ISO/IEC JTC1/SC22/WG4
Programming languages, their environments and system software interfaces
- Programming language COBOL

Secretariat: U.S.A. (Convener)

TITLE:
Minutes of WG4 Meeting 26, 17-21 October 2005

DATE ASSIGNED:
21 October 2005

SOURCE:
Charles Stevens, Convener, ISO/IEC JTC1/SC22/WG 4

BACKWARD POINTER
N/A

DOCUMENT TYPE:
Working group meeting report

PROJECT NUMBER:
JTC 1.22.01.01

STATUS:
For information

ACTION IDENTIFIER:
FYI

DUE DATE:
N/A

DISTRIBUTION:
MS Word 6.0

CROSS REFERENCE:
N/A

DISTRIBUTION FORM:
Defined

Address reply to:
ISO/IEC JTC 1/SC 22/WG 4 Interim Convener
 Ann Bennett
 IBM
 M/S J63/F34
 555 Bailey Avenue
 San Jose, CA 95141 USA
 nwallace@us.ibm.com

Meeting Minutes
JTC 1/SC 22/WG 4 Meeting 26
17 – 21 October 2005, Las Vegas, Nevada, USA

Location: AmeriSuites Hotel
        4520 Paradise Road
        Las Vegas, Nevada 89109
        USA
        Phone: 702-369-3366

Convenor: Charles Stevens
        Unisys Corporation
        M/S MV122
        25725 Jeronimo Rd
        Mission Viejo, CA 92691
        USA
        Charles.Stevens@Unisys.Com

1.   Opening of WG4 meeting.
Mr. Charles Stevens, convener, called WG4 meeting 26 to order at 0940 hours Pacific Daylight Time on Monday, 17 October 2005, in Las Vegas, Nevada, USA.

2.   Opening Business
2.1   Introduction of Delegates.
The delegates from each country were introduced. The following is the list of delegates in attendance for all or part of the meeting, along with their affiliation:

Germany:
      Mr. Peter Kamp - Fujitsu Siemens
Japan:
      Mr. Wataru Takagi - Hitachi
      Mr. Hideaki Fukushima - Fujitsu
The Netherlands:
      Mr. Huib Klink - Micro Focus
      Mr. Steven Klusener - Free University of Amsterdam
U.K.:
      Mr. Rod Grealish - self
U.S.A.:
      Ms. Ann Bennett - IBM
      Mr. Barry Tauber - Victor Consulting
      Mr. Don Schricker - Micro Focus
      Mr. Don Nelson - self
      Mr. Bruce Hobbs - Engineered Software
      Mr. Robert Karlin - Karlins' Korner

Mr. Michael Watson - Watson Systems
Mr. Jeff Lanam - Hewlett-Packard
Mr. Barry Rosetti - Micro Focus
Mr. Nick Tindall - IBM

2.2   Introductory remarks by convener.

2.3   Welcome by host, local arrangements.
Mr. Schricker greeted the delegates and presented administrative details about the meeting and its environment.

2.4   Appointment of secretary and chair.
Mr. Stevens chaired a major part of the meeting and appointed Ms Wallace as co-chair for the remainder of the meeting. Mr. Don Schricker was appointed secretary.

2.5   Selection of drafting committee.
Mr. Grealish, Ms Bennett, Mr. Klusener, and Mr. Karlin volunteered to serve on the drafting committee. Mr. Stevens asked Mr. Grealish to chair this committee.

2.6   Recognition of documents.
No new documents were introduced to the meeting.

2.7   Approval of the agenda.
The published agenda in WG4 N 0233 was approved by consensus at the start of the meeting.

2.8   Approval of minutes of meeting 25, The Hague, The Netherlands (WG4 N 0222)
Section 10 of the minutes of Meeting 25 was amended to indicate that the resolutions were published as WG4 N 0248. Resolution 7 was changed in part to read: "… appreciates the particular support … ". The revised minutes were approved by consensus.

3.   JTC1 or SC22 information affecting the group
3.1   SC22 Meeting 2005
JTC1 Directives: An ad-hoc meeting was held to allow the chair of JTC1 to make a presentation on the JTC1 directives and the changes that affected the languages working groups.

