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Data Management and Interchange

WG 4

**SQL/Multimedia
and Application Packages**

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Author: Takashi Kotera (Japan)

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**Minutes of
ISO/IEC JTC 1/SC 32/ WG 4 SQL/MM Meeting
November 16th – 20th, 2009
London, UK**

1 Introduction of Participants

The convener, Kohji Shibano, declared WG4 London meeting open at 10:00AM on November 16th.

Participants were:

Canada:	Baba Piprani	
	Mark Ashworth (*1)	
Germany	Joern Bartels	
Japan:	Kohji Shibano	(Convener & Part 7 co-editor)
	Kenji Suzuki	
	Tomoyuki Kajino	(Part 7 editor)
	Takashi Kotera	
Korea:	Dongwon Jeong	
	Jangwon Kim	
United Kingdom:	Mike Newton	(Part 6 editor)
United States:	Krishna Kulkani	
	Paul Scarponcini	

(*1) Participants in a conference call

2 Distribution of Documents

All documents relevant to the meeting, including both those available in advance of the meeting and those created during the meeting, were made available electronically. They were posted on servers to which all participants had access.

3 Selection of Secretary and Drafting Committee

Takashi Kotera (Japan) accepted the role of Secretary for the meeting. It was agreed that there was no need for a drafting committee.

4 Approval of Agenda

The convener explained the CJU meeting agenda (Korea2009mmnotice.doc). The agenda was approved as presented.

5 Review of the previous meeting minutes

5.1 Minutes of WG4 Meeting, Jeju, Korea (WG4:LCY-001)

The minutes were approved.

5.2 Minutes of the SQL/MM Editing Meeting for CD of Part 3 and FCD of Part7 (WG4:LCY-006)

The minutes were approved.

5.3 Minutes of Electronic meeting

6 National Body Opening Comments

6.1 Canada

Canada is pleased to be here at the London SQL/MM WG4 and continuing editing meetings, and thanks BSI and organizers for having selected a suitable location to address our issues.

Mark Ashworth is unable to join us at this meeting, but is available in remote mode. Hopefully we can connect via remote dial in. We may ask some items to be temporarily deferred pending resolution and caucus.

Canada was pleased to host the Spatial Electronic meeting for continuation of the editing meeting.

On spatial progression, Canada feels that if the existing papers from the USA are accepted and we can get PP 3-416 resolved by undoing the breaking change, then we are in pretty good shape to progress.

Canada is unable to support progression unless the change made covered by PP 3-416 PP is reversed since the change breaks current implementations and code.

We are concerned that the new types do not have a Well-Known Binary Format (CAN-P03-019 PP 3-406).

On History, Canada had found many Major Technical items as submitted in Korea which we believe are serious flaws that we insist need to be fixed before we would change our vote. Note that some of these flaws were identified in the previous CD document, and caused Canada to vote no on progression to FCD. It is encouraging to note that there are several contributions that

partially address the previously identified issues. We would like to see these addressed for progression.

On MDR, we encourage WG2- WG4 dialog and ask that we carefully consider the possibility of defining a common core Registry-level module, and address IS 11179 MDR as a specific specialization---with the core level handling common functionality for other future Registries. This way WG4 can harmonize and consolidate all Registry interface functionalities, focusing on re-using the common core and defining specializations for other registries, since WG2 appears to be working on several registries as per their agenda.

Canada offers to support and help in the resolution of various outstanding issues to enable progression at a rapid rate.

6.2 Germany

Germany is pleased to attend the meeting in this rainy capital of the United Kingdom.

We look forward to get good progress for the active parts of the standard.

We hope that the committee's working style will be as cooperative as it has been at previous meetings, and we will get on all proposals an agreement which suites everybody.

We thank the British Standards Institute for the invitation and hosting of the Meeting.

6.3 Japan

Japan is pleased to attend this London meeting of WG4 and we look forward to making progress Part 3: Spatial, Part 7: History and Part 8: MDR.

