

TG5 Liaison Report to WG21

5 December, 2003

1. Liaison Policy

In the following, "WG21 participants" means persons or companies who are current members of WG21's participating national bodies' C++ panels, such as current members of ANSI/INCITS J16, whether or not they currently attend the co-located WG21/J16 meetings.

TG5 wishes to enable close liaison with WG21, and wants to provide for WG21 participants who are interested in TG5's work to participate as observers, without needing to become Ecma members.

TG5 meetings: WG21 participants who are appointed to WG21's liaison to TG5 may attend TG5 meetings and participate but not vote. TG5 undertakes to publish in advance wherever possible the expected topics that it plans to cover at each meeting, to make it more convenient for those interested in a particular topic to know which meeting to attend in order to be able to participate in the discussion of that topic.

Note about WG21-TG5 liaison: SC22 has informed the WG21 convener that liaison already exists between SC22 and Ecma, and so no WG resolution is needed to create a liaison. The WG21 convener will propose that WG21's national bodies empower the convener to appoint members to the liaison upon request as above.

There is no preset limit to the number of observers at a given TG5 meeting, but if the number exceeds TG5's logistical limits (e.g., the host's costs for additional meeting room capacity and lunches) then the size of the liaison group should be adjusted to be considerate of such logistical limits. WG21 participants who would like to attend a TG5 meeting should inform the WG21 convener no later than two weeks in advance of the TG5 meeting.

ANSI/INCITS J16 allows nonmember guests, but after they have attended a few meetings J16 still asks them to pay to at least be observer members. The same policy will apply for Ecma TG5. Note that Ecma membership is free for universities and other not-for-profit organizations, and that on December 11, 2003, Ecma expects to create a new lower-fee membership category for small companies which costs less than the cost to attend that many meetings.

TG5 email reflector: TG5 will create a new email reflector, e-tc39-tg5-liaison@ecma-international.org, where it will conduct its technical discussion. Any WG21 participant may join this reflector to observe and/or participate in the discussion. No liaison appointment is necessary, and no Ecma membership is necessary. (TG5 internal administrative discussion will happen on TG5's internal reflector which is not shared. The precedent here is the closed ISO WG21 meetings on Sunday nights that handle ISO administrivia, deferring the technical discussion to the combined WG21/J16 meeting.)

Note that the TG5 reflectors are for technical and administrative discussion. Ecma and TG5 have rules about flamewars and publicity that the observer members will also be expected to respect. TG5's policy is that Ecma members (and likewise observers) who continue inappropriate nontechnical discussion on the reflector, or who distribute information from the reflector to nonparticipants, can be removed from the TG5 reflectors.

TG5 internal documents: TG5 will at the end of each meeting create a WG21 liaison report, with the relevant TG5 internal documents attached. This report will become a WG21 numbered document available to all WG21 members. Like any WG21 numbered document, it may not be redistributed publicly. (TG5 will periodically publish public drafts when TG5 feels they're baked enough to show; the above gives WG21 participants more frequent access to the more-raw working papers.)

2. Appointment of Liaison from TG5 to WG21

TG5 appoints the following as liaison to WG21:

Steve	Adamczyk
P.J.	Plauger
Tana	Plauger
Tom	Plum
John	Spicer

3. TG5 Documents

The following TG5 documents are attached to this liaison report: All current TG5 documents, excluding unapproved minutes.

TG5 notes that its base document candidate, which became document TG5/2003/04, is already publicly available and so is being incorporated by reference here instead of being directly attached. It is available at the following URL:

<http://download.microsoft.com/download/9/9/c/99c65bcd-ac66-482e-8dc1-0e14cd1670cd/C++%20CLI%20Candidate%20Base%20Draft.pdf>.

Invitation and venue for the: **1st meeting of Ecma TC39-TG5**
to be held in: **College Station, Texas, USA**
on: **4th – 5th December 2003**

TIME : **Between 08:30 and 09:00 each day**

LOCATION : **Courtyard by Marriott**
(group reservation "ECMA", \$79/day plus tax)
3939 State Highway 6 S
College Station, Texas 77845-5820
USA
Phone : +1 (979) 695-8111
Fax : +1 (979) 695-8228

Hosts :

Plum Hall (tplum@plumhall.com) and Microsoft (hsutter@microsoft.com).