The recent request to provide definitions for all terms used in the COBOL standard was a result of a JTC1 effort to move toward common terms across standards; the SC22 consensus was that this was largely a futile effort, as each language has developed in its own context and attempting to revise the terms and the ways in which they were used in each language would be destabilizing.

A JTC1 directive specifies that unanimous (prior?) consent of all interested participants is required in order for a meeting to take place using teleconferencing facilities (telephone alone, web-based text sharing, or video conferencing). SC22 asked that JTC1 reconsider this restriction, as it allows a single participant to stall work by preventing other members from participating by telecommunication if they so choose.

IEEE 754r issues: The chair of SC22 has written the INCITS executive board (and I believe at least one of the IEEE governing boards) about the delay in the adoption of IEEE 754r and its impact on the SC22 working groups (in particular, WG4, WG5, WG14 and WG21, and possibly also WG11). I was asked to poll the Working Groups within SC22 to document the specific requirements each of these groups had with respect to this proposed draft. The draft Fortran standard proposed for 2008 normatively references the revised IEEE 754r but does not specifically call forth the decimal floating-point formats; Technical Reports for both C and C++ have been written (with specific reference to the decimal floating-point formats), but their work has stalled because of the delay in the adoption of IEEE 754r, and their working groups have requested an extension in the deadline for submission of these TRs for ballot as a result.

4. Liaison Reports
4.1 SC22/WG11, Binding Techniques (Mr. Grealish):
Mr. Grealish reported that the FCD ballot on 10967-3, Language Independent Arithmetic part 3, complex floating point arithmetic and complex elementary numerical functions , closed with two No votes. During the WG11 meeting in April 2005, the ballot comments were discussed and the No vote from Japan was changed to Yes. The FDIS will be submitted for ballot shortly.

The revision of IEC 60559 (also known as IEEE 754, the floating-point standard) is being closely followed by WG11 to see whether this revision has consequences for the Language Independent Arithmetic documents

The FCD ballot on ISO/IEC 11404, General purpose datatypes, closed on 24 May 2005 with one No vote. The ballot resolution meeting was held two weeks ago in New York.

4.2 COBOL Forum (Mr. Tauber):
Mr. Tauber reported the status of the COBOL Forum, a not-for-profit entity that is intended to encourage the use of COBOL.

4.3 Free University Amsterdam (Mr. Klusener)
Mr. Klusener reported on the work at the Free University of Amsterdam on Grammarware.

See resolution 9.

5. Preliminary discussion of future meetings.
Mr. Grealish extended a tentative offer to host, in Newbury, West London, Birmingham or Stratford-on-Avon. Consensus of the working group was that the next WG4 meeting should be held in the UK. After discussion of the revision, this topic will be revisited to determine an appropriate date for the next meeting.

6. Defect Handling for ISO/IEC 1989 (22.01.01)
6.1 Technical Corrigendum 1 and Record of Response 1
SC22 N 3869, SC22 letter ballot to approve Technical Corrigendum 1
SC22 N 3901, Summary of voting on Technical Corrigendum 1

The comments were accepted and the Technical Corrigendum was changed accordingly.
See resolution 4 for endorsement of the response to comments.

6.2   Technical Corrigendum 2 and Record of Response 2
SC22 N 3891, SC22 letter ballot to approve Technical Corrigendum 2
SC22 N 3966, Summary of voting on Technical Corrigendum 2

The comments were accepted and the Technical Corrigendum was changed accordingly. See resolution 5 for endorsement of the response to comments.

7.   TR 24716, Native COBOL syntax for XML (22.01.08)
SC22 N 3872, SC22 letter ballot to approve pDTR 24716
SC22 N 3908, Summary of voting on SC22 letter ballot SC22 N 3872)
SC22 N 3912, German comments on SC22 N 3872
WG4 N 0244, J4 recommended responses to comments in SC22 N 3908
WG4 N 0183, XML TR schedule

7.1   Schedule

The convener is planning to submit the draft for DTR ballot after update by J4, in accordance with the ballot resolution, and after an informal straw poll by WG4. Resolution 3 presents WG4 direction on this topic.

