ISO/IEC JTC1/SC22/WG9 N604

Draft Meeting Minutes

Meeting #77 of ISO/IEC JTC 1/SC 22/WG 9

Saturday, 5 October 2019 in Lexington, Massachusetts

In accordance with Resolution 76-2, meeting #77 was held the morning of Saturday, 5 October, 2019 in Lexington Massachussetts. The meeting started at 09:00 local time.

The detailed agenda was distributed as N603.

Remote access to the conference was available via Zoom.

AGENDA

Opening Orders, Meeting Convenor

HOD Reports

Liaison Reports and Introductions

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

Convenor's Report

Project Editor Reports (as needed)

- IS 8652:   Jeff Cousins, Ed Schonberg, and Randy Brukardt
- IS 15291:   Bill Thomas and Greg Gicca
- TR 15942:   Ben Brosgol
- IS 18009:   Erhard Ploedereder
- TR 24772-2:   Joyce Tokar
- TR 24772-6:   Stephen Michell

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

ISO Code of conduct (CoC) Review

   URL: https://www.iso.org/publication/PUB100397.html

Welcome and Administrative Arrangements

Approval of the [Agenda](#)

Approval of [N599](#): Meeting #76 Minutes.

Welcome Guests (Alok Shrivastava, Justin Squirek, Richard Wai)

HOD Reports

Canada – Brad Moore (HOD)

Italy – Tullio Vardanega (HOD)

Portugal – Luis Miguel Pinho (HOD)

Spain – Juan Antonio de la Puente (HOD)

Switzerland – Nicholas Kaethner (HOD)

UK – Jeff Cousins (HOD)

Activity of the UK NB's Ada Panel remains restricted to the convenor (myself) distributing a progress report every few months, plus the occasional e-mail. The convenorships of all the UK Programming Language panels have come up for their three yearly renewals; unless anyone objects by October 11th we will all be re-appointed.

Jeff Cousins' article on "ARG Work in Progress III" has been submitted to the Ada User Journal. It is hoped that once Ada 202x is published, the UK can produce the Rationale.

The UK delegation is Jeff Cousins (electronically) for this meeting of WG 9.

USA – Tucker Taft (HOD)

Guests, if any

AGENDA

Liaison Reports and Introductions

Ada Europe – Dirk Craeynest

Ada-Europe would like to inform the WG9 convener that it is unable to send a liaison delegation to Meeting #77 in Lexington, Massachusetts, USA, on Saturday 6 October 2019. Erhard Ploedereder announced he will try to participate via Zoom.

For now, we mainly want to remind everyone that the next Ada-Europe conference will be held in the week of June 8-12, 2019, in Santander, Spain, and we reconfirm our usual hospitality agreement for WG9, ARG and HRG, as well as for WG23. The Preliminary Call for Papers was distributed at the Warsaw conference in June 2019, is available on the event's web site [1], and the updated CfP will be distributed shortly via various channels.

The 2020 edition of our conference continues the major revamp in the registration fees that we introduced this year, redesigned to extend participation and to reward contributors.

[1] http://www.ada-europe.org/conference2020

We will submit a more complete report for meeting #78 in June 2020.

SIGAda – Drew Hamilton

WG 23 – Erhard Ploedereder

Since the last WG9 meeting in Warsaw, WG23 is shepherding the three ISO-approved Parts (language-independent Part, the Ada Part 2 and the C-Part 3) through the post-ballot process at ISO. After more than 6 months, we received Part 1 back from the ISO Editor last Sunday. It came with many changes, most notably the indiscriminate replacement of all occurrences of "must", "may" and "might" by "needs to" and "can", respectively. WG23 is putting up resistance. (The terms are not randomly interchangeable.) Also, the editing process has changed in the sense that now the Project Editor delivers Word files and gets PDF with changes back to review and approve. One wonders about maintaining Standards. The Ada Part is next in line.

More productively, WG23 has worked together with WG21 on completing the C++ Part. A sizeable Study Group SG12 of WG23 has become interested in the vulnerabilities work and is helping WG23 along quite eagerly (which is a marked improvement over attitudes a few years back). A WG23 meeting in Cologne on July 15-18 jointly with the WG21 meetings and with extended shared sessions with SG12 helped the document along quite a bit. Another three-day meeting is coming up in early November in Belfast, UK. Hopefully it will result in a completed draft of Part 4 that can then be circulated more widely.

On a different track, Parts for Java and Python have been produced. At a recent three-day meeting in Hanover, MD, Sept. 26-28, the Java Part was reviewed in its entirety and also the first half of a Python Part. It is likely that the Java Part will be ready for broader review after the Belfast meeting.

At the last WG9 meeting, I urged action to get the SPARK Part updated, since, once Part 1 of TR 24772 becomes an International TR, the previous version, including all its annexes, is taken off the list of active ISO documents. This means that the annexes for Python, Ruby, PHP, and SPARK will be removed as active documents. It would be a pity to see SPARK no longer present among the WG23 documents. Unfortunately, several attempts on the part of WG23 to get assistance from SPARK experts have come to naught. There is no progress to report towards a SPARK Part. Again, WG23 urges WG9 as the ISO home of SPARK to assist in this endeavor.

