ISO/IEC JTC1/SC 22/WG 9 N617

Draft Minutes

Meeting #81 of ISO/IEC JTC 1/SC 22/WG 9

Tuesday, 29 June 2021 (virtual only)

Meeting #81 of WG 9 was held 29 June 2021. Per ISO guidance, the meeting was strictly virtual due to the COVID-19 pandemic. The meeting started at 16:00 UTC.

The detailed agenda was distributed as N616.

Remote access to the conference was available via WebEx.

AGENDA

Opening Orders, Meeting Convenor

Introductions and Reports

Liaison Reports and Introductions (as needed)

- Ada Europe: Dirk Craeynest
- SIGAda: Drew Hamilton
- WG 23: Erhard Plödereder
- Fortran: Van Snyder

Convenor's Report

Project Editor Reports (as needed)

- IS 8652: Steve Baird, Randy Brukardt
- IS 15291: Bill Thomas and Greg Gicca
- TR 15942: Alejandro Mosteo
- IS 18009: Erhard Plödereder
- TR 24772-2: Joyce Tokar
- TR 24772-6: Stephen Michell, Erhard Plödereder, Tullio Vardanega

Rapporteur Group Reports (as needed)

- Report of Ada Rapporteur Group: Steve Baird, Chair
- Report of Annex H Rapporteur Group: Joyce Tokar, Chair

Review of Open Action Items and Unimplemented Resolutions

Committee as a Whole

Opening Orders

Call to Order

Appointment of Meeting Secretary

Welcome and Administrative Arrangements

Code of Conduct

Approval of the Agenda

Approval of N614: Meeting #80 Minutes.

Reports and Introductions

Austria – Johann Blieberger (HoD)

Canada – Brad Moore (HoD)

Finland – Niklas Holsti (HoD)

Italy – Tullio Vardanega (HoD)

Portugal – Luis Miguel Pinho (HoD)

Spain – Alejandro Mosteo (HoD)

Switzerland – Nicholas Kaethner (HoD)

UK – Jeff Cousins (HoD)

USA – Tucker Taft (HoD)

Guests – ?

Liaison Reports and Introductions

Ada Europe – Dirk Craeynest

SIGAda – Drew Hamilton

WG 23 – Erhard Plödereder

Since the last virtual WG9 meeting, WG23 has continued its schedule of weekly 3-hour conference calls plus occasional additional meetings, focusing on Parts of TR 24227 in turn. The present status is:

- Java is completed. A virtual meeting with Oracle is now scheduled for July 7th.
- SPARK is completed, up to review and approval by WG9.
- Python gets closer to completion. WG23 expects it to be finished in 2021.
- C++ made steady progress. Less than ten vulnerabilities remain to be completed for a first draft of the entire document.
- The Ada Part is back with WG9 for comment resolution.
- Part 1 has undergone changes in response to Niklas' comments and other comments received since the last publication as a TR. The changes are rolled into the working document for the International Standard version of the 24227.

There has been further bad news from ISO: TRs shall, from now on, no longer contain any recommendations or guidelines. Those are the exclusive domain of Standards. The principle has been written down in an ISO-approved paper. It affects WG9 work as well.

ISO has not yet reacted to our inquiry via SC22 to get pre-approval of free availability before turning WG23 documents into Standards.

Fortran, INCITS/PL22.3 – Van Snyder

Convenor's Report
Activities since the Last Session

The informal review period for the proposed new Ada Draft International Standard (DIS) is now complete. Thank you all for the many, detailed comments!

As mentioned in the last meeting, in consultation with the SC 22 Chair and the Committee Manager, I developed Document [N612](#). This document describes the process by which the Ada standard "source document" is produced and provided to ISO so that the copyright and free availability (of the source document) is maintained. Therefore, the document is important, especially for the future, as there is no other document within ISO describing the means by which Ada is treated specially. The treatment is not really all that special but does require us to go through a specific ISO-defined submission process that is not usually applied. N612 describes that process.

However, in further consultation with the SC 22 Chair and the SC 22 Committee Manager, a simpler process is both available and required under new rules. Now, Randy will submit the contribution directly to WG 9, rather than indirectly via the US TAG.

