# JTC1/SC22/WG14 N1081

APPROVED MINUTES FOR 29 March - 02 April 2004 MEETING OF ISO/JTC1/SC22/WG14 AND INCITS J11 WG14/N1081 INCITS/J11/04-Coogee Meeting Minutes 02-April-2004 Meeting Times: Mon 29 March 2004 09:30-12:00 13:30-17:00 Tues 30 March 2004 09:00-12:00 13:30-17:00 Wed 31 March 2004 09:00-12:00 13:30-17:00 Thur 01 April 2004 09:00-12:00 13:30-17:00 Fri 02 April 2004 09:00-12:00 Meeting Location: Crowne Plaza Coogee Beach Sydney Cooqee NWS 2034 Australia Phone: +61 2 9315 7600 FAX: +61 2 9315 9100 E-Mail: Crowne Plaza Coogee Beach Sydney Host: Standards Australia Host Company: Whitesmiths Australia Pty Ltd Host Contact information: Whitesmiths Australia Pty Ltd Level 6, 44 Miller Street PO Box 1909 North Sydney, 2060, Australia Phone: +61 2 8912 1700 Fax: +61 2 8912 1701 1. Opening activities 1.1 Opening Comments (O'Brien, Plauger, Benito) John O'Brien, Whitesmiths welcomed everyone to Australia. 1.2 Introduction of Participants/Roll Call John Benito WG14 Convener USA Tom Plum Plum Hall USA

Barry Hedquist	Perennial, Inc	USA
John Parks	Intel	USA
Edison Kwok	IBM-Canada	USA/Canada HOD
P. J. Plauger	Dinkumware, Ltd	USA
Tana L. Plauger	Dinkumware, Ltd	USA
Douglas Walls	Sun Microsystems	USA HOD
Nobu Mori	SAP	Germany HOD
Francis Glassborow	Self	UK HOD
Martyn Lovell	Microsoft	USA
Cecilia Galvan	Metrowerks	USA
Randy Meyers	Silverhill Systems	USA
Nick Stoughton	Free Standards Group	Cat A Liaison SC22
Walter Brown	Fermilab	USA
Marc Paterno	Fermilab	USA
Rich Peterson	HP	USA

1.3 Selection of Meeting Chair and Meeting Secretary (Benito)

JB to act as meeting chair. BH to act as meeting secretary.

1.4 Procedures for this Meeting (Benito)

As per normal.

1.5 Approval of Previous Minutes (N1033)

Minutes approved as amended. Doc No WG14/N1061 - Final Minutes

1.6 Review of Action Items and Resolutions (Secretary)

ACTION: Nubo Mori to prepare a Disposition of Comments for the PDTR Ballot for Additional Character Types in final TR19769 DONE - N1035.

ACTION: Convener (JB) to forward an NP, submitted by Canada, for a Type 2 TR on Decimal Floating Point, to SC22 for Ballot. DONE

ACTION: PJ Plauger to draft the response for his proposal to the DR291 for review in Coogee. FT volunteered to review the response. DONE N1050

ACTION: FRANCIS GLASSBOROW to rephrase RoR, DR 260. DONE

ACTION: DOUG GWYN to develop words, RoR, DR-236, restricting use of union members. **OPEN** 

ACTION: DOUG GWYN to provide hard copy edits for Library Security TR to RANDY MEYERS DONE

ACTION: WG14 Convener to begin development of a NWI for a type 2 TR for "Addition of Special Math Functions", to be done in close coordination with WG21. N1056 DONE

ACTION: DOUG GWYN to provide additional words to the editor C99 Rationale CLOSED  $% \left( \mathcal{A}^{\prime}\right) =\left( \mathcal{A}^{\prime}\right) \left( \mathcal{A}^{\prime}\right)$ 

ACTION: Convener to prepare a Disposition of Comments on Ballot for Registration of the C Locale and forward to SC22 for action. DONE N1042, N1043.

