

Document Number: X3J16/92-0128

WG21/N0205

Date: 12 November 1992

Project: Programming Language C++

Reply to: Dan Saks

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Minutes  
ISO/IEC JTC1/SC22/WG21 Meeting No. 5  
1 - 6 November 1992

Boston Park Plaza Hotel  
64 Arlington St.  
Boston, MA 02116 USA

1 Opening and introductions

Carter convened the meeting at 19:04 (EST) on Sunday, 1 November 1992.  
Saks was the secretary.

1.1 Welcome from host

1.2 Introductions and Roll Call of Technical Experts

The attendance list is attached as appendix A.

1.3 Selection of Meeting Chair

Carter offered to chair the meeting.

1.4 Selection of Meeting Secretary

Carter affirmed that Saks is the permanent secretary for WG21.

1.5 Select Language

Carter suggested that WG21 conduct this meeting in English, and no one objected.

1.6 Selection of Drafting Committee

Carter asked for volunteers to serve as the drafting committee for this meeting. Shopiro volunteered. Carter suggested that Saks should be a permanent member of the drafting committee. Saks agreed.

Saks suggested that WG21 should ask each working group of WG21+X3J16 (the joint C++ committee) to designate a member to bring the working group's formal motions to and participate in the drafting committee. Carter agreed to pass this request to WG21+X3J16.

## 1.7 Adoption of Agenda

Carter submitted SD-0 == 90-0022R2 (as of 14 September 1992) as the meeting agenda, and recommended adding these items:

- 3.3 WG21 Project Schedule
- 3.4 Language Independence
- 3.5 Character Sets

Motion by Bruck/Plum: "Move that we approve SD-0 = 90-0022R2 as amended as the meeting agenda."

Motion passed: 5 yes, 0 no.

### 1.7.1 Recognition of Documents

Carter listed the temporarily numbered documents for this meeting:

- BT-1, SC22 Resolutions, August 22, 1992
- BT-3, WG20 Convener's Report, SC22/N1233
- BT-4, Procedures for Handling Defect Reports, SC22/N1236
- BT-5, Terms of Reference ... Cross Language Coordination, SC22/N1235
- BT-6, Convener's Report of Char Set Ad Hoc ..., SC22/N1239
- BT-7, PCTE
- BT-8, WG21 Project Schedule

## 1.8 Approval of Minutes from Previous Meeting

Saks submitted document N0154 = 92-007 for approval.

Motion by Bruck/Lajoie: "Move we approve N0154 = 92-0077 as the minutes of the previous meeting."

Motion passed: 5 yes, 0 no.

## 2 Status, Liaison and Action Item Reports

### 2.1 Small Group Status Reports

None.

### 2.2 Liaison Reports

#### 2.2.1 SC22 Report

Carter explained that WG11(Binding Techniques), WG15(POSIX), WG18(FIMS), WG19(VDM-SL), WG20(Internationalization) and SC21 are working on cross language standards. SC22 directed all programming language committees to reply to a questionnaire designed to assess the impact of pending cross language standards. SC22's Ad Hoc Group on Cross Language Coordination (XLCG) plans to use the replies to set policy for future work on cross language standards. In addition, WG11 should benefit from a review of its pending standards.

Carter distributed copies of some of the pending cross language standards to each head of delegation present. Item 5c in the cover letter (92-0111 = N0188) for the questionnaire lists the standards that SC22 would like to be considered, but the distributed documents do not cover all of these standards. (The FIMS, VDM and Internationalization standards are not attached.)

Carter asked Rumsby to locate a copy of the VDM standard for WG21 to review.

Carter explained that there are eight of these pending cross language standards. It could take programming language working groups many years to conform to all of them, so SC22 needs to establish policies on conformance and the continuing development of cross language standards. If some of the efforts are inappropriate, they should be stopped, and the resources shifted to tasks that are more important.

Plum suggested that answering the questionnaire involves issues of technical substance that should be discussed in the joint committee, not just by WG21.

Carter said he wanted a list of names, one to review each document. He asked Lenkov to add an agenda item to the joint meeting agenda to solicit volunteers to do this work.

Carter said it will be understood that the replies will not be the official position of WG21. They will simply be the best guess answers by the convener.

Lenkov said all the pending cross language standards have about the same relationship to C++. He was concerned that if we gave each of the eight documents to a different person, we'd get eight different positions. He did not want to spend two or three hours on Monday discussing these issues in open committee. He suggested asking for two to four volunteers to draft answers to some of the questions by the end of the week. Then ask others to finish the work after the meeting.

Plauger more-or-less agreed with Lenkov's proposal, but added that this task is really WG21's responsibility, not X3J16's.

Carter will explain the questionnaire to WG21+X3J16, and ask members to volunteer for an ad hoc committee that will write replies.

Plauger explained SC22's new procedures for handling defect reports (BT-4).

Plauger described the work of WG20 (Internationalization). He attended their most recent meeting in Quebec, Canada in October.