Japan would like to thank the UK National Body for hosting this meeting.

6.4 Korea

Korea is pleased to participate in this WG 4 Interim meeting, London, UK.

We look forward to get progressive results of all parts of the standard.

We thank the British Standard Institution, BSI for the invitation and hosting of this Interim Meeting.

6.5 United Kingdom

The UK would like to welcome you all to the headquarters of British Standards, and we hope you have been able to make suitable arrangements for your stay in London.

We are pleased to participate in this meeting of WG4 and we look forward to making progress on the three parts of Spatial, History and MDR, and of course to consider what changes are needed for Framework.

For Part 7, History, there have been many changes and further changes are required to resolve all ballot comments, so we consider that a second FCD ballot is required.

6.6 United States of America

USA is pleased to participate in WG4 and the two ballot resolution meetings. USA thanks Phil Brown and the UK National body for hosting the meetings in such a historic city.

On Part 3 Spatial, USA submitted a number of technical contributions for the Electronic CD Editing meeting. Though US was disappointed that the electronic meeting did not take any action on them, US hopes that the national bodies have had adequate time to review them and are ready to act on them quickly. USA hopes that the Spatial part will complete the CD ballot successfully and will progress to the FCD ballot out of this meeting.

On Part 8 MDR, USA believes that adequate liaison with the metadata registry domain experts is essential for successful progression of the working document.

7 WG2 and WG3 Issues – Possible ad hoc meeting with WG2 on SQL-MM Part-8 (MDR)

8 Work Program

8.1 NP 13249-1 SQL/MM Part 1: Framework 4th Edition– Shiratori, PE – (develop 1st WD) (WG4:LCY-002)

Noted.

8.2 WD 13249-8 SQL/MM Part 8: MDR – Jeong, PE – 32N1911 WD (WG4:LCY-005r1)

8.2.1 Change report for SQL/MM – Part 8: MDR for 2nd Working Draft (LCY-037)

Dongwon Jeong presented LCY-037 and LCY-038 and the papers were discussed together. The following points were identified as discussion topics in the joint meeting with WG2.

1. Project title of SQL/MM Part8.
2. What should be the target registry? 11179-3 Ed.2 or 11179-3 Ed.3?
3. Does have a list of incompatibilities between 11179-3 Ed.2 and 11179-3 Ed.3?
4. Scope of SQL/MM Part8 (common part and specialization?).
5. Business scenario for querying registries.
6. To what extent should SQL/MM Part8 recognize the conformance levels defined by 11179-3?
7. Should SQL/MM Part8 project be progressed by regular WG4/WG2 joint meeting or formation of collaborative group?

8.2.2 Issues for SQL/MM – Part 8: MDR from Wuhan meeting (LCY-038)

See 8.2.1.

8.2.3 Items for Discussion for Joint Meeting between WG4 and WG2

The paper was discussed. As for the title of SQL/MM Part8, “Metadata Registry Access” is adopted.

8.3 CD 13249-3 SQL/MM Part 3: Spatial – continuation editing session – Ashworth, PE – 32N1820 CD, 32N1859 SoV (WG4:LCY-003)

8.3.1 Consolidated Ballot Comments for SQL/MM Spatial (WG4:LCY-007r1)

Noted.

8.3.2 Delaunay (WG4:LCY-008)

Paul Scarponcini presented LCY-008. The paper was accepted and SEQ#032 was resolved.

8.3.3 Slope (WG4:LCY-010r1)

Paul Scarponcini presented LCY-010 and revised it to add the definition of Slope. The paper was accepted and SEQ#119 was resolved.

8.3.4 Patches (WG4:LCY-011)

Paul Scarponcini presented LCY-011. The paper was accepted and SEQ#125 and SEQ#131 were resolved.

8.3.5 TINElement Type (WG4:LCY-012)

Paul Scarponcini presented LCY-012. The paper was accepted and SEQ#148 was resolved.