Carried Over OPEN Action Items from Kona ACTION: Randy Meyers - Lvalue of expression - OPEN ACTION: FRED TYDEMAN create wording for a DR 287 dealing with one or more typos in G.5.1p8. OPEN. ACTION. RANDY MEYERS to write a paper discussing the issues raised during the discussion of DR 219. OPEN 1.7 Approval of Agenda (N1047) Items added to the agenda: N1045 - Defect Report: May FE \* floating-point exception flags have bits in common? (Tydeman) (add to 10.0) N1049 - Suggested changes to N1031 secure C library functions (Plauger) (add to 9.0) N1050 - Corrections to domain-error reporting for TR on special math functions (Plauger) (add to 6.0) N1056 - Proposal for NWI, Special Math Functions (Benito) (add to 6.0) J11 Tag - Security NWI. Tom Plum paper, #scope, Thurs afternoon, N1062, add to item 14 Items deleted from the agenda: Items changed on the agenda: Typo, 9a should be N1055 vice N1551 The agenda was approved as modified. 1.8 Distribution of New Documents New documents: N1060 - TC2 N1061 - Final Minutes N1062 - #scope proposal 1.9 Information on Next Meeting (Sutter) (N1054) The next meetings will be held in Redmond, Washington, USA WG21/J16 (C++) Oct 17-22, 2004 WG14/J11 (C) Oct 25-29, 2004 See WG14/N1054 for Details Request info on additional hotels

1.10 Identification of National Bodies (Benito)

Countries represented: USA, UK, Canada, Germany,

1.11 Identification of J11 voting members (Walls)

7 J11 members out of 15 possible members.

10:00 - 10:30 2. Liaison Activities

## 2.1 J11 (Walls, Meyers)

RM reported ANSI forwarded NWI on Secure Library to ISO (SC22 N3704)

## 2.2 WG14 (Benito)

JB - both TRs have been approved and are at ITTF for publication. Edit changes to Embedded TR are being handled by Willem Wakker.

TC2 being put together, has 75 corrections, will incorporate TC2 and TC1 as a revision to C99 for the next publication (C04, or C05).

#### 2.3 J16/WG21 (Plum, Plauger)

WG21 met last week. TP reported his paper (#scope), also an effort to harmonize the C++/C preprocessor requirements, possible new conformance category called "conditionally supported". Proposal on #scope may cause us to want to adopt 'conditionally supported'.

 $\rm PJ$  - WG21 agreed to review incompatibilities with C99 and adopt those that are possible. Also agreed to review C99 library extensions being proposed in WG14 TRs.

## 2.4 WG15 (POSIX) (Stoughton)

WG15 is not really functioning, however the projects are all alive and well under the auspices of the "Austin Group". TCs have been developed, and the content of the next revision of ISO/IEC 9945 is being developed. Motion made at SC22 to disband WG15, no consensus, motion was withdrawn. Likely to come up at the next SC22 plenary.

#### 2.5 WG20 (I18N) (Simonsen) no formal report

Nobu provided some current status. WG20 has no ongoing projects, however a NWI for a TR has been submitted. (subject unknown).

## 2.6 Other Liaison Activities

## 2.6.1 Free Standards Group (Stoughton)

FSG is developing a document called the Linux Standards Base, will submit as a PAS. The LSB submittal should happen soon. A number of interface overlaps with C library functions. Biggest area of overlap is with WG15 (POSIX).

## 3. TR Status Report (TR 18037, N1021) (Benito)

Re: Extensions to support embedded processors. Document approved, submitted to ITTF. ITTF wants edits made to the document, being done by Willem Wakker, should be published later this year. Some DRs being submitted, will discuss in Redmond.

#### 4. TR Status Report (TR 19769, N1040) (Mori)

Re: Extensions to support new character data types

Ballot closed, TR is approved and submitted to ITTF, no comments from ITTF yet. Will be posted on the web site.

11:45 - 12:00

#### 5. Defect report status (Benito)

The following Defect Reports are in REVIEW Status:

251, 261, 266, 268, 284, 287, 289, 290, 292

JB has created a TC2 (WG14/N1060) comprised of the following 40 CLOSED DRs:

207, 211, 215, 218, 222, 223, 224, 225, 228, 229, 230, 233, 238, 239, 240, 241, 242, 243, 244, 245, 247, 248, 249, 250, 262, 263, 265, 267, 269, 270, 272, 273, 274, 275, 276, 278, 279, 281, 282, 285

(Larry Jones will do a final sweep of the proposed TC2.)