At the upcoming SC 22 Plenary in August, I will request SC 22 to approve a project for the new edition. We will request the "accelerated timeframe" process, which is usually 18 months but, if there are no requests for technical changes, will be much shorter because we can skip some intermediate ballots. Once the project is approved and starts, we can go directly to the DIS stage. The DIS ballot takes twelve weeks, plus eight weeks for potential translation into other (natural) languages, so, assuming no major editorial issues, there is a total of approximately 20 weeks for the DIS stage to complete. That's if everything goes smoothly.

The next, immediate step is to vote whether Randy should forward the Draft to WG 9. That will require the ARG report to be heard first.

In addition, we need to decide whether we want to have a "formal" review, given the new process: should the completed informal review be considered the formal review? Again, the ARG report needs to be heard first.

Finally, Clyde Roby has retired from IDA. Clyde has graciously maintained the WG 9 document website for many years. I will take over the handling of the document web site until we can move the entire set over the ISO facility. At that point I will handle the insertion of new files into that facility.

AGENDA

Project Editor Reports (as needed)

IS 8652 (Information Technology--Programming Languages - Ada) (Steve Baird, Randy Brukardt)

IS 15291 (ASIS) (Bill Thomas, Greg Gicca)

TR 15942 (Guidance for the Use of Ada in High Integrity Systems) (Alejandro Mosteo)

IS 18009 (Conformity Assessment of an Ada Language Processor) (Erhard Plödereder)

TR 24718 (Guide for the Use of the Ravenscar Profile in High Integrity Systems) (Alan Burns)

TR 24772 (Guidance to avoiding vulnerabilities in programming languages – Vulnerability descriptions for the programming language Ada) (Joyce Tokar)

AGENDA

Rapporteur Group Reports (as needed)

Rapporteur Report ARG (Steve Baird)

Since the last report (Jan 2021), the ARG has met (electronically) twice. The major action of the first of these two meetings was a vote to send a draft of the Ada 2022 standard to WG 9 and solicit feedback. The resulting WG 9 review generated 179 comments. Many were formatting

fixes that were dealt with via editorial review; 13 of the issues identified were deemed sufficiently substantial that AIs were generated for them. In the second meeting (Jun 2021), these 13 AIs were approved and the resulting draft of the Ada 2022 standard was approved for submission to WG 9 as the final draft.

It was expected that this would conclude the ARG's role in the development of the (initial) Ada 2022 standard. However, the hubris implicit in claiming that any version of anything is the "final" version has once again been highlighted by the universe. It was recently discovered that, as a result of an oversight, some of the ARG approved wording for AI12-0409 did not make it into the draft RM. Correctly incorporating this wording into the RM is not a major change, but it was not included in the version of the RM that was posted for review by WG 9. We anticipate incorporating this wording in the version that WG 9 will formally vote on, but I bring this point to everyone's attention in case anyone has any objection to this or would like to discuss the matter.

Throughout the entire Ada 202x project, but particularly during 2021, Randy Brukardt has done a tremendous amount of work in order to keep the process on track. I thought about enumerating his contributions here but it didn't take long before I just gave up - the list was too long. Other people (most notably Tuck) also contributed both insight and effort to the project, but Randy's work "behind the scenes" deserves particular acknowledgement.

The ARG will eventually need direction from WG 9 regarding how to proceed with post-Ada-2022 work, but not today. In addition to any language maintenance and development work, there is also a recognized need to improve the website and the underlying infrastructure used for managing language changes and clarifications.

Rapporteur Report HRG

[AGENDA](#)

Open Action Items and Unimplemented Resolutions

This is the "To Do" list for WG 9. Some are informal action items assigned to various participants. Some are formal resolutions, which are not yet implemented. Some items are simply in suspense awaiting action by other groups.

AI-78-3: WG 9 members should individually prepare to discuss WG 9 work items after delivery of Ada 202x. Examples could include: additional activities for the HRG along reliability and security lines; co-joining efforts with the real-time workshops in order to produce standards-related documents; adoption of SPARK and its environments into the WG9 scope.

To be discussed at the upcoming September meeting.

Status: Open

AI-80-1: Joyce to contact previous members, if possible, and invite Tucker and Steve, to review the Ada Part : TR 24772-2.

Status: Done

AI-80-2: All WG 9 members to review the SPARK Part after the Ada RM informal review completes. Steve Baird to initiate the effort. Report by September meeting. Tucker and Pat volunteer.

Status: Open

Committee as a Whole

Unfinished Business

New Business

Scheduling of Future Meetings

Virtual meetings, 20 September 2021 and mid June 2022 (near Brussels).