7.2   Resolve ballot comments

WG4 discussed the German comment in SC22 N 3912. Consideration was given to other views during discussion, particularly that XML is well-accepted by the industry and there appears to be vendor interest in native COBOL syntax for XML. There was consensus to continue the development of the TR.

Annex B, Unresolved technical issues, was discussed and the issues were resolved as follows:

1. The OPEN NEXT DOCUMENT and CLOSE DOCUMENT were used in the document sent for review instead of INITIATE and TERMINATE as requested at the last WG4 meeting. There was no objection to the change in terminology. This will be dropped as an open issue.

2. This issue was separated into two issues:

a. White space: The TR will be clarified to specify that you get all the character data including the white space.

b. Data length: In the TR there is no way to determine the number of characters of XML data that are transferred into a data item. Several solutions were discussed, but no change will be made in this area because when this TR is included in the standard, the ANY LENGTH clause can be specified on the data items that receive the XML data and then there will be no limit to the size and the size can be determined.

3. Trailing spaces: No change will be made to the specification with regard to trimming spaces from data items referenced in the IDENTIFIED clause. Only trailing spaces will be trimmed. Leading spaces will result in an attempt to create invalid XML and cause an exception condition to be set to exist. This will be dropped as an open issue.

4. Null namespace: The TR will be changed such that the specification of a NAMESPACE clause with the USING phrase when the value of data-name-5 is spaces will result in the null namespace.

5. 'IDENTIFIED BY' default: The IDENTIFIED clause will continue to require specification of either the BY phrase or the USING phrase. This will be dropped as an open issue.

6. Lack of support for multi-document files in I/O mode: WG4 consensus is that disallowing the opening of a multi-document file for I/O is not a burdensome restriction. This will be dropped as an open issue.

7. Should trailing Boolean zeros be trimmed: The TR will continue to retain trailing zeros on boolean items, not trim them. This will be dropped as an open issue.

8. Partitioning: elementary versus immediate subordinates: This issue is moot since it was agreed to eliminate partitioning of one XML datum among multiple receiving fields.

US comments: The comments were satisfactorily resolved. The draft TR will be updated accordingly.

See resolution 1 regarding the acceptance of the responses to the comments.

Mr. Takagi suggested adding a syntactic option to transfer content without regard to contained elements or markup. This allows the user to handle mixed content and processing instructions and to parse XML to an arbitrary depth.

Individual straw vote: add a feature to read and write mixed content data including the markup
           Yes - 5, No - 3, Abstain - 7

Individual straw vote: Ask J4 to explore this feature, carefully considering the issue of validation of the XML.
           Yes - 15, No - 0, Abstain - 0

See the resolution 2 on this topic.

It was agreed that more examples would be helpful, including one that illustrates reading an XML document of unknown structure.

8. **TR 24717, Collection Classes (22.01.09)**
    SC22 N 3873, SC22 letter ballot to approve pDTR 24717
    SC22 N 3909, Summary of voting onSC22 letter ballot SC22 N 3873
    WG4 N 0246, J4 recommended responses to comments in SC22 N 3909

WG4 N 0184, Collection Class schedule
Temporary: J4/05-0221, Change Method (Gavan)

8.1 **Schedule**

The convenor is planning to submit the draft for DTR ballot after the project editor completes the changes that were directed during WG4 discussion. See resolution 6 on this topic.

8.2 **Resolve ballot comments**

The two countries that submitted comments were pleased with the response and the resulting changes.

Annex B, Unresolved technical issues, was discussed and the issues were resolved as follows:

Issue 1: There was no sentiment to add the capability of allowing object references to be added to a keyed collection class without associating keys with them. This will be dropped as an open issue.

Issues 2 and 3 will be retained since they involve solutions that will be provided when the TR is integrated into the standard.