The following DRs are CLOSED with a Record of Response:

201, 205, 206, 208, 212, 216, 217, 221, 226, 227, 231, 235, 237, 246, 252, 253, 254, 255, 256, 257, 258, 264, 271, 277, 280

The following DRs had a TC, and Record of Response:

218, 250, 269

DR 295 - new DR from Larry Jones, will go up on wiki at lunch - DONE.

#### 6. Special Math Functions (N1051) (N1056) (N1050) (Plauger)

This is a proposed Type 2 TR to extend the C library math functions by adding a number of 'special' functions, most of which are Bessel functions.

N1056 - Proposed NWI (Convener ), reviewed. Some discussion on finding an NB to submit.

N1051 - Proposed TR, presented by PJ Plauger. Corresponding effort underway in C++ expects to be 'frozen' by the close of meetings in Redmond (6 months). Fermilabs a big contributor to the extensions, Pete Becker will be the WG21 PE.

N1050 - Corrections to Domain-Error Reporting (Plauger) - contains corrections to proposal regarding domain errors.

Discussion of how to coordinate the reflector discussion, suggested c++stdcompat. This list is maintained by Andrew Koenig (ark@acm.org).

DW brought up the issue of using a new, distinct, header for these functions. Open issue for now.

## 7. Decimal Float-point. (N1052, N1057, N1058) (Kwok, Plauger)

N1052 - Critique of N1016, Decimal Floating Point Arithmetic (Plauger)

N1057 - Draft TR, Extensions for Decimal Floating Point Arithmetic (Kwok)

N1058 - Rationale for having separate decimal floating-point data types. (Kwok)

N1057 - Both C and C++ have agreed to work on a parallel effort.

PJ reported on the discussion in WG21, consensus there was for a Library only solution. Drawback is not getting the 'literals'. There are work arounds. For C, notion akin to something like Annex F - binding to IEEE 754 - proposed as the lightest weight solution. The solution entails some 'ugly' application code for users. Best solution for C, in a TR, may involve language changes, new FP types, etc.

TP pointed out that in at least one large marketplace uses mostly float and double, and 'losing' long double might have a minimal impact, i.e. use long double as a decimal FP type.

PJ worried about the notion of 6 (or more - 9) FP types, except if someone "really wants to do it in decimal". Expects that users would not be likely to 'demand' that they be able to do FP operations in binary if decimal is available.

RM - DEC compiler had the 9 FP types, and they were sometimes accessed simultaneously. All types could be overloaded. Getting all of this to work, along with the implications for printf, scanf, was doable.

TP - programming style, i.e. frequent rounding, can yield precisions for decimal and binary approaches that are difficult to distinguish from each other.

RM leaning towards original IBM proposal to add types

Straw Poll - Who can 'live with' each of the following options?

1. IEEE 754R type binding (14, 1, 1)

2. Library Only implementation (12, 3, 1)

3. Add three new lang types w/ literals (12, 1, 3)

4. #3 above for binary as well as decimal-6 new types(bin & dec) (9, 4, 3)

Greater consensus with approach #3, which is closest to the original IBM proposal.

TP concerned that this effort may be getting ahead of the marketplace.

ML concerned that #3 is really a slippery slope to #4, which represents a considerable more complex addition to language

MP - speed is most important to their community.

 $\ensuremath{\text{PJ}}$  / Kwok (IBM) to hash out the issues to present a more baked paper in Redmond.

RM offered to write up how to do the binary conversions between options 3 & 4.

#### Completed #7

8. Continue Decimal Float-point. (N1052, N1057, N1058) (Kwok, Plauger) really a continuation of 7 - which completed on Monday.