Local Contact:

Kay Jones, Texas A&M University (kay@cs.tamu.edu, 979-458-0722).

We will meet in Room C. Please plan to be there between 8:30 and 9:00 each day; continental breakfast and catered lunch will be provided each day, and group dinner Thursday Dec 4, courtesy of co-host Microsoft.

If you have special dietary requirements, please contact Thomas Plum at the above e-mail address prior to November 14th.

Directions

Flying to College Station Easterwood Airport (CLL): Service is available from Houston (IAH) and Dallas (DFW);

see: <http://www.tamu.edu/easterwoodairport/aa.html>

or <http://www.tamu.edu/easterwoodairport/continental.html>.

From College Station Easterwood Airport (CLL) to Courtyard by Marriott (about 7 miles, 15 minutes): The Courtyard by Marriott has airport shuttle service available upon request. On arriving at Easterwood Airport, call them at 979-695-8111 and request pick up. It should take about 10 - 15 minutes to arrive.

Alternatively, car rental is available at the airport through Advantage Rent A Car, for advance reservations call 800-777-5500 or locally at 979-268-0223. Or for taxis, if they aren't waiting at the curb call 979-846-2233 or 979-693-5532.

From Bush International Airport Houston (IAH) to Courtyard by Marriott (about 95 miles, 2 1/2 hours):

Limo service costs \$150. Celebrity Limousine at 1-877-375-4666 (toll free) is very familiar with the trip.

Alternatively, car rental is available; use Internet map such as <http://mappoint.msn.com> or <http://maps.yahoo.com>.

Proposed Timeline for ECMA and ISO/IEC JTC 1 Standardization

Rex Jaeschke, Microsoft

rex@RexJaeschke.com

2003-11-07

Based on my experience with the first round of standardization of the C# and CLI specifications, here's my suggestion for a timeline for the first C++/CLI standard. (Note that this is the schedule that TG2 [C#] and TG3 [CLI] are following for the next edition of their standards.)

1. Dec, 2003, through Sep, 2004, TG5 takes the original submission and turns it into a final draft standard.
2. Sep, 2004, at its semi-annual business meeting, TC39 agrees to forward the final draft based on TG5's recommendation.
3. Sep, 2004, at the annual ISO/IEC JTC 1/SC 22 plenary, I (as ECMA-to-SC22 liaison) will announce that ECMA expects to submit the spec to JTC 1 via the Fast Track process in Jan, 2005.
4. Dec, 2004, the ECMA office will notify JTC 1 that ECMA expects to submit the spec via the Fast Track process in Jan, 2005, and provides an advance copy of the draft spec for circulation as a courtesy.
5. Dec, 2004, at its semi-annual business meeting, the ECMA General Assembly (GA) adopts the submission as an ECMA standard, Version 1, gives it a number, and makes it available for free from the ECMA public website.
6. Jan, 2005, the ECMA standard is submitted to JTC 1 for Fast Track processing. JTC 1 determines that Subcommittee 22 (SC22 — programming languages and environments) is the appropriate home for this, and assigns the task to SC22.
7. Mid-Jan, 2005, SC22 starts a 6-month letter ballot period.
8. While National Bodies (NBs) are reviewing the specs and, ultimately, submitting comments, so too can TG5 via ECMA. TG5 might want to meet in person or have one or more phone conferences to determine what these comments are and possibly what should be its own formal response to those comments.
9. Jul 1, 2005, a JTC 1 ballot resolution meeting date, location, chairman, and project editor are proposed by ECMA.
10. Mid-Jul, 2005, SC22's 6-month letter ballot period ends and all comments are due to JTC 1's ITTF. (All comments must be submitted electronically using a specific Word template.)
11. Aug 1, 2005, JTC 1's ITTF collates all the ballots and their associated comments, and makes them available to the ballot resolution committee (which is, essentially, TG5).
12. Aug 1, 2005, the SC22 Secretariat announces the date and location of the ballot resolution meeting.
13. Aug 1–mid-Sep, 2005, TG5 works on producing formal responses to all public comments.
14. Late Sep, 2005, the ballot resolution meeting is held for x days. Any NB that has voted NO on the ballot must send a representative; otherwise, their NO vote will be ignored. (Assuming that all or a sufficient number of the NBs voting NO convert that to a YES based on decisions made at the ballot resolution meeting, the draft is unofficially an ISO/IEC standard.)