8.3 **Change method**

WG4 was not interested in including this additional method in the class library. J4 will respond to Mr. Gavan

9. **Revision of ISO/IEC 1989:2002**
SC22 WG4 N 0242, Informal straw poll on WD 1.5
Temporary: J4/05-0224, Method overloading issues (Reimann)
WG4 N 0234, Revision schedule
Temporary: J4/05-0189, US straw poll response

9.1 **Schedule**

Based on the estimated time required to make the changes resulting from the resolution of comments on the informal straw poll and to include the three TRs in the revision working draft before submitting as a CD, the revision would appear to be on schedule. The next milestone is to submit the first CD for registration and approval by August 2006.

9.2 **Informal straw poll**
The intent of the informal head of delegation straw poll was to determine whether WG4 approves the revision draft as reflected in WD 1.5. The tally was YES - 4 (Japan, Netherlands, UK, US), No - 1 (Germany). However, discussion at this meeting indicates that additional work is required before forwarding the draft to SC22.

Japan: The changes requested by Japan were discussed and made by the project editor.

UK: The changes requested by the UK were discussed and made by the project editor.

Germany:

The comments submitted by Germany were discussed. Responses to significant comments follow:

A and B.   (A revision in 2008 is premature.)
WG4 sees value in continuing to produce a revision to meet new market requirements. Providing a standard specification of the new features is desirable. Pieces of COBOL 2002 have been accepted and are in use. The same will be true of the next standard and WG4 saw no problem with that. It is true that some of the new features do make pervasive changes, but this was not unexpected. The TRs are solid at this time. WG4 resolved the ballot comments on the TRs and both are ready to proceed to the DTR state.

C.1   (XML is not stable) XML is in fact a stable language.   Enhancements to XML are extensions that do not destabilize the language. See discussion under agenda item 9.3 on including TRs in the revision.

C.2   Collection classes. See discussion under agenda item 9.3 on including TRs in the revision.

C.3   Dynamic tables. The net of the comment was that they have become too complex. The initial user requirement was to require minimal changes to existing programs.

WG4 would like dynamic tables to go to public review. That review will determine whether the feature remains as is, gets simplified, or is deleted.

C.4   Any-length elementary items. The net of the comment was that they are too complex

WG4 would like this feature to go to public review. That review will determine whether the feature remains as is, gets simplified, or is deleted.

C.6   Method overloading. The issues can be seen in J4/05-0224. WG4 discussed this input extensively and took the following straw votes:

Individual straw vote: Is method overloading to be retained in the draft standard?
                    Yes - 8, No - 1, Abstain - 4

Individual straw vote: Should we continue to use a best fix algorithm for method overloading?
                    Yes - 11, No - 0, Abstain - 2

See resolution 7 on this topic.

J4 will further consider the detail in J4/05-0224. J4 documents are available at http://www.cobolportal.com/j4.

D.   The features in the draft revision were requested by WG4 after consideration of the alternatives and the time frame for the revision was deemed important by WG4 in order to keep COBOL as a viable standard.

See resolution 8 regarding the direction for the revision.

US: The US general comments were satisfactorily addressed. Most of the technical changes requested by the U.S. were accepted.

9.3   Inclusion of Technical Reports

WG4 discussed which Technical Reports should be included in the working draft and took the following straw votes:

- Individual straw vote: Should the finalizer TR be included in the draft standard after investigation?
                    Yes - 3, No - 1, Abstain - 7
    Country straw vote: Yes - 4 (UK, Germany, Netherlands, Japan),   No - 0,   Abstain - 1(US)

- Individual straw vote: Should the XML TR be included in the draft standard?
                    Yes - 8, No - 1, Abstain – 2

- Individual straw vote: Should the Collection class TR be included in the draft standard?
                    Yes - 6, No - 1, Abstain - 4

WG4 supports the inclusion of all three technical reports in the revision.

10.   Future plans
10.1   Future meetings
The next meeting of WG4 is tentatively scheduled for the week of 19 March 2007 in the UK.

11.   Review and approval of resolutions from this meeting
The following are the resolutions from this meeting, which are also reported in WG4 N 0255.