## Tuesday 0930

9. C Library Security (N1055, N1059, N1049) (Meyers)

N1055 - Draft TR, Extensions for Library Security

N1059 - Editor's report - Security TR

N1049 - Plauger comments on N1031 (prior version of N1055)

SC22WG14 10483 - Josef Wankerl email

SC22WG14 10484 - Randy Meyers email

#### RM walked thru a review of N1059.

- gets s needs words re: misuse causing memory overflow

- scanf s/be scanf s

- review of UNIX functions, NS pointed out that UNIX is also ISO/IEC 9945 (i.e. the SUS and 9945 are the same.)

- TP suggested that committee members look at the OpenBSD implementations strlcpy and strlcat to determine whether or not our proposed strcpy\_s and strcat s are better. See http://www.courtesan.com/todd/papers/strlcpy.html

- discussion of naming conventions, use of "\_r" for reentrant, "\_s" for C secure library functions, and the mixing of the two, is something we should avoid.

Straw vote:

1. should we eliminate all uses of "\_r" from all C function i.e. use only
" s". (16 yes)

2. use " r" only where it makes sense, keep to a minimum (0 yes)

3. maximize the use of "-r", do not use " s" (1 yes)

#### Straw vote:

1. Add STDC to the front of the macro names - no objection.

## Review of N1055 (Draft Library Security TR)

**3.1.1 Standard Headers** - considerable discussion of naming conventions, use, got, get, has, as well as the model presented in para 1-3.

support for get/got (6)support use/has (7)

CONSENSUS:

- feature test macro: \_\_STDC\_SECURE\_LIB\_\_
- replace \_\_USE\_SECURE\_LIB\_\_\_with \_\_STDC\_WANT\_SECURE\_LIB\_\_\_
- replace \_\_GOT\_SECURE\_LIB\_\_ with \_\_STDC\_SECURE\_LIB\_\_
- slight adjustments to the model

The above will be reflected in the next draft of the TR.

3.3.2.1, p4, fscanf\_s, straw vote on matching behavior with scanf

- leave it the way it is in current draft (2)
  - make along the same lines as current scanf (8) abstain (2)
    - To be reflected in next draft

#### 3.3.2.2, scanf s,

- PJ proposed in N1049:

-- scanf should add optional .prec after width, where prec is either a decimal number or a \* (to read a size\_t argument). Default prec is (size\_t)(-1). For c s [], prec specifies the maximum number of elements to store in the array pointed to by the argument, including any terminating nul. If not all consumed characters can be stored, the conversion will fail.

-- scanf\_s should be the same, except that default prec is zero. (Hence it must be specified or the conversion will always fail.)

General agreement on PJs proposal.

invalid format issue - how to treat - TBD. Randy will look at.

size\_t issue (TP), concern over using size\_t, wants to limit it to the size of a 'signed int' to avoid misused by novices (or anyone else). PJ - this is actually a widespread source of errors, and maybe all uses of size\_t should be looked at. This may be worth doing, but is not easy. Martyn pointed out that there is a platform coming (Win64) where size\_t will be larger than an int (64 vs 32 bits).

3.4.2.1.2 getenv s - mod to return count that includes the null character.

Issue: Should there be an errno value to distinguish a missing environment variable as opposed to output buffer was not big enough? Resolution: Leave as is.

Tuesday Afternoon 1:30 -

9. C Library Security (N1055, N1059, N1049) (Meyers) (con't)

#### 3.4.3 - Searching and Sorting utilities,

Issue: Microsoft has found lots of code that sorts or searches zero-length arrays (sometimes pointed to by a null pointer). An implementation is free to permit this as an extension, but should searching/sorting zero-length arrays added to this TR? Resolution: Yes, and use of null pointer as well.

3.5.4.2 strnlen - change to strnlen s (per this mornings naming convention decision). The function, strnlen, is in widespread use, and will be incorporated into POSIX.

3.6.1 - delete definition of normalized time.

3.6.2.1, asctime s - add store the null terminator only if there is room to do so.

3.6.2.3, gmtime r, change to gmtime s

3.6.2.4, localtime r, change to localtime s

3.7.2.3.1 wcsnlen, change to wcsnlen s

PJ comment: In general, the secure library functions should have defined, and safe, semantics for null pointer arguments.

<string.h>

-- gets s should return a null pointer for a null pointer argument.