15. Oct, 2005, the project editor integrates all changes based on the ballot resolution meeting, and forwards the revised spec to ITTF for final proofing and processing.
16. Late Mar, 2006, the spec is announced as an ISO/IEC standard.
17. Mar, 2006, the corresponding ECMA standard is revised to match that adopted by ISO/IEC.
18. Mar, 2006, TC39 votes to forward this revised draft to the ECMA GA for adoption.
19. Jun, 2006, the ECMA GA adopts Version 2 of the standard, which, except for some typographical and front matter differences, is identical to that from ISO/IEC.
20. Sep, 2006, at the annual ISO/IEC JTC 1/SC 22 plenary, I (as ECMA-to-SC22 liaison) request that JTC 1 make available for free, the ISO/IEC version of the standard.
21. Nov, 2006, JTC 1 approves the free availability.

As you can see, the Fast Track process takes about 15 months, Jan, 2005 to Mar, 2006.

Ordinarily, ECMA TC39 and the GA deal with new or revised standards at their semi-annual meetings. (While this could be done via letter ballots, it's not the normal case.) As such, this timeline synchronizes with the Sep, 2004, and Dec, 2004, meetings of TC39 and the GA, respectively. If the Sep, 2004, date is missed, the whole schedule likely will slip 6 months, to synchronize with the next TC39 and GA meetings.

***Agenda for the:
to be held in:
on:***

***1st meeting of Ecma TC39-TG5
College Station, Texas, USA
4th - 5th December 2003***

TIME : 09:00 till 17:00 on 4th December 2003
09:00 till 15:00 on 5th December 2003
[8:30 AM Breakfast, Noon Lunch both days]

LOCATION : Courtyard by Marriott
(group reservation "ECMA", \$79/day plus tax)
3939 State Highway 6 S
College Station, Texas 77845-5820 USA
Phone: +1 (979) 695-8111
Fax: +1 (979) 695-8228

CONTACTS : Thomas Plum, tplum@plumhall.com,
+1 (808) 937-9744 (mobile)
Kay Jones, kay@cs.tamu.edu, +1 (979) 458-0722

1 Opening

- 1.1 Appointment of Recording Secretary
- 1.2 Introduction of participants
- 1.3 Host facilities/local information

2 Adoption of the agenda (including posting of new documents)

3 [Reserved for Approval of Minutes in future agendas]

4 [Matters arising from the minutes not covered elsewhere]

- 4.1 Welcome and overview of ECMA process – Mr. van den Beld

5 Project Editor's Report – Mr. Jaeschke

- 5.1 Proposed Timeline [Ecma/TC39-TG5/2003/2] – Mr. Jaeschke

6 Reports from Liaisons

- 6.1 TC39 TG2 (C#) – TBD
- 6.2 JTC1/SC22 – Mr. Jaeschke
- 6.3 SC22/WG21 – liaison policy, reflector policy, public-release docs policy

7 Date and place of next meeting

- 7.1 January 2004 Hawaii Meeting
- 7.2 March 2004 Australia Meeting
- 7.3 Teleconference planning

- 8 [TG5 Sub-team Reports]**
- 9 Previous Meeting Relevant Action Item Review, Not Covered by This Meeting Agenda Topics**
 - 9.1 Previous Meeting Action Items: TBD**
- 10 Key Technical Discussions**
 - 10.1 Adopt base document**
 - 10.2 Technical issues to resolve in base document**
- 11 Any other business**
- 12 Review of action items for this meeting**
- 13 Adjournment**

**Venue Notice for the:
to be held in:
on:**

**2nd meeting of Ecma TC39-TG5
Kailua-Kona, Hawaii, USA
29th - 31st January 2004**

TIME : 09:00 till 17:00 on 29th January 2004
09:00 till 17:00 on 30th January 2004
09:00 till 15:00 on 31st January 2004
[8:30 AM Breakfast, Noon Lunch each day]

LOCATION : Ohana Keauhou BeachHotel [See attached booking form]
(group reservation "Plum Hall", \$115 or 125/day plus tax)
78-6740 Ali'i Drive
Kailua-Kona, Hawaii 96740 USA
Phone: +1 (808) 322-3441 or tollfree 877-532-8468
Fax: +1 (808) 322-3117 [Please reserve room by 2003/12/24]

CONTACTS : Thomas Plum, tplum@plumhall.com, +1 (808) 937-9744 (mobile)

Please plan to be there between 8:30 and 9:00 each day; continental breakfast and catered lunch will be provided each day, courtesy of host Plum Hall. If you have special dietary requirements, please contact Thomas Plum at the above e-mail address prior to January 14th.

