Doc No: SC22/WG21/N3379 PL22.16/12-0069 Date: 2012-01-27 Project: JTC1.22.32 Reply to: Kyle Kloepper Riverbed Technologies Kyle.Kloepper@riverbed.com

Minutes, WG21 Teleconference 2012-01-27 1. Opening and introductions

The meeting is called on 2012-01-27 at 14:08 UTC.

1.1 Roll call of participants

The following persons are in attenuance.	
country	
USA	
USA	
USA	
USA	
Switzerland	
USA/Canada/Convener	
USA	
USA	
UK	
Canada	
USA	
USA	
USA	
USA	
Finland	
USA	
USA	

The following persons are in attendance:

1.2 Adopt agenda

Sutter asks for objections to adopting the agenda $\underline{N3321}$ for this meeting. With no objections $\underline{N3321}$ is adopted as the agenda for this meeting by unanimous consent.

1.3 Approve minutes from previous meeting

Sutter asks for objections to approving minutes from WG21 teleconference 2011-08-05 ($\underline{N3300}$). With no objections $\underline{N3300}$ is approved by unanimous consent.

1.4 Review action items from previous meeting

Two actions from previous meeting:

- 1. AI: Remove Vollmann from liaison list to SC22/WG23.
 - o Done.
- 2. AI: Ask CERT if they can get someone to attend both WG21 and WG23.
 - Done. Sutter asked but no one responded. Benito asked David Svoboda, but Svoboda cannot attend WG23.
- 3. AI: Miller will contact P.J. Plauger to ask to setup wiki.
 - o Done.

1.5 Review of project editor and liaison assignments

Sutter states that project editor role is Stefanus Du Toit. Du Toit is unable to attend this teleconference, but has passed along notes to Sutter. Lawrence Crowl remains backup editor. Sutter directs participants to section 4.2 of document <u>N3298</u> in the premeeting mailing.

Sutter asks if there are any changes to be made to <u>N3298</u> section 2.3. No response.

Meredith comments that Detlef Vollmann is still listed as WG23 liaison. Sutter responds that he has updated his copy, but it was not yet submitted. Sutter asks if there are any other suggestions or changes. No response.

2. Status, liaison and action item reports

2.1 Small group status reports

Core Working Group

Miller reports CWG has 72 new issues since Bloomington in the pre-meeting mailing. 65 issues are expected to be moved from open to defect report status. 59 are ready from Bloomington. Drafting review in December approved 6 items to tentatively ready.

Miller comments that N3323 is close to being ready to move. It was seen at Bloomington and discussed on teleconference. Sutter asks about one meeting waiting period for N3323. Mike says concepts did not change since Bloomington, only the way it was applied in some corner cases. Miller asks Brown to comment who confirms that last set of tweaks were minor. Sutter clarifies that he does not want to be procedural, just to make sure someone asked if it had been revised over the teleconference.

Stroustrup raises concern that CWG is extending language through minor technical changes not well understood outside of CWG. He is concerned that there is no paper describing usability changes and worried that overall the text is becoming incomprehensible. Miller asserts that the paper does a good job of exploring rational and usability and has no objection to EWG taking a look. There is no hurry here and can defer until Portland.

Herb comments that there are two issues: 1. we should have design motivation and rational 2. Language changes should be looked at by EWG. Stroustrup will take a look at N3323 in Kona.

Miller says that N3324 (basically just a large wording change) may move to ready status to be moved in Portland.

Miller asks for questions. No response.

Library Working Group

Meredith reports LWG will have a quiet meeting. There will be time spent looking at new papers. There are about 50 new issues with only 10 or 11 in ready status. He says nothing will be brought to motion on Friday.

Sutter asks if there are any further questions for LWG. No response.

Evolution Working Group

Stroustrup reports main concern for Kona and future year is time frames. There are enough proposals to keep committee busy for a decade. Stroustrup is worried that the language is mutating randomly based on who is present at the meetings.

EWG will have presentations on parallel programming constructs, transactional memory, and modules. One day will be spent for half a dozen issues to be able to ship in 4-5 years.

Sutter agrees that the timeframe discussion is important to have in Kona, but this is not a discussion of the teleconference. Sutter asks if this would be a good discussion to have early in the week. Stroustrup states that EWG will not make progress unless there is a timeframe. Meredith asks if a clear decision about timeframe will be made.