-- strncpy s and strncat s should return ERANGE for null pointer arguments.

-- strnlen s should return zero for a null pointer argument.

<wchar.h>

-- wcsncpy s and wcsncat s should return ERANGE for null pointer arguments.

-- wcsnlen s should return zero for a null pointer argument.

All functions and all headers should be checked.

Randy will take a stab at posting words for how to deal with null pointers on the reflector.

PJ - N1049 - batch 2 - tmpnam s documentation should compare the length of the filename to maxsize-1, not maxsize. RM - not needed: TR uses 'size' for the number elements of an array, and 'len' for length of a string. strlen("abc") < sizeof "abc"</pre>

New functions coming: mbsrtowcs s, wcsrtombs s, wcrtomb s. Goal: always null terminate, add size parameter for dst, remove optional static state.

10. Potential defect reports (N1046, N1048, N1053) (Meyers, Plauger, Benito)

N1046 - Validity of constant in unsigned long long range. (Adamczyk) RM - believes the analysis is correct, but this is likely a constraint error requiring a diagnostic. DR committee will look at this & try to answer this week. Add to 11.0 DR items for discussion.

N1048 - Corrections to requirements on inexact floating-point exceptions (Plauger) N1048 is really input to DR 291.

N1053 - Treatment of error conditions for exp(INFINITY). (Tydeman) Assigned as DR 296

N1045 - FP exception flags w/ bits in common (Tydeman) assigned DR 297.

WG21 Core Issue 195 - macro name suppression in rescanned replacement text - add to DR items for discussion.

 $\tt WG21$  Core Issue 350 - signed char underlying representation for objects add to DR items

See 11.0 Defect Reports for any discussion on the above items.

## 11. DEFECT REPORTS

The following Defect Reports are in OPEN Status

DR 219 - Effective Types The interpretation by the submitter is not supported by the Standard. When copying multiple objects there is no obligation to come up with a type that applies to the totality of everything that is being copied. Action: RM to propose a RoR. Status: **Open - but may move to Review if the RoR becomes** available.

DR 236 - type based aliasing rule applied to union or allocated objects Status: **OPEN** Action Item remains for **Doug Gwyn** write a RoR restricting use of union members. TP pointed out that Martyn proposed a straight forward rule to apply here.

DR 260 - indeterminate values and identical representations Francis to draft a committee response (responsetodr260.txt) by Thursday. (DONE) Adopted words proposed by Francis, move to **Review**, and eventually add supporting 'chapter and verse' from the standard.

Follow-on response from Francis, dr260response03302004.txt Adopted, moved to **Review**.

DR 283 - accessing non-current union member ("type punning") OK - move to **Review**.

DR 286 - correctly rounded and rounding direction mode - adopt suggested response, use 'rounding mode', move to **Review**.

DR 288 - deficiency on multibyte conversions. OK - move to Review.

DR 291 & N1048 - corrections on requirements on inexact floating-point exceptions. Adopt changes in N1048, OK - move to **Review**.

DR 293 - double complex instead of complex in example OK - move to Review.

DR 294 - C99 restrict keyword question Proposed RoR from Tom McDonald (sp?) Q1 - OK, move to Review; Q2 - response is not adequate to answer the question - RM will get back to Tom to get a better response; Q3 - suggested adding some valid examples, following the style presented in the standard. Remains **Open** 

Rich Peterson proposed a dr\_294\_mod Rich walked thru his propose response - applause from the adjoining room. Move to **Review**.

DR 295 - Incomplete types for function parameters (Larry Jones) Action: Tom Plum will propose a response for review in Thursday

Proposed response for DR295 Change "Proposed Response" to "Proposed TC" - move to **Review** 

DR 296 - exp(INFINITY) Proposed words need some tweaking. Strike "exceptional round off error, add "..where x is finite." to last sentence in STC for Rationale. Adopted those changes, moved to **Review** 

DR 297 - FE\_\* FP exception flags, may it have bits in common Adopted the proposed TC, deleting the footnote. Move to **Review**.