Directions

Fly to Keahole-Kona Airport (KOA), via Honolulu, Los Angeles, San Francisco, or Vancouver. Taxis are available at KOA, but many visitors will prefer to rent a car (or share a car with another colleague). Leaving the airport, there is a stoplight at the highway. Turn right (south), drive 6.8 miles to stoplight at Palani Road. Continue straight on the highway (whose highway number changes to "Highway 11") and drive another 4.9 miles. Turn right on Kamehameha III Road, drive 1.5 miles downhill. Turn right on Ali'i Road, drive 0.9 miles. Turn left into driveway of Ohana Keauhou Beach Hotel.

If time permits, another alternative is flying into Hilo Airport (ITO). Rent a car at Hilo Airport, stay a night on the Hilo side of the Big Island, tour Hilo, the volcano, orchid farms, etc. Drive to Keauhou, spend several days at meeting(s), drive back to Hilo side touring Hamakua coast, waterfalls, tropical gardens, etc, return car in Hilo, fly out from Hilo.



HOTEL RESERVATION FORM

Toll Free Reservations: 1-877-KEAUHOU (877-532-8468)

PLUM HALL MEETING
January 25, 2004 to February 2, 2004

Property Information:

OHANA Keauhou Beach Resort is located at 78-6740 Ali'i Drive in Keauhou-Kona on ten acres of lush, tropical oceanfront gardens. Enjoy a quiet and relaxed atmosphere with a very traditional Hawaiian feeling,

Partial Ocean View \$115 _____ Non-Smoking _____ Smoking _____
Ocean View \$125 _____ King _____ DbI/DbI _____

Please note: Room rate does not include applicable taxes.

Applicable Taxes: State Excise Tax 4.166% and Transient Accommodations Tax 7.25% = Total Hotel Taxes 11.416%
(Subject to change without further written notice)

ARRIVAL DATE: _____ DEPARTURE DATE: _____

NAME: _____ SHARE WITH: _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP CODE: _____

TELEPHONE: (_____) _____

KONA ARRIVAL TIME _____ FLIGHT NUMBER & TIME _____

KONA DEPARTURE TIME _____ FLIGHT NUMBER & TIME _____

- ♦ Check In time is 3:00 p.m., Check Out time is 12:00 noon.
- ♦ INDIVIDUAL GUEST WILL BE RESPONSIBLE FOR HOTEL BELL PERSON SERVICES (Current industry rate is \$6.25 per person, round trip, inclusive.)
- ♦ DEADLINE: Final day for reservation is :
- ♦ CANCELLATION: Reservations must be canceled no later than 72 hours prior to your arrival date to avoid forfeiture of deposit.
- ♦ DEPOSIT DUE WITHIN 10 DAYS OF RESERVATION: ONE NIGHT ROOM AND TAX (\$) (REQUIRED BY PERSONAL CHECK PREFERRED (US Dollars): Pay to the order of OHANA Keauhou Beach Resort
- ♦ To better service you, it is important for us to receive your flight arrival and departure by deadline noted above.

CREDIT CARD INFORMATION:

CARDHOLDER NAME _____ EXP. DATE: _____

TYPE OF CARD: _____ CARD NUMBER: _____

BILLING ADDRESS: _____

For information contact our Group Coordinator: Diana Perkins or Augustine (Puamaile) Kimitete