1.   ISO/IEC JTC1/SC22 WG4 endorses the responses to the pDTR ballot comments on ISO/IEC TR 24716:200x(E), Native COBOL syntax for XML support, proposed by INCITS/J4 in WG4n0244, as modified by WG4, and requests that the WG4 convener forward the responses to SC22.

Unanimously approved

2.   ISO/IEC JTC1/SC22 WG4 requests that INCITS/J4 explore the feasibility of adding the features of reading and writing mixed content data (including markup) considering the validation of XML data. Further, J4 should add these features on the advice of the J4 XML ad-hoc group to ISO/IEC pDTR 24716:200x(E), Native COBOL syntax for XML support.

Unanimously approved

3.   ISO/IEC JTC1/SC22 WG4 requests that INCITS/J4 include the changes approved by WG4 to ISO/IEC pDTR 24716:200x(E), Native COBOL syntax for XML support, and send the document to the WG4 convener for forwarding to SC22 for DTR ballot, after an internal WG4 straw poll that is to commence no later than the end of March 2006.

Unanimously approved

4.   ISO/IEC JTC1/SC22 WG4 instructs the Technical Editor of Technical Corrigendum 1 to apply the comments received in response to letter ballot ISO/IEC JTC1/SC22 N3901 to Technical Corrigendum 1 and send the revised document to the WG4 convener for forwarding to SC22.

Unanimously approved

5.   ISO/IEC JTC1/SC22 WG4 instructs the Technical Editor of Technical Corrigendum 2 to apply the comments received in response to letter ballot ISO/IEC JTC1/SC22

N3966 to Technical Corrigendum 2 and send the revised document to the WG4 convener for forwarding to SC22.

Unanimously approved

6. ISO/IEC JTC1/SC22 WG4 endorses the responses to the pDTR ballot comments on ISO/IEC TR 24717:200x(E), COBOL Collection Classes, proposed by INCITS/J4 in WG4n0246 and requests that the WG4 convener:
   - forward the responses to SC22;
   - forward the revised pDTR to SC22 for DTR ballot.

Unanimously approved

7. ISO/IEC JTC1/SC22 WG4 requests that INCITS/J4 proceed with the development of parameter polymorphism using Best Fit for method resolution. INCITS/J4 is requested to evolve a clear set of rules for method resolution consistent with best practices in other common object oriented languages.

Unanimously approved

8. ISO/IEC JTC1/SC22 WG4 re-affirms the direction it has previously established for the features to be included in the next revision of COBOL.

Unanimously approved

9. ISO/IEC JTC1/SC22 WG4 requests that INCITS/J4 monitor and review the application to the COBOL Standard of Grammarware Technology being researched at the Free University Amsterdam. WG4 requests that J4 report back by the next meeting of WG4 on the progress being made at the Free University Amsterdam and J4's evaluation of the applicability of Grammarware Technology in producing future COBOL standards.

Unanimously approved

10. ISO/IEC JTC1/SC22 WG4 expresses its grateful appreciation for the hospitality shown by Don and Penny Schricker to the members of WG4 during its meeting in Las Vegas in October 2005.

     Unanimously approved

11.   ISO/IEC JTC1/SC22 WG4 expresses its appreciation for the entertainment provided by Robert Karlin and his Barbershop quartet. *Oddly Enuf*, consisting of Bruce Poehlman, Robert Karlin, Duncan Gilman, and Tim Singer. WG4 requests that its convener write a letter to express WG4's appreciation of the entertainment provided by the quartet.

     Unanimously approved

12. ISO/IEC JTC1/SC22 WG4 expresses its deep appreciation to Don Schricker for his convenership of WG4 over many years. He has guided the activities of WG4 with firmness, fairness, and good humor. WG4 notes with pleasure that Mr. Schricker will continue his association with COBOL as chair of INCITS/J4, a director of ECLIPSE, and his continuing participation in WG4.

     Unanimously approved

12. Close of the meeting:
With resolutions having been approved and all agenda items having been addressed, the convener declared the meeting adjourned at 1058 hours Pacific Daylight Time on Friday, 21 October 2005.

_____ End of document _____