Review of New Action Items

AI-81-1: Pat to update N612 to reflect latest process for creating/submitting the Ada DIS.

AI-81-2: Pat to request the new project approval at the SC 22 Plenary.

AI-81-3: Pat to get the WG 9 documents transferred to the ISO Documents facility.

AI-81-4: Steve to stand up the SPARK Part review team, with a report by the September meeting.

Final Consideration of Resolutions

Resolution 81-1: The meeting minutes of meeting #80 are approved.

Resolution 81-2: The next two meetings of WG 9 will be held 20 September 2021 (virtual) and mid June 2022 (perhaps live, after Ada Europe).

Resolution 81-3: Axe Consultants (Randy) should forward the Draft DIS "source doc" to WG 9 for submission to SC 22, including a cover letter re: copyright.

Resolution 81-4: WG 9 will consider the informal review, already completed, as their formal review of the DIS.

Resolution 81-5: TR 15942 will be converted to an International Standard, specifically as a Guidance Standard. Note that making a TR into an IS will require a New Work Item Proposal, NWIP (form 4).

Resolution 81-6:

ISO/IEC JTC 1/SC 22/WG 9 continues its Annex H Rapporteur Group (HRG) until the next plenary meeting and expresses its grateful appreciation to the Rapporteur and the members for their continuing service.

Joyce Tokar is continued as Rapporteur.

The membership of the HRG is designated to be: Steve Baird, John Barnes, Ben Brosgol, Alan Burns, Rod Chapman, Gary Dismukes, Bob Duff, Michael Gonzalez Harbour, Stephen Michell, Brad Moore, Miguel Pinho, Erhard Plödereder, Juan Antonio de la Puente, George Romanski, Jean-Pierre Rosen, S. Tucker Taft, Joyce Tokar, and Tullio Vardanega.

The Convenor of WG 9 is authorized to act for WG 9 between meetings in appointing additional members of the HRG. In doing so, he shall consult with the Rapporteur and the National Body or Liaison Organization nominating the member.

Rapporteurs are permitted to allow other individuals to observe the deliberations of the Rapporteur Group. The admission of observers and the extent of participation permitted to observers are at the discretion of the Rapporteur with the concurrence of the membership of the Rapporteur Group.

Resolution 81-7:

ISO/IEC JTC 1/SC 22/WG 9 continues its Ada Issues Rapporteur Group (ARG) until the next plenary meeting and expresses its grateful appreciation to the Rapporteur and the members for their continuing service.

Steve Baird is continued as Rapporteur.

The membership of the ARG is designated to be: Raphaël Amiard, Steve Baird, John Barnes, Randy Brukardt, Alan Burns, Arnaud Charlet, Jeff Cousins, Gary Dismukes, Claire Dross, Robert Duff, Edward Fish, Pascal Leroy, Brad Moore, Jean-Pierre Rosen, Ed Schonberg, Justin Squirek, Tucker Taft, Tullio Vardanega, and Richard Wai.

The Convenor of WG 9 is authorized to act for WG 9 between meetings in appointing additional members of the ARG. In doing so, he shall consult with the Rapporteur and the National Body or Liaison Organization nominating the member.

Rapporteurs are permitted to allow other individuals to observe the deliberations of the Rapporteur Group. The admission of observers and the extent of participation permitted to observers are at the discretion of the Rapporteur with the concurrence of the membership of the Rapporteur Group.

Resolution 81-8: WG 9 would like to thank Randy Brukardt for the prodigious effort required in producing the Draft.

Resolution 81-9: ISO/IEC JTC 1/SC 22/WG 9 expresses its grateful appreciation to Alok Srivastava for acting as secretary for Meeting #81.

Resolution 81-10: ISO/IEC JTC 1/SC 22/WG 9 expresses its grateful appreciation to Clyde Roby, on the occasion of his retirement, for maintaining the document list web page. His support these many years is highly appreciated and will be missed.

Resolution 81-11: ISO/IEC JTC 1/SC 22/WG 9 expresses its grateful appreciation to the Convenor, Pat Rogers, for his work in identifying and documenting the proper process for submitting the draft standard to ISO in order to maintain Ada's long-standing availability.

[AGENDA](#)

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References

See http://www.open-std.org/jtc1/sc22/wg9/documents.htm for the WG 9 Document Log, including the ability to download the documents.