Carter briefly explained the work of SC22's Ad Hoc Group on Character Sets. He said that ISO 10646 is now a formal standard. Carter suggested that WG21 send a representative to the Character Set Ad Hoc meeting in Copenhagen in April, 1993. No one volunteered. Carter will ask a member of the joint committee to attend.

Plauger suggested that WG21 hold a caucus later in the week. The committee agreed to meet at lunch time on Thursday.

Carter explained that PCTE (Portable Common Tools Environment) is developing C++ bindings. Carter has requested a copy of the proposed bindings for review. No one objected.

Carter presented his proposed C++ project schedule (BT-8). Shopiro asked what happens if schedule slips. Plauger suggested that whereas SC22 might have been tolerant of schedule slippage in the past, it's now possible that JTC1 and SC22 could disband a committee that slips too much.

Carter asked Lenkov to add an agenda item for the joint meeting to discuss this schedule. Plum asked to discuss this twice at the joint meeting -- once on Monday and again later in the week.

#### 2.2.2 SC22/WG11, Binding Techniques, Report

Deferred to the joint meeting with X3J16.

#### 2.2.3 SC22/WG14, C, Report

Deferred to the joint meeting with X3J16.

Carter said that Simonsen asked WG21 to designate a different liaison to WG14. Plum volunteered.

#### 2.2.4 SC22/WG15, POSIX, Report

Deferred to the joint meeting with X3J16.

#### 2.2.5 SC22/WG20, Internationalization, Report

Deferred to the joint meeting with X3J16.

#### 2.2.6 US C++ TAG, X3J16, Report

None.

#### 2.3 Review Action Items from Previous Meetings (secretary)

- still* [ 1. Stroustrup will coordinate soliciting proposals on implementing international character handling in "intelligent" C++.

Not done.

- 2.* [ 2. Shopiro must get written permission from AT&T to use the base document (90-0020) for ISO standardization, including permission for translation into languages other than English for use by other national standards bodies.

Not done.

Carter will send a letter to Shopiro requesting that Shopiro get written permission from AT&T to use the base document (90-0020) for ISO standardization, including permission for translation into languages other than English for use by national standards bodies.

3. Carter will ask WG20 to add Vilot, Steinmuller, Allison, Plauger and Shopiro to their mailing list, and also ask WG20 to distribute their mail electronically.

Done.

### 3 New Business

#### 3.1 Review Responses to Language Independence Survey

See item 2.2.1.

#### 3.2 Review Changes to Working Paper

Deferred to the joint meeting.

#### 3.3 WG21 Project Schedule

Deferred to the joint meeting.

#### 3.4 Language Independence

See item 2.2.1.

#### 3.5 Character Sets

See item 2.2.1.

### 4 Review/Approval of Resolutions, Action Items and Issues

Carter announced that he must resign as convener in the next six months. Plauger said that the next convener must be from the US. Carter said that Sam Harbison of Tartan Labs has volunteered.



Plum suggested offering the position to Stroustrup.

For action items, see 5.6.

### 5 Closing Process

#### 5.1 Select Chair for Next Meeting

Carter asked for someone else to chair the next meeting. No one volunteered. Carter said he'd plan to chair the next meeting.

#### 5.2 Next Agenda

The convener should schedule the following items for the next meeting:

-- Replies to the WG20 Questionnaire

5.3 Future Meetings

Deferred to the joint meeting.

5.4 Mailings

Deferred to the joint meeting.

Carter acknowledged the following volunteers for future mailings:

- Clark Nelson (Intel), post-Portland,
- Eric Krohn (Bellcore), pre-San Diego,
- possibly Paul Zeiger (US West), pre-Asilomar/Palo Alto.

5.5 Document Number Assignment

Carter will ask Clamage to assign permanent document numbers to BT-4, BT-5, BT-6, and BT-8.

Plum suggested making BT-8 (the project schedule) a standing document. No one objected.

5.6 Review Action Items

- 1. Stroustrup will coordinate soliciting proposals on implementing international character handling in "intelligent" C++.
- 2. Carter will write a letter to Shopiro asking him to get written permission from AT&T to use the base document (90-0020) for ISO standardization, including permission for translation into languages other than English for use by other national standards bodies.
- 3. Rumsby will locate a copy of the VDM standard.

5.7 Thanks to host

WG21 thanked Johnson and OSF for hosting the meeting.

5.8 Adjournment

WG21 recessed at 21:15 on Sunday and reconvened in joint session at 09:00 Monday morning. See the corresponding joint meeting minutes (N0206 = 92-0129) for the time of adjournment on Friday, 6 November 1992.

[Secretary's Note: During the joint session, McLay and Colvin volunteered to assist Carter with the cross language questionnaire. Allison, Colvin, and Bruck offered themselves as potential candidates to represent WG21 at the Ad Hoc meeting on Character Sets in Copenhagen in April 1993. Consequently, the Thursday lunch meeting (suggested during the discussion under item 2.2.1 above) was cancelled.]