Stroustrup made comment about new proposals spending two meetings in EWG then two in CWG. Brown comments that time required for LWG to apply language change is often forgotten when making plans to add new features. Stroustrup has asked EWG to avoid changes that would require refactoring entire library. Meredith states that after EWG has featured designed then LWG can work in parallel with CWG.

Stroustrup comments on two types of features. The most interesting and powerful are pervasive. The easiest to get passed are easily ignored by everyone, but have not effect on the programming community. Sutter states that the first kind of features is what makes C++11 feel like a new language—every five line code example is changed. He suggests not doing that in Kona as not only is every compiler obsolete, but also authors of major books will take at least two years to catch up with standard. Sutter says we just broke every book.

Stroustrup agrees that most major proposals will be pervasive: concepts, rich pointers, static if, pattern matching constructs, multimethods. He says that it could be a good idea to only stick on minor features, but may have a problem agreeing to that and sticking to it.

Sutter asks if there are any further questions for Stroustrup. No response.

2.2 Liaison reports

2.2.1 SC22 report

Sutter reports on plenary in Copenhagen. Rex Jaeschke has been working to reduce clutter and administration. He streamlined meetings to just a day and a half. Sutter and Benito attended by telephone. Nothing interesting happened with WG21. Benito has nothing more to add. Sutter asks if there are any questions. No response.

2.2.2 SC22/WG14 (C) report

Benito states that C published a new edition last year a bit ahead of schedule. Work is beginning on two subjects: 1. secure coding in C 2. working on C bindings to 754. The committee is moving back to publishing technical specifications. Meetings will colocate with C++ the week after Kona and Portland.

Meredith asks if C11 has made any extensions to the library that C++ should document. Benito is not sure and suggests that C++ take a look at the document and farm at will. He says that C worked very hard to stay compatible in all concurrency areas and there is nothing there needed to be farmed. Nelson confirms that there were no major extensions.

Stroustrup asks if there were attempts to increase C^{++} compatibility. Benito says they worked very hard to stay in step with C^{++} and got out of step due to last minute changes in Madrid. He asks to communicate with the committee if there are any areas that need work.

3. New business

3.1 Review of priorities and target dates

Sutter reiterates that main thing to talk about in Kona is target dates. He asks if there is anything else. No response.

3.2 Review of current mailings

Group reviews current pre-Kona mailing to make sure all papers are being handled by correct subgroup. Nelson suggests that someone should look over CWG issues and see what should be moved to EWG.

Sutter relays Du Toit's editor's report. Nothing more to report than what is in the mailing. Git is working well and people are already sending him patches. Brown notes that current document does not highlight changes from previous working draft. Nelson says this should not be talked about without Du Toit. Sutter points out that editor's report does list changes, but there are not change bars in document. He asks Brown to raise his question again on Monday in Kona.

Meredith asks why N3339 is going to EWG and not LWG. He suggests that LWG is a better venue. Nelson says that EWG was his suggestion as he tried to error on the side of assigning to EWG.

Group decides to move N3339 to LWG and that EWG should take a look at the paper and speak up if they feel is should be considered in EWG instead.

Group reviews post-Bloomington mailing to make sure no papers are missed.

3.3 Any other business

Nelson observes that the C++11 standard is for sale on the ANSI website for \$285 and asks if there is an effort underway to get a reasonable price. Plum replies that a price reduction is already on the ballot for Q1, but does not know the exact date. Plum will find the exact date by the Kona meeting. Goldthwaite offers to help get a lower price for the UK version if needed.

Sutter asks if there is any other business. No response.

4. Review

4.1 Review and approve resolutions and issues

No resolutions or issues.

4.2 Review action items

No action items.

5. Closing process

5.1 Establish next agenda

Sutter states that N3321 will be agenda for October teleconference.

5.2 Future meetings

Next teleconference will be Friday 5 October 2012 the Friday a week before face to face meeting; after mailing, but before travel to face to face meeting.

Next face to face meeting is 15-19 October in Portland.

5.3 Future mailings

Nelson says post-Kona mailing deadline is 24 February. The pre-Portland mailing deadline is 21 September.

5.4 Adjourn

The meeting was adjourned at 2012-01-27 15:40 UTC.