Toll Free: (877) 532-8468

Direct: (808) 322-3441

Fax: (808) 322-3117

Email: kbr@ohanahotels.com

	A	B	C	D	E	F	G	H	I
1	Date Raised?	Issue Raiser?	Reference	Issue Type	Owner	Comment	Other Remarks	Resolved?	Postponed?
2	7-Oct-03	Rex Jaeschke		Technical		The current CLI spec supports Unicode V3.0. Peter Hallam of MS has an action item to see what's involved in having TG2 (C#) and TG3 (CLI) support Unicode V4.0. If TG3 makes changes in this direction, TG5 should look at how this would affect its spec.	Brought up during the phone meeting of 10/7.	No	
3	7-Oct-03	Tom Plum		Technical		Diagnostics: How should we deal with warnings and such?	Brought up during the phone meeting of 10/7.	No	
4	10-Oct-03	Phone meeting		Technical		<p>Future directions: Should there be an informative annex listing future directions?</p> <p>Possible entries are:</p> <ol style="list-style-type: none"> 1. Supporting static members in interfaces 2. Mixed types 3. gcnew of unmanaged types 4. new of managed types 		No	
5	10-Oct-2003	Tom Plum		Technical		<p>While discussing enums (25.1.3) and wchar_t's not being permitted as an underlying type, a discussion arose w.r.t CLI's requiring wchar_t to have the same representation as System::Char; that is, a 16-bit character.</p> <p>This needs further investigation.</p> <p>Possible need to look at/point to the PDTR currently out from WG11 (ISO C).</p>	<p>In email on 10/12/2003 Tom Plum wrote:</p> <p>Refining my comments re wchar_t, I see a short-term and a long-term ...</p> <p>Short-term, there's no need to change anything. The 16-bit unicode type is wchar_t in VC++ and in C++/CLI.</p> <p>Long-term, the decision is up to TG5, and depends upon who participates. My own guess is that TG5 in fact will be the first group that has to integrate Unicode 3.1 and 4.0 into its language definition. I suspect that before we're done we'll have four types of character (and literal and C++ string):</p> <p>char - has to be 8 bits to integrate with CLI 'x' "str" string = basic_string<char></p> <p>wchar_t - implementation's legacy choice of widechar L'x' L"str" wstring = basic_string<wchar_t></p> <p>char16_t - 16-bit character type, has to be UCS-2 or UTF-16 for CLI u'x' u"str" ustring (?) = basic_string<char16_t> (or string16?)</p> <p>char32_t - 32-bit character type, has to be UTF-32 for CLI U'x' U"str" Ustring (?) = basic_string<char32_t> (or string32?)</p> <p>wchar_t can be the same type as char16_t or char32_t, but isn't required to be</p>	No	
6	10-Oct-2003	Phone meeting		Technical		Issue of mapping system value types to the fundamental types, and interop with the standard library.		No	

	A	B	C	D	E	F	G	H	I
1	Date Raised?	Issue Raiser?	Reference	Issue Type	Owner	Comment	Other Remarks	Resolved?	Postponed?
7	21-Oct-03	Rex Jaeschke		Technical		What is the interaction between the standard I/O streams and System::Console?		No	

2003-12 Project Editor's Report

Rex Jaeschke

ECMA TC39 TG5 project editor

rex@RexJaeschke.com

+1 703 860-0091

General Information

1. Each time a new version of the draft standard is produced, it will be made an official ECMA TC39/TG5 document, resulting in its being posted to the TG5 website. At that time, I will also issue a Project Editor's Report (such as this one) , which will also be made an official document
2. Working drafts will be numbered WD1.1, WD1.2, WD1.3, and so on, where the base document used for the first TG5 meeting will be considered WD1.0
3. The standard is maintained in MS Word. (I can also produce PDF.) All substantive edits are done with Change Tracking switched on; strictly editorial changes are not.
4. All issues raised and not resolved during face-to-face or phone meetings, or via email, will be recorded in a Comment Spreadsheet, maintained in MS Excel. (I can also produce PDF; however, this is a static rendering, and does not allow filtering via drop-down lists.)
5. The official email reflector for TG5 is e-tc39-tg5@ecma-international.ch. Only registered members can post to this reflector.
6. The official website for TG5 is <http://www.ecmadocs.ch>. A username and password (issued by ECMA) is needed to access this. You will only have access to pages for committees for which you are registered.
7. To get a document number assigned to a TG5 document, email that document to Michele Bonvin at michele@ecma-international.ch, asking her to make the attachment an official TC39/TG5 document. (ECMA provides an MS Word letterhead template for this purpose at <http://ftp.ecmadoc.net> in the directory "Tools".)