Fortran, INCITS/PL22.3 – Van Snyder

Convenor's Report

Activities since the Last Session

Meeting Objectives

The major objectives for this meeting are:

1. Check state of Ada 202x draft review/prototyping effort
2. Plan WG 9 meetings in the future
3. Develop Technical Reports or Standards improving the Ada libraries

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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) (Ben Brosgol)

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

IS 18009 project editor report: No comments received and no activities to be reported.

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

See status of AI-73-8.

TR 24772-2 (Guidance to avoiding vulnerabilities in programming languages – Vulnerability descriptions for the programming language Ada) (Joyce Tokar)

TR 24772-6 (SPARK part of TR 24772) (Stephen Michell, Erhard Ploedereder, Tullio Vardanega)

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Rapporteur Group Reports (as needed)

Rapporteur Report ARG

Since the last report (June 2019), the ARG has met once (June 2019 in Warsaw).

At that meeting, 11 AIs (Ada Issues) were approved by the ARG.

  AI12-0191-1/11 Clarify "part" for type invariants
  AI12-0210-1/04 Type Invariants and Generics
  AI12-0214-2/02 Boolean conditional case expressions and statements
  AI12-0240-6/04 Global aspect and access types used to implement Abstract Data Types
  AI12-0326-2/03 Bounded errors for procedural iterators
  AI12-0333-1/03 Predicate checks on out parameters
  AI12-0335-1/02 Dynamic accessibility check needed for some requeue targets
  AI12-0336-1/02 Meaning of Time_Offset
  AI12-0337-1/01 Simple_Name("/") in Ada.Directories
  AI12-0338-1/02 Type invariants and incomplete types
  AI12-0339-1/01 Empty function for containers

Progress was also made on other AIs. As per the policy discussed at the previous WG 9 meeting, these AIs are not yet being formally delivered to WG 9 for disposition.

As usual, the AIs that have been approved by the ARG but not by WG 9 can be found at http://ada-auth.org/ai-files/ARG_AI12.zip .

Rapporteur Report HRG

Numerics Rapporteur Group

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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-73-8: Pat to reformat TR 24718 with the required changes per ISO feedback.

Status: Closed (pending ISO review). The second submitted version was rejected by the ISO reviewer because additional changes were required. (The first version submitted did not conform to the TR format at all because it was a York Uni report originally.) Those changes have been made and the third revised version was submitted to ISO on 3 October.

AI-76-1: Tullio and Juan to contact volunteers for work on TR 15942 (Guide for the use of the Ada programming language in high integrity systems). They found a person, but need to follow-up to verify his interest.

Status: Open

AI-76-2: Pat to initiate pursuit of new national body members from vendors' customers.

Status: Open. No action to-date.

AI-76-3: The Convenor will send a letter to Ada vendors, the high-performance community, and the Ada community, requesting they comment on the draft, especially the parallelism features.

Status: Closed. Information was provided by Randy and disseminated by Dirk.

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Committee as a Whole

Ada 202x Review and Prototyping Status

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Unfinished Business

AGENDA

New Business

AGENDA

Scheduling of Future Meetings

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Meeting #78 will be held in conjunction with Ada Europe 2020 in Santander, Spain, on Friday 12 June 2020 at 9:00AM local time.

Meeting #79 will be held at a to-be-determined date/location. Richard Wai and Tucker will discuss.

Review of New Action Items

AI-77-1: the Convener will send an email to AdaCore requesting insights into the plan and schedule for the prototyping efforts.

AI-77-2: Steve Baird will obtain from AdaCore the list of AIs considered "controversial" by AdaCore and send the list to WG 9 and the ARG.

AI-77-3: Tucker and Richard will discuss the possible place and date for meeting #79 in terms of co-locating it with a conference and will inform WG 9 once determined. (The default location is the AdaCore offices in Lexington.)

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Final Consideration of Resolutions

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Resolution 77-1: The meeting minutes of meeting #76 contained in document N599 are approved.

This resolution passed unanimously.

Resolution 77-2:

ISO/IEC JTC 1/SC 22/WG 9 schedules future meetings as follows:

Meeting #78 will be held in conjunction with Ada Europe 2020 in Santander, Spain, on Friday 12 June 2020 at 9:00AM local time.

Meeting #79 will be held at a TBD location and date.

This resolution passed unanimously.

Resolution 77-3:

ISO/IEC JTC 1/SC 22/WG 9 continues the Ada High-Integrity 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 Ploedereder, 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.

This resolution passed unanimously.

Resolution 77-4:

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, Jeff Cousins, Gary Dismukes, Claire Dross, Robert Duff, Pascal Leroy, Brad Moore, Jean-Pierre Rosen, Ed Schonberg, Justin Squirek, Tucker Taft, Tullio Vardanega, and Richard Wai.

Note that Claire Dross is a new member and Erhard Ploedereder has been removed, per his request.

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.

This resolution passed unanimously.

Resolution 77-5: ISO/IEC JTC 1/SC 22/WG 9 expresses its grateful appreciation to Alok Srivastava for acting as secretary for Meeting #77.

This resolution passed unanimously.

Resolution 77-6: ISO/IEC JTC 1/SC 22/WG 9 expresses its grateful appreciation to AdaCore hosting meeting #77.

This resolution passed unanimously.

Resolution 77-7: ISO/IEC JTC 1/SC 22/WG 9 expresses its grateful appreciation to Clyde Roby for maintaining the document list page.

This resolution passed unanimously.

RECESS

AGENDA

The Convenor recessed the meeting at 10:32 am, subject to a call to resume.

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.