N1046 - Validity of constant in unsigned long long range. (Adamczyk) RM - believes the analysis is correct, but this may a constraint error requiring a diagnostic. DR committee will look at this & try to answer this week - **DONE** 

6.4.4p2 says "The value of a constant shall be in the range of representable values for its type." Violating that constraint requires a diagnostic.

However, the paper raises sufficient question to be treated as a DR. Words in 7.18.4.1 need correcting. Assigned DR 298. Action: RM will propose a response to have ready for Thursday. OPEN

WG21 Core Issue 268 - macro name suppression in rescanned replacement text. Agreement that in this corner case the Standard does not specify the behavior but sees no real world significance. Not a DR. ACTION: TP will communicate our discussion of Core Issue 268 to the C++ Core Group. **CLOSED** 

WG21 Core Issue 350 - signed char underlying representation for objects. Basic question is whether or not the C++ Core group resolution to this issue will cause compatibility problems with C. Their proposed resolution would change the wording in 3.10 [basic.lval] from "a char or unsigned char type" to "a byte-character type." Answer: Possibly. There is no DR for C99, ACTION: PJ will verbally communicate a response (Anyone else can do so, liaisons are free to do so.) **CLOSED** 

"Fortunately I'm not Clive Feather." - Francis, during a discussion of how Clive may view this issue.

### DRs in Review Status:

DR 292 - agreed to CLOSE

DR 290 - footnote number will need to be tracked - CLOSE DR 289 - Original grammar simply forget to include the proposed, however the proposed grammar still needs some work - missing type qualifier, etc. ACTION: RM to edit DR 289 by Thursday. DR 287 - agreed to CLOSE DR 284 - agreed to CLOSE DR 268 - remove Committee Discussion, agreed to CLOSE DR 266 - agreed to CLOSE DR 261 - agreed to CLOSE DR 261 - agreed to CLOSE DR 251 - The second proposed change (to 6.7.2.3#1) is a conformance change (constraint) - which causes some concern about slipping in a 'conformance change' - agreed CLOSED.

## Summary for DR status:

The following DRs are moved from OPEN to REVIEW status: 260, 283, 286, 288, 291 (w/N1048), 293, 294, 295, 296, 297,

The following DRs are moved from REVIEW to CLOSED: 292, 290, 287, 284, 268 (delete committee discussion), 266, 261 (w/proposed response from Francis),

12. Separate WG14 administration (Benito) and J11/U.S. TAG meetings (Meyers, Walls)

12.1 WG14 Administration Items

12.2 US TAG WG14 (INCITS/J11) Session - Thursday afternoon.

See J11 Minutes at the end of the WG14 minutes.

13. Defect report review (See 10.0)

14. #scope (Plum)

D-N1062 - # scope proposal, 3/31/04 version (Plum)

SC22WG14 10488 - David Keaton email

SC22WG14 10489 - Bjarne Stroustrup email

SC22WG14 10490 - Derek Jones email

SC22WG14 10493 - Doug Gwyn email

SC22WG14 10494 - Tom Plum email

SC22WG14 10496 - John Levine email

Wed Afternoon Tom presented his paper, N1062, The #scope extension for the C/C++ preprocessor.

This item was initially brought up in the "Evolution Working Group" at the C++ Meetings. Bjarne Stroustrup chairs that group, but was not present at the meeting. Straw votes taken at that meeting were: (the convention is - strongly favor / weakly favor / weakly oppose / strongly oppose)

