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Project: JTC1.22.32

Reply to: Stefanus Du Toit

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Minutes of PL22.16 Meeting, October 19, 2009

1. Opening activities

Clamage called the meeting to order at 09:00 (UTC-7) on Monday, October 19, 2009.

Clamage noted that P.J. Plauger was awarded the 2009 INCITS Merit Award in recognition of his service to INCITS.

1.1 Opening comments

Plauger noted that the logistics of the meeting were set up by John Benito of Blue Pilot Consulting. He described that Dinkumware and EDG agreed to pay for half of the costs of the meeting each, and subsequently Gimpel Software contributed additional funds. He went on to explain that after this Bloomberg generously offered to pay the expenses for the entire meeting. Plauger announced that due to these additional funds a reception would be held on the Wednesday evening of the meeting.

Plauger noted that EDG, Gimpel Software and Bloomberg should be acknowledged for contributing funds, and John Benito should be noted for handling the logistics of the meeting.

Benito described the arrangements and facilities for the meeting.

1.2 Introductions

Clamage had the attendees introduce themselves.

1.3 Meeting guidelines (Anti-Trust)

Clamage reviewed the patent disclosure rules.

The following materials were displayed without any further interpretation or discussion:

- <u>http://www.incits.org/inatrust.htm</u>
- <u>http://www.incits.org/call.htm</u>
- <u>http://www.incits.org/pat_slides.pdf</u>

1.4 Membership, voting rights, and procedures for the meeting

Clamage reviewed the rules for membership and voting rights.

1.5 Agenda review and approval

Clamage presented the agenda (document PL22.16/09-0081 = WG21/N2891).

A new item was added to the agenda, a short US TAG meeting, item 1.11.

Motion to approve the agenda as amended:

Mover: Hedquist Seconder: Stoughton

Approved by unanimous consent.

1.6 Distribution of position papers, WG progress reports, WG work plans for the week, and other documents that were not distributed before the meeting.

Each of the Working Group chairs presented their plans for the coming week.

Library Working Group (LWG)

Hinnant reported LWG status.

Core Working Group (CWG)

Adamczyk reported CWG status.

Evolution Working Group (EWG)

Stroustrup noted that EWG would be meeting during the week.

Stroustrup went on to list other issues that were on the agenda for EWG.

Discussion ensued.

1.7 Approval of the minutes of the previous meeting

Motion to approve the minutes (document <u>PL22.16/09-0110 = WG21/N2920</u>):

Mover: Hinnant **Seconder:** Hedquist

Approved by unanimous consent.

1.8 Liaison reports

WG14 Liaison

Nelson commented that given that this was the second WG21 meeting since WG14 had last met, there was not much new WG14 material to be discussed or reported.

POSIX Liaison

Stoughton reported that the POSIX/C++ liaison group had had a meeting at Google on the Sunday immediately preceding the Santa Cruz meeting. He stated that the minutes for the liaison meeting were linked to from the WG21 wiki. He noted that a liaison report was coming out of this meeting, consisting of three primary points, none of which he felt warranted discussion time in the full committee. He did, however, encourage everyone to look at the report. He noted he expected some discussion as a result of the report, especially in LWG.

WG23 Liaison

Benito reported that WG23 (Software Language Vulnerabilities) was meeting in Santa Cruz at the same time as the WG21 meeting. He reported that the WG23 group was strictly working on ballot resolution, with the goal of getting a document published in 2010.

1.9 Editor's report

The editor's report is document PL22.16/09-0151 = WG21/N2961.

Motion to approve the latest Working Draft (document <u>PL22.16/09-0150 =</u> <u>WG21/N2960</u>):

Mover: Becker Seconder: Hinnant

Approved by unanimous consent.

1.10 New business requiring actions by the committee

No new business.

1.11 US TAG Meeting

The PL22.16 TAG meeting was held at this time.

2. Organize subgroups, establish working procedures.

Clamage announced that those present would be breaking up into working groups until Friday. He noted that the committee was in recess until then.

3. WG sessions (Core, Library, Performance, Evolution).

- 4. WG sessions continue.
- 5. WG sessions continue.
- 6. WG sessions continue.
- 7. WG sessions continue.
- 8. General session.

8.1 WG status and progress reports.

Core Working Group

See 11.1 below.

Library Working Group

See 11.1 below.

Evolution Working Group

See 11.1 below.

8.2 Presentation and discussion of DRs ready to be voted on. Straw polls taken.

See 11.1 below.

9. WG sessions continue

10. WG sessions continue

11. Review of the meeting

51 members were present.

