MMC WG Meeting Minutes, Wednesday 5 November 2008

Embassy Suites 1325 E. Dyer Rd. Santa Ana, CA 92705

Hosted by Western Digital.

1. Statement of T10 Rules

The MMC meeting has been authorized by INCITS T10 and will be conducted under the INCITS rules. Ad hoc meetings take no final actions, but prepare recommendations for approval by the INCITS task group. The voting rules for the meeting are those of the parent committee, INCITS T10. For the ad hoc, other than straw votes, the voting rules are: one vote per participating company.

The minutes of the MMC meeting will be posted to the T10 Reflector and will be included in the next T10 committee mailing. Attendance at a working group meeting does not count toward minimum attendance requirements for T10 membership. Working group meetings are open to any person or company to attend and to express their opinion on the subjects being discussed.

2. Introductions

3. Document Distribution

The proposed meeting agenda,
The TCG Optical Security System Class specification, v1.00,
An overview presentation of the TCG OSSC,
The latest draft of MMC6 (MMC6R02A.PDF)
Fuji7, revision 1.10,
BD Commands, revision 1.11.

4. Call for Patents

None reported.

5. Approval of Agenda

Additions to the agenda...

Katata-san (Pioneer) wished to discuss corrections according to the Blu-ray commands document: Blu-Ray Disc Multi-Media Command Set Proposal for INCITS, Version 1.11.

David Burg (Microsoft) had started an e-mail discussion about the no seek complete error reporting that may/should result in Host retries of reads.

6. Old Business

6.1 Blu-ray Commands

"Blu-Ray Disc Multi-Media Command Proposal for INCITS, Version 1.11" lists corrections to version 1.10 in Section 1.1.3. These changes will be put into MMC-6. The Blu-ray document will be posted to the T10 website.

6.2 HD DVD in MMC-6

Rather than mark all of HD DVD as legacy, it shall remain in MMC-6, but unchanged from MMC-5. MMC-6 will refer to Fuji for follow-on technologies.

6.3 VCPS

Bill McFerrin made some inquiries about VCPS. There are no objections to making it legacy.

7. New Business

7.1 No Seek Complete Discussion

There are occasions when a read operation is delayed due to a resource conflict. This sometimes occurs when a READ is attempted while a write is in progress on random writable media. Many Drives report "No Seek Complete (3/02/00). David Burg proposes that we note: "Although 2/04/08 is preferred, some devices may also report 3/02/00. Accordingly is it recommended that host retries the command on sense information 3/02/00."

In the Fuji7 READ(10) command description there is a comment: "When a logical unit cannot perform read operation on a Random writable medium, the logical unit may use 3/02/00 NO SEEK COMPLETE. It is recommended that host issue the same READ command again several times. The 3/02/00 NO SEEK COMPLETE may be used for the actual seek failure. Therefore the number of the retry may be limited."

After some discussion the WG has the following conclusion: It is acceptable to include David Burg's statement, but it is also necessary to detail the retry specification from Katata-san.

MMC-6 will be modified as follows:

After sub-clause 4.1.6.3 add a new heading: Error Responses while reading. The text should be:

"During read operations, the Drive may experience temporary resource conflicts that may delay the ability to read and return data. In this situation, the preferred sense response is either 2/04/07 or 2/04/08, however 3/02/00 is also permitted. In these cases, it is recommended that host retry the

same read operation. Note that 3/02/00 (NO SEEK COMPLETE) may also be reported when there is an actual seek failure. The Host's retry response should be the same in both cases. Although the actual number of retries is Host specific, it should have some finite limit.

7.2 REPORT LUNS – mandatory in SPC-3

This is required for compliance with SPC-3. A note will be added that this compliance is dependent upon INQUIRY response.

7.3 TCG Optical Security Subsystem Class (OSSC)

Status: The specification was released for publication by the TCG board of directors in mid-October. The specification is now available in the public area of www.trustedcomputinggroup.org. The PDF was included in the distribution.

Bill McFerrin (DPHI) reviewed the OSSC and noted that although the document outlines how security information is to be stored on optical media, specification of format details were left to the MMC WG.

During the discussion of the proposed format for discs with the track/session model, concerns were raised about the initialization time associated with the PSA search. Katata-san suggested that this could be reduced if PSA content was rerecorded whenever a secure session is closed. When the PSA content is large, the capacity loss would be higher than is normally acceptable. It could also result in much higher time cost when closing the session. Bill McFerrin suggested that recording a pointer block will have similar improvements with a small fixed overhead at close session time.

8. Action Items

- The chair will post meeting documents to the T10 website: MMC6R02A.PDF, BD Commands, revision 1.11.
- The chair will produce MMC6R02B with the changes discussed during the meeting.
- The chair will perform testing to evaluate the OSSC format proposals.

9. Future Meeting Schedule

Orlando Marriott Lake Mary Hotel 1501 International Parkway Lake Mary, Florida 32746 USA

Hosted by: Symantec See T10.ORG for reservation details.

Alternate proposal:

During CES week may be a better time to next meet in order to minimize travel.