- should this author pursue this proposal? 6/3/3/5 (Split 9/8 favor/oppose) - assuming the author does pursue it, should we have a separate #import/#export? 10/4/0/1 (Strong favor) - develop this particular proposal in coordination with WG14? 10/2/2/3 (Strong Favor) - work with WG14 on the macro scope problem? 13/4/0/1 (Strong favor) Bjarne's follow-up comunication with the committee indicated that his proposal was "prelimary", and he would have a new version ready for presentation in Redmond (see SC22WG14 10489). Discussion: RM - we should look at this seriously and decide if it's even a good idea. TP - advoctes working closely with WG21, work on the PP is overdue and usefull. PJ - we certainly don't want to get ahead of C++ on this effort. RM - even under the best of conditions, it is likely that dirty namespace will remain. REG: Opposed in general to the proposal, sees it as a patchwork fix to a much larger problem. He is working on a prototype pre-processor. Problem needs a more extensive fix. JB pointed out that WG14 voted down numerous PP proposals in the past. Thurs AM Tom presented a revised version (dn1062-pp-scope-proposal-0331pm.pdf) of yesterday's paper. Minor changes, cleaned up typos, etc. PJ - macros for limits, float, are not included. TP will add them. Where do we go from here? Develop further, wait for WG21 development? FG - what C problems does this proposal tried to solve? PJ - first problem is defending yourself from those on the outside, and the #scope proposal addresses that problem. It does not solve all problems. Would like to see a trial implementations, library samples, etc., so one can see how much better things are with this approach. 15. - not used Thurs AM 16. Administration 16.1 Future Meetings 16.1.1 Future Meeting Schedule 2004 Oct Redmond, WA USA. 25-29 Oct, 2004, Hosted by Microsoft/ANSI See N1054 2005 Apr, Norway, Oslo - Host: Norwegian Standards, 4-8 April 05 2005 Sep/Oct hosted by Canadian National Body (specifics are TBD)

2006 Mar/Apr - Germany, Host: SAP / DIN

2006 Sep/Oct - looking for a US venue / host

Discussion items:

Discussion of how to deal with increasing hosting / meeting costs.

PJ Putting together a portable network that could go from meeting to meeting to provide the needed connectivity for everyone. FG says ACCU has a slush fund to support standards development and may be able to help. Anyone who wants to help can contact PJ or Tana after April 10.

JB has been in contact w/Denmark, (5th country) to support Library Security: US, Can, Ger, Den, Netherlands.

16.1.2 Future Agenda Items - none

16.1.3 Future Mailings

Post Coogee meeting mailing items to be with JB by 3 May, 2004

Pre Redmond mailing items to be with JB by 27 Sep, 2004

16.2 Resolutions - none

16.2.1 Review of Decisions Reached

Convener to forward TC2 Editor to generate a revised version of the standard w/ TC1 & TC2

16.2.2 Formal Vote on Resolutions - none

16.2.3 Review of Action Items

1. Convener - Forward a proposed ISO/IEC 9899:1999 Technical Corrigenda 2 to SC22 containing corrections to the C99 Standard based on the following Closed Defect Reports: 207, 211, 215, 218, 222, 223, 224, 225, 228, 229, 230, 233, 238, 239, 240, 241, 242, 243, 244, 245, 247, 248, 249, 250, 262, 263, 265, 267, 269, 270, 272, 273, 274, 275, 276, 278, 279, 281, 282, 285.

2. Randy Meyers to contact Tom McDonald to get a more thorough answer to DR 294, Question #2. CLOSED OBE

3. Tom Plum will communicate our discussion of Core Issue 268 to the C++ Core Group.

4. PJ will verbally communicate a liaison response for C++ Core Issue 350 to the submitter.  $\ensuremath{\text{DONE}}$ 

5. RM to propose a RoR for DR 219.

6. RM to edit grammar in Proposed TC for DR 289.

7. Tom Plum to write up a Proposed Response to DR 295 by Thursday - DONE

8. DOUG GWYN to develop words, RoR, DR 236, restricting use of union members.

9. Randy Meyers - Write a paper on Lvalue of expression.

16.2.4 Thanks to Host

Thanks to Whitesmiths for hosting the meetings, providing lunches, the excellent dinner events, and making our visit 'down under' a thoroughly enjoyable one.

Thanks to Tom Plum, Plum Hall, for providing the Wiki services for the meeting.

Thanks to PJ & Tana Plauger, Dinkumware, for providing the SMTP mail server, helping out with the networking issues and providing assistance and coordination through Whitesmiths.

16.3 Other Business - none

17:00 17. Adjournment

Meeting adjourned at 11:55 am, Thursday, April 1, 2004.

Draft Minutes for the J11/U.S. WG14 TAG Meeting, Wednesday March 31, 2004

Meeting called to order at 13:23.