11.1 Motions.

CWG Motions

Vote – CWG Motion 1

Move we apply the resolutions of the following issues from <u>N2962</u> to the C++0X Working Paper:

257 481 527 587 589 601 604 608 612 618 626 630 656 657 672 693 695 699 703 704 705 713 715 717 719 721 726 730 731 735 737 776 785 786 790 792 801 803 804 806 809 831 832 833 834 835 840 842 850 854 855 862 865 874 876 877 879 882883 884 888 896 908 921 926 928 929 930 933 934 936 940

This is all issues marked "ready" or "tentatively ready," with the exception of issues 799, 812, 861, 919, and 920, for a total of 50 issues in ready status and 22 in tentatively ready status.

Mover:	Adamczyk
Seconder:	Miller
Unanimous consent.	

Vote – CWG Motion 2

Move we apply $\underline{N2998}$ "Reaching Scope of Lambda Expressions" to the C++0X Working Paper.

Mover:	Adamczyk
Seconder:	Crowl
Unanimous consent.	

Not Moved – CWG Motion 3

The following motion was not moved: apply <u>N2989</u> "Unified Function Syntax" to the C++0X Working Paper.

LWG Motions

Vote – LWG Motion 1

Move we apply the resolutions to the following issues from N2948 to the C++0X Working Paper:

<u>149, 419, 430, 498, 564, 565, 630, 659, 696, 711, 716, 723, 788, 822, 838, 847, 857, 859, 876, 881, 883, 886, 934, 1004, 1012, 1019, 1178</u>

Mover:	Hinnant
Seconder:	Brown
Unanimous consent.	

Not Moved – LWG Motion 2

The following motion was not moved: apply N2986 "Equality Comparison for Unordered Containers" to the C++0X Working Paper.

Vote – LWG Motion 3

Move we apply $\underline{N2994}$ "constexpr in the library: take 2" to the C++0X Working Paper.

Mover:	Hinnant
Seconder:	Brown
Unanimous consent	

Not Moved – LWG Motion 4

The following motion was not moved: apply N2981 "Proposal to Simplify pair (rev 2)" to the C++0X Working Paper.

Vote – LWG Motion 5

Move we apply <u>N2951</u> "forward" to the C++0X Working Paper.

Mover:	Hinnant
Seconder:	Brown
Unanimous consent	

Vote – LWG Motion 6

Move we apply <u>N2988</u> "LWG Issue 897 and other small changes to forward_list" to the C++0X Working Paper.

Mover:	Hinnant
Seconder:	Brown
Unanimous consent	

Vote – LWG Motion 7

Move we accept the proposed resolution in NB comment $\underline{\text{UK-300}}$. (This moves swap from the <algorithm> header to <utility>.)

Mover:	Hinnant
Seconder:	Brown
Unanimous consent	

Vote – LWG Motion 8

Move we apply <u>N2997</u> "Issues on Futures (Rev. 1)" to the C++0X Working Paper.

Mover:	Hinnant
Seconder:	Brown
In favor:	20
Opposed:	4
Abstain:	8

Motion is carried.

Vote – LWG Motion 9

Move we apply <u>N2996</u> "A Simple Asynchronous Call" to the C++0X Working Paper.

Mover:	Hinnant
Seconder:	Brown
In favor:	17
Opposed:	4
Abstain:	10

Motion is carried.

Vote – LWG Motion 10

Move we apply <u>N2992</u> "More Collected Issues with Atomics" to the C++0X Working Paper.

Mover:	Hinnant
Seconder:	Brown
Unanimous consent.	

Vote – LWG Motion 11

Move we apply <u>N2984</u> "Additional Type Traits for C++0x (Revision 1)" to the C++0X Working Paper.

Mover:	Hinnant
Seconder:	Brown
In favor:	25
Opposed:	1
Abstain:	8

Motion is carried.

Vote – LWG Motion 12

Move we apply <u>N2982</u> "Allocators post Removal of C++ Concepts" to the C++0X Working Paper.

Mover:	Hinnant
Seconder:	Brown
In favor:	22
Opposed:	3
Abstain:	7

Motion is carried.

Additional Motions

Hinnant moved to thank the Secretary, especially for the notes in the LWG. Applause followed the motion.

Hinnant moved to thank the Host. Applause followed the motion.

Clark moved to express the group's thanks to the outgoing Convener. Applause followed the motion.

11.2 Review of action items, decisions made, and documents adopted by the committee

None.

11.3 Issues delayed until Saturday

None.