8.3.6 TINElement Value (WG4:LCY-013)

Paul Scarponcini presented LCY-013. The paper was accepted and SEQ#149 was resolved.

8.3.7 Empty (WG4:LCY-014r1)

Paul Scarponcini presented LCY-014 and revised it to replace DR3). The paper was accepted and SEQ#152 was resolved.

8.3.8 Coincidence (WG4:LCY-015)

Paul Scarponcini presented LCY-015. The paper was accepted and SEQ#144 and SEQ#145 were resolved.

8.3.9 Equals (WG4:LCY-016)

Paul Scarponcini presented LCY-016. The paper was accepted and SEQ#176 was resolved. PP3-419 was also resolved.

8.3.10 Zed (WG4:LCY-017)

Paul Scarponcini presented LCY-017. The paper was accepted and SEQ#177 was resolved.

8.3.11 Harmony (WG4:LCY-018)

Paul Scarponcini presented LCY-018. The paper was accepted and SEQ#174 was resolved.

8.3.12 Cardinality (WG4:LCY-033)

Paul Scarponcini presented LCY-033. The paper was accepted and SEQ#158, SEQ#161 and SEQ#176 were resolved.

8.3.13 AsText (WG4:LCY-034)

Paul Scarponcini presented LCY-034. The paper was accepted and SEQ#123 and SEQ#124 were resolved. PP3-408 was also resolved.

8.3.19 Visibility (WG4:LCY-009)

Paul Scarponcini presented LCY-009. The paper was accepted and SEQ#121 and SEQ#129 were resolved.

8.3.20 Resolve PP 3-416 (WG4:LCY-040)

LCY-040 was discussed together with LCY-042. UK is against LCY-040 and is for LCY-042. Japan and Germany abstain. The paper was rejected.

8.3.21 US Response to lcy040 (WG4:LCY-042)

See 8.3.20.

8.4 FCD 13249-7 SQL/MM Part 7: History – continuation editing session – Shibano & Kajino, PEs 32N1827 FCD, 32N1866 SoV (WG4:LCY-004)**8.4.1 Clear the privileges for history table (WG4:LCY-019)**

Takashi Kotera presented LCY-019. The paper proposed the explicit requirement for the history table. It was argued against, since the history table is like the shadow table of a tracked table but is a virtual table in Part7. The paper was rejected. SEQ#060, SEQ#061 and SEQ#062 were still open.

8.4.2 Correction of the term “schema definition” (WG4:LCY-020)

Takashi Kotera presented LCY-020. The paper was accepted and SEQ#084 was resolved.

8.4.3 Change proposal to SEQ#21 and SEQ#26: figures of history table (WG4:LCY-021r1)

Kenji Suzuki presented LCY-021 and revised it to modify section 4.1 of the paper. LCY-021r1 was accepted with the following amendment:

Replace the lead text of the new paragraph of subclause 3.2.2 proposed in 4.1 of the paper with

This part of ISO/IEC 13249 uses the following representation in a figure for a table that includes the column of HS_Hist of the structured type, HS_History.

Replace <Name of Column of Predefined Type> in the new paragraph of subclause 3.2.2 proposed in 4.1 with <Column Name> of Predefined Type.

Replace <Name of Column of Predefined Type> in the new paragraph of subclause 3.2.2 proposed in 4.1 with <Column Name> of Predefined Type.

SEQ#021 and SEQ#026 were resolved.

8.4.4 Change proposal to SEQ#46: concept of period normalization (WG4:LCY-022)

Kenji Suzuki presented LCY-022. The paper was accepted and SEQ#046 was resolved.

8.4.5 Response to the ballot comments of SQL/MM Part 7: History (WG4:LCY-023r1)

Open ballot comments were reviewed through LCY-023r1.