1. Attendees:

Randy Meyers	Silverhill Systems	Non Voting, J11 Chair
Douglas Walls	Sun Microsystems	Primary, J11 IR
John Benito	Farance	Primary
Tom Plum	Plum Hall	Primary
Barry Hedquist	Perennial, Inc.	Primary
John Parks	Intel	Primary
Edison Kwok	IBM	Primary
P. J. Plauger	Dinkumware, Ltd	Primary
Tana L. Plauger	Dinkumware, Ltd	Alternate
Martyn Lovell	Microsoft	Primary
Rich Peterson	HP	Primary
Cecilia Galvan	Metrowerks	Non-voting

16 voting members, 9 voting members present

2. Review of NCITS Anti-Trust Guidelines

Randy covered the INCITS Anti-Trust Guidelines.

## 3. US Position on Ballot for NWI Decimal Float-Point TR - SC22 N3720

Motion (Sun, Farance): J11 recommends approval of SC 22 N3720 -New Work Item Proposal a Type 2 Technical Report for Extensions for the programming language C to support decimal floating-point arithmetic with the following recommendation to the six questions: Q.1 Do you accept the proposal in document SC 22 N3720 as a sufficient definition of the new work item? (If you have responded "NO" to the above question, you are required to comment.) \_\_X\_Yes No Comments: Q.2 Do you support the addition of the new work item to the SC 22 programme of work? \_\_X\_Yes \_\_\_\_No Comments: Q.3 Do you commit yourself to participate in the development of this new work item? \_\_X\_Yes No Comments: Q.4 Are you able to offer a project editor who will dedicate his/her efforts to the advancement and maintenance of this project? (If "YES," please identify) Yes \_\_\_\_X\_No Comments: Q.5 Do you have a major contribution or a reference document ready for submittal? Yes X No Comments: Q.6 Will you have such a contribution in ninety days? Yes X No Roll Call Vote. Dinkumware - yes Farance - yes IBM - yes Microsoft - yes Perennial - Yes Plum Hall - yes Intel - yes Sun - yes HP - yes Motion PASSES (9,0,0,16)

## $4\,.$ US Position on Ballot for NWI for Library Security TR, SC22 N3704

Motion (Sun, Microsoft): J11 recommends approval of SC 22 N 3704 - New Work Item Proposal for a Type 2 Technical Report for Extensions to the C Library for Secure C Library Functions with the following recommendation to the six questions: )

Q.1 Do you accept the proposal in document SC 22 N3704 as a sufficient definition of the new work item? (If you have responded "NO" to the above question, you are required to comment.) \_\_X\_Yes No Comments: Q.2 Do you support the addition of the new work item to the SC 22 programme of work? \_\_X\_Yes \_\_\_\_No Comments: Q.3 Do you commit yourself to participate in the development of this new work item? \_\_X\_Yes No Comments: Q.4 Are you able to offer a project editor who will dedicate his/her efforts to the advancement and maintenance of this project? (If "YES," please identify) \_\_X\_Yes \_\_\_\_No Comments: Randy Meyers rmeyers@ix.netcom.com 4025 Gumwood Ln. Knoxville, TN 37921-1364 +1 865-521-3915 Q.5 Do you have a major contribution or a reference document ready for submittal? \_\_X Yes \_\_\_\_No Comments: WG14/N1055 Security TR working draft Q.6 Will you have such a contribution in ninety days? \_X\_\_Yes No Roll Call Vote. Dinkumware - yes Farance - yes IBM - yes Microsoft - yes Perennial - Yes Plum Hall - yes

Intel - yes Sun - yes HP - yes Motion PASSES (9,0,0,16)

## 5. US Position on Ballot Position on NWI Special Math TR (future proposed US Sponsored effort)

SC22/WG14 N1056

Motion to forward WG14/N1056 to INCITS as a US sponsored contribution (Perennial, Dinkumware). (9,0,0,16) Dinkumware - yes Farance - yes IBM - yes Microsoft - yes Perennial - Yes Plum Hall - yes Intel - yes Sun - yes HP - yes Motion Passes (9,0,0,16)

6. Meeting adjourned without objection at 14:15.