JTC 1/SC 22 instructs its Chair to request that the web pages for each of the JTC 1/SC 22 standards on that list on the ISO On-Line Store site describing all standards approved for free availability clearly state that there is no charge for electronically downloadable versions.

Amendment to ISO/IEC 8652

WG 9 has requested that SC 22 allow us to bypass the normal PDAM ballot and proceed directly to FPDAM (the equivalent of FCD for amendments). The request was approved:

Resolution 05-29: Authorization to Initiate an FPDAM Ballot for Ada

JTC 1/SC 22 instructs its Secretariat to initiate an FPDAM ballot for ISO/IEC 8652: 1995, Ada, upon receipt of the text from the WG 9 (Ada) Convener.

SC 22 Requests Sent to WG 9

New Work on Programming Language Vulnerabilities

A new OWG ("Other Working Group" – like a Rapporteur Group reporting directly to SC 22) was created to develop a Technical Report providing a commensurate treatment of the vulnerabilities in various programming languages:

Resolution 05-14: JTC 1/SC 22 N 3913, NP Ballot on Guidance to Avoiding Vulnerabilities in Programming Languages through Language Selection and Use

JTC 1/SC 22 notes that the "No" votes of the UK on Questions 1 and 2 are changed to "Yes" due to resolution of the concern noted in their ballot; and that final disposition of the NP is not yet possible pending clarification of the vote of one National Body. [Subsequent to the meeting, it was determined that the NP had been approved – JWM.]

To deal with any necessary work, JTC 1/SC 22 creates an Other Working Group on Vulnerability (OWG: Vulnerabilities), in accordance with sub-clause 2.6.2 of the JTC 1 Directives, with the following terms of reference:

- Definition of the task: Using the statement of scope previously provided in JTC 1/SC 22 N 3913, create an initial draft document and, if necessary, a revised New Work Item Proposal.
- Time frame: Submit the materials by the next plenary meeting of JTC 1/SC 22.
- Membership: Open to all JTC 1/SC 22 P and O members, liaison organizations, and subgroup representatives.
- Convener: James W. Moore (US).
- Administrative Support: The MITRE Corporation.
- Meetings: Continued operation by email and website collaboration pending invitations by working groups to co-locate meetings.

JTC 1/SC 22 instructs working groups to work with OWG: Vulnerabilities to co-locate meetings on this topic as appropriate.

WG 9 may want to designate representatives to the OWG. Furthermore, WG 9 participants may consider volunteering to represent their national body in this work.

Grammar Engineering Project

The Netherlands is performing some work on "browsable grammars" – grammars that can be browsed via hyperlinks. SC 22 calls the work to the attention of its Working Groups:

Resolution 05-15: Grammar Engineering Project

JTC 1/SC 22 notes "Grammar Engineering" is a project being run from the Free University of Amsterdam that is of relevance for existing and future JTC 1/SC 22 projects. JTC 1/SC 22 instructs its subgroups and project editors to:

- review this work, available from http://www.cs.vu.nl/grammars/browsable and discussed in JTC 1/SC 22 N 3977;
- investigate areas for co-operation; and
- report at the 2006 JTC 1/SC 22 Plenary upon progress made and issues found.

Other Items of Interest

Subcommittee and Working Group Document Repositories

JTC 1 has converted its document repository to a tool named LiveLink and has requested its subcommittees to also make the transition. There is some criticism of the tool's interface and performance. SC 22 has decided to continue its current website as a mirror of its "official" repository and has authorized its working groups to continue with their current websites:

Resolution 05-13: Transition to Live Link

JTC 1/SC 22 notes that the transition of the committee's website and documents to Live Link are causing difficulties for some members. (In particular, several members have experienced browser compatibility issues.) Therefore, because the new system is not fully understood and the browser issues are not resolved, JTC 1/SC 22 authorizes Keld Simonsen to continue to maintain the current JTC 1/SC 22 website and document repository, mirroring all documents appropriate to the subcommittee until the 2006 Plenary. Further, JTC 1/SC 22 notes that its Working Groups are not required to use Live Link unless they so desire, and may continue to maintain their own websites and document repositories.

JTC 1/SC 22 thanks Mr. Simonsen for his maintenance of the JTC 1/SC 22 website.

Vocabulary

You may be interested in the outcome of the various exercises to gather vocabularies from SC 22 language standards. It is summarized in this resolution:

Resolution 05-36: Vocabulary

JTC 1/SC 22 notes with gratitude the work undertaken by Roger Scowen and the Canadian

Translation Bureau with regard to vocabulary, and understands the magnitude of that undertaking. JTC 1/SC 22 recommends that work continue to identify a suitable home for a vocabulary database, noting especially the offers and suggestions from several national bodies and liaison organizations, and invites proposals for JTC 1/SC 22's consideration at the 2006 Plenary.

JTC 1/SC 22 instructs its Chair to inform JTC 1 that the terminology exercise between JTC 1/SC 22 and the Canadian Translation Bureau has shown

- 1. Collecting existing definitions from current standards is sometimes a trivial exercise and sometimes labour intensive.
- 2. Review and translation by experts (e.g., the Canadian Translation Bureau) discloses inconsistencies, ambiguities, and unnecessary diversity.
- 3. Removing the deficiencies is an exercise for which manpower is probably not available.
- 4. The results, a descriptive definition of (specialized) usage, are nevertheless valuable to many people.

JTC 1/SC 22 believes that the exercise is worthwhile and that volunteers will come forward if they realize that the results will be freely available.

The key word in this resolution is "descriptive" in item 4. No one was in favor of developing a prescriptive vocabulary that would have to be used by all of the language standards. Nevertheless, this issue will persist because of JTC 1 initiatives regarding vocabulary.

Document Readability

Apparently, there have been some reports of documents that are difficult to read:

Resolution 05-37: Readability of JTC 1 Documents

JTC 1/SC 22 recommends that the JTC 1 Directives should include a general instruction that all JTC 1 documents be written with due regard to their intended readership. In particular, readers often need a table defining acronyms and a reference to a suitable dictionary of terms.

JTC 1/SC 22 recommends that when a group circulates the results of its work widely (e.g., JTC 1/SC 22 N 3940, "JTC 1 N 7824 Web Services Study Group Meeting Report"), that group should provide an introduction or background section.

JTC 1/SC 22 instructs its Chair to make these recommendations known to JTC 1.

Next Meeting

Resolution 05-34: JTC 1/SC 22 Plenary for 2006

JTC 1/SC 22 thanks the United Kingdom for its generous offer to host the 2006 Plenary and is pleased to accept the offer. The Plenary is scheduled at the BSI Facilities in London, England, during the week of 18 September 2006.