1) SEQ#007

Amendments proposed in LCY-023r1 were changed as follows:

1. Replace the text “a timestamp, a timestamp value that is fixed for an SQL-transaction” proposed to add in 3.1.4 with “a timestamp, a timestamp value that is within the duration of an SQL-transaction”
2. Add the following note immediately after the above-mentioned definition of a timestamp:

NOTE: this value is implementation-dependant, preferably corresponding to the end of an SQL-transaction

3. Add "SQL-transaction" in 3.1.2 definitions taken from 9075-2.

SEQ#007 was resolved.

2) SEQ#014

SEQ#014 was closed with no action.

3) SEQ#019

Amendment to 4.1.1 proposed in LCY-023r1 was accepted and SEQ#019 was resolved.

4) SEQ#020 and SEQ#024

Amendment to 4.1.1 proposed in LCY-023r1 was changed as follows:

A tracked table is a persistent base table for which any changes to the current values of specified tracked columns are to be recorded. A history table is a means of virtualising the recording of these changes, even though there is no requirement for it to exist as a persistent base table.

SEQ#020 and SEQ#024 were resolved.

5) SEQ#022

The solution proposed in the comment was accepted. SEQ#022 was resolved.

6) SEQ#025

The solution proposed in the comment was accepted. SEQ#025 was resolved.

7) SEQ#027

The solution proposed in the comment was accepted. SEQ#027 was resolved.

8) SEQ#028

SEQ#028 was closed with no action.

9) SEQ#032 and SEQ#034

It was agreed that SEQ#032 and SEQ#034 were resolved as the result of applying the solution of SEQ#036, which has been already resolved.

10) SEQ#035

Amendment to 4.1.2 proposed in LCY-023r1 and SEQ#035 was resolved.

11) SEQ#040

SEQ#040 was closed with no action.

12) SEQ#049

SEQ#049 was closed with no action.

13) SEQ#054

It was agreed that SEQ#054 was addressed by the solution proposed in SEQ#053 which has been already resolved. SEQ#054 was closed.

14) SEQ#058

The solution proposed in the comment was accepted. SEQ#058 was resolved.

15) SEQ#079

SEQ#079 was closed with no action.

16) SEQ#083

SEQ#083 was closed as proposed in LCY-023r1.

17) SEQ#092

SEQ#092 was closed with no action.

8.4.6 List the restrictions in Scope clause (WG4:LCY-024)

Tomoyuki Kajino presented LCY-024. The paper was accepted with the following amendments

1. Replace the statement “The following changes are not allowed” in the new inserted text with “the following operations are not supported in this standard”
2. Delete new subclause 4.8.

SEQ#096 was resolved SEQ#003 was closed with registering the feature of changes to the definition of the schema of a tracked table for language opportunity.

8.4.7 Definition of "contiguous" (WG4:LCY-025)

Tomoyuki Kajino presented LCY-025. The paper was accepted with the following amendment:

Replace the definition of contiguous periods proposed in 3.1 of the paper with

a sequence of two or more periods, such that, for all $1 < i \leq n$ (where n is the number of periods), the begin time of the i -th period is equal to the end time of the $(i-1)$ -th period.

Replace the second sentence of the definition of period-normalized table proposed in 3.1 of the paper with

Each row in a period-normalized table is formed from one or more rows of a history table with the same values in one or more specified columns that relate to a continuous period, which may either be a single period from one row or contiguous periods from many rows.

SEQ#009 and SEQ#050 were resolved.

8.4.8 Raising an exception if HS_CreateHistory is invoked with primary key columns (WG4:LCY-026)

Tomoyuki Kajino presented LCY-026. The paper was accepted and SEQ#063 and SEQ#064 were resolved.

8.4.9 (VOID) (WG4:LCY-027)

The paper number was voided.

8.4.10 Definition of HS_PNormalize method if there is only one tracked column (WG4:LCY-028)

Tomoyuki Kajino presented LCY-028. The paper was accepted and SEQ#069 was resolved.

8.4.11 (VOID) (WG4:LCY-029)

The paper number was voided.