12. Plans for the future

12.1 Next and following meetings

Plauger reviewed the upcoming meetings. The following meetings were:

- Mar 8-13, 2010 Pittsburgh, PA, USA: CERT
- Jul 12-17, 2010 Rapperswil, Switzerland: HSR Hochschule für Technik
- Nov 8-13, 2010 Batavia, IL, USA: Fermilab

Plauger noted there had been an invitation from Spain to host in the Spring of 2011. He went on to state that an invitation had been extended for the Summer 2011 meeting in Indiana. Finally, he stated that Intel had also offered to host the Fall 2011 meeting in Portland.

12.2 Mailings

Nelson reported the following mailing deadlines:

post-meeting mailing	2009-11-06
pre-Rapperswil mailing	2010-02-12

13. Adjournment

Motion to adjourn

Mover: Hedquist

Seconder: Wong

Unanimous consent.

Attendance

Company/Organization	Representative	Mon	Tue	Wed	Thu	Fri	Sat
Apple Computer	Howard E. Hinnant	V	V	V	V	V	V
Apple Computer	Doug Gregor	A	A	Α	A	A	A
Bloomberg	John Lakos	V	V	V	V	V	
Bloomberg	Alisdair Meredith	A	A	A	A	A	Α
BoostPro Computing	David Abrahams	V	V	V	V	V	V
Cisco Systems	Martin Sebor	A	A	A			
CodeGear/Embarcadero	Dawn Perchik	V	V	V	V	V	V
CodeGear/Embarcadero	David Deon					Α	
Dinkumware	P. J. Plauger	V	V	V	V	V	V
Dinkumware	Tana Plauger	Α	A	A	A	A	Α
Edison Design Group	J. Stephen Adamczyk	V	V		V	V	V
Edison Design Group	Jens Maurer	Α	A	А	Α	Α	Α
Edison Design Group	William M. Miller	Α	A	А	Α	Α	Α
Edison Design Group	John H. Spicer	A	A	A	А	A	Α
Edison Design Group	Daveed Vandevoorde	A	A	A	A	Α	Α
Fermi Nat. Accelerator Lab	Walter E. Brown	V	V	V	V	V	V
Gimpel Software	James Widman	V	V	V	V	V	V
Google	Matthew Austern	V	V	V	V		
Google	Lawrence Crowl	A	A	A	А	Α	V
Google	Bill Gibbons	A	A	A	A	A	
Google	Nick Lewycky			A			
Hewlett-Packard	Hans Boehm	V	V	V	V	V	V
IBM	Paul E. McKenney	Α	A	А	Α	Α	Α
IBM	Michael Wong	V	V	V	V	V	V
Indiana University	Jeremiah Willcock	V	V	V	V	V	
Indiana University	Marcin Zalewski	A	A	A	А	Α	V
Intel	Clark Nelson	V	V	V	V	V	V
Intel	Pablo Halpern	A	A	A	A	A	

Company/Organization	Representative	Mon	Tue	Wed	Thu	Fri	Sat
Intel	Stefanus Du Toit	А	A	A	A	A	A
Microsoft	Jonathan Caves	V	V	V	V	V	V
Microsoft	Herb Sutter			A	A	A	
Oracle	Paolo Carlini	V	V	V	V		V
Perennial	Barry Hedquist	V	V	V	V	V	V
Plum Hall	Thomas Plum	V	V	V	V	V	V
Red Hat	Jason Merrill	V	V	V	V	V	V
Red Hat	Benjamin Kosnik	A	А	A	A	Α	Α
Roundhouse Consulting	Pete Becker	V	V	V	V	V	V
Seymour	Bill Seymour	V	V			V	V
Sun Microsystems	Stephen D. Clamage	V	V	V	V	V	V
Symantec	Mike Spertus	V	V	V			
Texas A&M	Bjarne Stroustrup	V	V	V	V	V	V
USENIX	Nick Stoughton	V	V	V	V	V	V
Zephyr Associates	Thomas Witt		V	V	V	V	V
HSR	Peter Sommerlad	N	N	N	N	N	N
Ixonos Plc.	Ville Voutilainen	N	N	N	N	N	N
University Carlos III	J. Daniel Garcia	N	N	N	N	N	N
Vollmann Engineering	Detlef Vollmann	N	N	N	N	N	N
	Takatoshi Kondo	N	N				
Blue Pilot Consulting	John Benito	N					
Amazon.com	Gary Powell	N	N	N	N	N	
CMU/SEI/CERT	David Svoboda	N	N	N	N	N	N