8.4.12 Check if a period in the future is specified (WG4:LCY-030r1)

Tomoyuki Kajino presented LCY-030 and revised it to eliminate duplicate description and to uniform behaviors of set operations when future time is passed as its parameter. The paper was accepted and SEQ#087 and SEQ#090 were resolved.

8.4.13 New methods for union and except operation (WG4:LCY-031r1)

Tomoyuki Kajino presented LCY-031. The solutions of SEQ#085 and SEQ#088 proposed in the paper, which introduced a new feature, were rejected. The paper was revised to remove that new feature and to change the behavior when resulted period was disjointed. The paper was accepted. SEQ#085 and SEQ#088 were closed with no action and SEQ#086 and SEQ#089 were resolved.

8.4.14 Revise description of history type in Concept section (WG4:LCY-032r1)

Tomoyuki Kajino presented LCY-032 and revised it to make description of 3.1 of part7 generic, not depending on a history. The paper was accepted and SEQ#056 was resolved.

8.4.15 Interim disposition of FCD Ballot Comments on SQL/MM Part 7:History (WG4:LCY-035r1)

Tomoyuki Kajino reported the summary of the status in resolving ballot comments through LCY-035r1.

8.4.16 Time precision of HS_History type attributes (WG4:LCY-036r1)

Tomoyuki Kajino presented LCY-036. It was rejected that the paper addressed SEQ#098 and a part of SEQ#091. The paper was revised to address just SEQ#091 partially. The paper was accepted and SEQ#091 was resolved partially.

9 National Body Closing Comments

9.1 United States of America

USA is pleased with the progress amade at this meeting. USA appreciates the excellent facilities that made it possible to have productive meetings. USA again thanks Phil Brown and the UK National body for hosting the meetings.

9.2 United Kingdom

The UK is pleased with the progress in three parts of WG4 work; Part 3, Spatial, Part 7, History and Part 8, which, for the time being, is now MRA - Metadata Registry Access. We consider that the joint meeting with WG2 was very useful and would wish that such joint meetings should continue, as well as possibly closer liaison arrangements.

We hope that you have all been able to enjoy your time in London, despite the weather.

9.3 Korea

Korea was see for the progress of each part.

9.4 Japan

Japan is pleased with the progress made in this meeting on Part3, Part7, and Part8.

Japan would like to thank the UK National Body for hosting this meeting in this wonderful city.

9.5 Germany

Germany likes to thanks the British Standard Institute for hosting the meeting in London.

Germany is also happy that we were able to progress two important parts of the standard.

9.6 Canada

Canada thanks BSI for the excellent facilities and hosting the London SQL/MM WG4 and continuing editing meetings.

Canada thanks WG4 editing group members for accommodating the absence of Mark Ashworth, the spatial editor who could not attend due to sickness.

On the spatial part, Canada is unable to support progression as per JTC1 directives due to the outstanding major technical issue PP 3-416 since the change breaks current implementations and code

On History, Canada is pleased to see the gradual resolution of issues and thanks Japan for their contributions.

10 Liaison Issues

None.

11 WG4 Recommendation to SC32 and review of project plan

11.1 WG4 Meeting Resolutions (WG4 N0079)

Resolution of this meeting was discussed and it was reflected to WG4 N0079. WG4 N0079 was accepted.

12 Action Items

- 1) Baba Piprani: to create the minutes of the electric meeting for CD ballot resolution of Part3.

13 Adjourn

The meeting was adjourned at 10:15 on Friday, November 20th, 2009.

Appendix A: JTC 1/SC 32/WG 4 SQL/MM London meeting Document Register

WG4:LCY-001	Kotera	Minutes of WG4 Meeting, Jeju, Korea
WG4:LCY-002	Shiratori	SQL/MM-Part 1: Framework Working Draft - Edition 4
WG4:LCY-003	Ashworth	SQL/MM-Part 3: Spatial 4th Edition Text for CD Editing Meeting
WG4:LCY-004	Shibano/Kajino	SQL/MM-Part 7: History 1st Edition Text for FCD Editing Meeting
WG4:LCY-005r1	Dong-Won Jeong	SQL/MM-Part 8: MDR Working Draft - Edition 2
WG4:LCY-006	Kotera	Minutes of the SQL/MM Editing Meeting for CD of Part 3 and FCD of Part7
WG4:LCY-007r1	Ashworth	Consolidated Ballot Comments for SQL/MM Spatial.
WG4:LCY-008	Scarponcini	Delaunay
WG4:LCY-009	Scarponcini	Visibility
WG4:LCY-010r1	Scarponcini	Slope
WG4:LCY-011	Scarponcini	Patches
WG4:LCY-012	Scarponcini	TINElement Type
WG4:LCY-013	Scarponcini	TINElement Value
WG4:LCY-014r1	Scarponcini	Empty
WG4:LCY-015	Scarponcini	Coincidence
WG4:LCY-016	Scarponcini	Equals
WG4:LCY-017	Scarponcini	Zed
WG4:LCY-018	Scarponcini	Harmony
WG4:LCY-019	Japan	Clear the privileges for history table
WG4:LCY-020	Japan	Correction of the term "schema definition"
WG4:LCY-021r1	Japan	Change proposal to SEQ#21 and SEQ#26: figures of history table
WG4:LCY-022	Japan	Change proposal to SEQ#46: concept of period normalization
WG4:LCY-023r1	Japan	Response to the ballot comments of SQL/MM Part 7: History
WG4:LCY-024	Japan	List the restrictions in Scope clause
WG4:LCY-025	Japan	Definition of "contiguous"
WG4:LCY-026	Japan	Raising an exception if HS_CreateHistory is invoked with primary key columns
WG4:LCY-027	Japan	(VOID)
WG4:LCY-028	Japan	Definition of HS_PNormalize method if there is only one tracked column
WG4:LCY-029	Japan	(VOID)
WG4:LCY-030r1	Japan	Check if a period in the future is specified
WG4:LCY-031r1	Japan	New methods for union and except operation
WG4:LCY-032r1	Japan	Revise description of history type in Concept section
WG4:LCY-033	Scarponcini	Cardinality
WG4:LCY-034	Scarponcini	AsText
WG4:LCY-035r1	Kajino	Interim disposition of FCD Ballot Comments on SQL/MM Part 7:History
WG4:LCY-036r1	Japan	Time precision of HS_History type attributes
WG4:LCY-037	Korea	Change report for SQL/MM – Part 8: MDR for 2nd Working Draft
WG4:LCY-038	Korea	Issues for SQL/MM – Part 8: MDR from Wuhan meeting

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ISO/IEC JTC 1/SC 32/WG 4 KMG-001

WG4:LCY-039	Korea	Schedule for joint meeting of WG4 with WG2Appendix
WG4:LCY-040	Canada	Resolve PP 3-416
WG4:LCY-041	US	Comment Status 20091118
WG4:LCY-042	US	US Response to lcy040
WG4 N0079	Shibano	ISO/IEC JTC 1/SC 32/WG 4 London Meeting Draft Resolutions

Appendix B: Paper numbers for the SC32/WG4 meeting in Kunming, China

WG4:KMG-001	Kotera	Minutes of WG4 Meeting, London, UK
WG4:KMG-002	Shiratori	SQL/MM-Part 1: Framework Working Draft – Edition 4
WG4:KMG-003	Ashworth	SQL/MM-Part 3: Spatial 4th Edition Text for CD Editing Meeting
WG4:KMG-004	Shibano/Kajino	SQL/MM-Part 7: History 1st Edition Text for FCD Editing Meeting
WG4:KMG-005	Dongwon Jeong	SQL/MM-Part 8: MDR Working Draft – Edition 1
WG4:KMG-006		
WG4:KMG-007		
WG4:KMG-008		
WG4:KMG-009		
WG4:KMG-010		

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