Minutes Sept 2007 SSC-3 (07-413r0)
Date: Sept 18, 2007
Time: 9:40 am-5:45 pm
Location: Vancouver, B.C.

Agenda

1. Opening remarks and introductions
Dave Peterson thanked PMC-Sierra for hosting.

Attendance

SSC-3 Working Group Attendance Report - September 2007

<table>
<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Mr. David Peterson</td>
<td>P</td>
<td>Brocade</td>
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<td>Mr. Kevin Marks</td>
<td>P</td>
<td>Dell, Inc.</td>
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<td>Mr. Robert H. Nixon</td>
<td>A</td>
<td>Emulex</td>
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<td>Mr. Ralph O. Weber</td>
<td>P</td>
<td>ENDL Texas</td>
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<td>Mr. Curtis Ballard</td>
<td>V</td>
<td>Hewlett Packard Co.</td>
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<td>Mr. Michael Banther</td>
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<td>Hewlett Packard Co.</td>
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<td>Mr. Christopher Williams</td>
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<td>Hewlett Packard Co.</td>
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<td>Mr. Kevin Butt</td>
<td>A</td>
<td>IBM Corp.</td>
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<td>Mr. Robert Payne</td>
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<td>Iomega Corp.</td>
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<td>Mr. Frederick Knight</td>
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<td>Network Appliance</td>
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<td>Mr. Geoffrey Barton</td>
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<td>Overland Storage</td>
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<td>Mr. Matthew Ball</td>
<td>V</td>
<td>Quantum Corp.</td>
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<td>Dr. Paul Suhler</td>
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<td>Quantum Corp.</td>
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<td>Mr. Erich Oetting</td>
<td>P</td>
<td>Sun Microsystems, Inc.</td>
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<td>Mr. Roger Cummings</td>
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<td>Symantec</td>
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<td>Mr. Georg Boasson</td>
<td>V</td>
<td>Tandberg Storage</td>
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<td>Mr. Jorgen Walle-Jensen</td>
<td>V</td>
<td>Tandberg Storage</td>
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17 People Present

Status Key:  P - Principal
             A, A# - Alternate
             AV - Advisory Member
             E - Emeritus
             L - Liaison
             V - Visitor
2. Approval of agenda (07-330r0) [Peterson]
Dave Peterson moved that the agenda be approved. Michael Banther seconded the motion. Passed unanimously.

3. Approval of meeting minutes (07-238r1) [Peterson]
Dave Peterson made a motion to approve the minutes. Kevin Marks seconded the motion. The motion passed unanimously.

4. Review of old action items [Butt]
4.1 Dave Peterson: Bring in a White Paper on the value added with Explicit Command Set.
Carry-Over

4.2 Michael Banther: Bring in proposal to improve handling of cleaning and firmware upgrade cartridges.
07-409r0

4.3 Roger Cummings: produce a proposal to describe the events that shall activate and deactivate the cleaning related tape alert flags and to add a second flag for predictive failure of the medium.
07-408r0

4.4 Micheal Banther: Create a proposal to add additional activation conditions to TapeAlert. See note in 05-154r3 to bring in new proposal for this additional info.
Move to SSC-4 items. Kevin Butt asked to add a new section in the Minutes for SSC-4 items.

4.5 [Kevin Butt] Revise Configurable EW (07-218r2) and post as 07-218r3
Complete

4.6 [David Peterson] Include 07-218r3 in SSC-3.
Complete

4.7 [Gideon Avida] Revise Set Data Encryption Parameters through an SA (07-254r0) and post as 07-254r1
Complete

4.8 [David Peterson] Incorporate 07-254r1 into SSC-3.
Complete - Need to discuss an issue with one of the tables incorporated.

4.9 [Kevin Butt] Revise Protecting a partially encrypted volume (07-290r0) and post as 07-290r1
Complete

4.10 [Kevin Butt] Revise Cleaning Model (07-219r0) and post as 07-219r1
Complete

4.11  [Michael Banther] Revise Requested Recovery log page (07-046r1) and post as 07-046r2
Complete

4.12  [Kevin Butt] Revise TapeAlert Delineation (06-138r4) and post
Complete.

5. Old business

5.1  General items

5.1.1  Vendor Feedback (05-351r1) [Group]
Dave has been going through and hopes to discuss next meeting.

We need to assign an owner for item 2.7 of 05-351r1 which is to provide a means for the library Serial Number to be reported by the Tape Drive. Dave will take care of this.

5.1.2  Cleaning Model (07-219r1) [Butt]
Kevin covered this. There are changes needed related to the load states and several changes in the table. Michael emailed Kevin some comments. Time was called.

<<Move to SSC-4>>

5.1.3  TapeAlert Delineation (06-138r5) [Butt]
Many edits were made. Kevin Butt made a motion to include 06-138r5 as modified into SSC-3. Michael Banther seconded the motion. The motion passed unanimously.

AI: Kevin Butt Revise TapeAlert Delineation (06-138r5) and post.
Dave Peterson incorporate TapeAlert Delineation (06-138r6) into SSC-3

<<Remove from Agenda>>

5.1.4  Requested Recovery log page (07-046r2) [Banther]
Michael covered the changes to this proposal. Roger asked that the “VHF data descriptor (see ADC-2)” be modified to indicate which log page it belongs to.

Michael Banther made a motion that Requested Recovery log page (07-046r2) as modified be included in SSC-3. Paul suhler seconded the motion. The motion passed unanimously.

AI: Michael Banther revise the Requested Recovery log page (07-046r2) and post as 07-046r3.
Dave Peterson to incorporate Requested Recovery log page (07-046r3)

<<Remove from Agenda>>

5.2  Security-related items
5.2.1  SSC-3 Table 123 cleanup [Peterson]
Dave pointed out some issues found during incorporation of previously approved proposals.
The WRAPPED KEY LENGTH field and the SIGNATURE LENGTH field are undifined as to how long they are. The decision was made to make them 2-bytes long.
Why is the LABEL format not specified? Dave will create a table to describe.
Dave wants to remove the version byte and the format byte from the LABEL field.
AI: Fred Knight to invistigate the acceptability of doing this.

5.2.2  Protecting a partially encrypted volume (07-290r0) [Butt]
Several edits were made.
Kevin Butt moved that Protecting a partially encrypted volume (07-290r2) as modified be included into SSC-3. This was seconded by Bob Nixon. The motion passed on a 5:0:3 vote.
After the vote was taken, Roger Cummings stated that the reason for Symantec's abstention on the motion was that the proposal does not support a sufficient level of assurance that ONLY encrypted data has been written to the volume. In order for encryption to be usable as defined in various types of data privacy legislation, it will be necessary to be able to PROVE, at a significant time after the fact, that ALL of the data on a "lost" volume was encrypted. Roger believed that the only way to achieve the required level of assurance is to define a volume feature similar to Write Protect that ensures that only encrypted data is ever written to the medium, and he requested that such a volume feature be included within the scope of the upcoming SSC-4 project.
AI: Kevin Butt to revise Protecting a partially encrypted volume (07-290r2) and post.
Dave Peterson to incorporate Protecting a partially encrypted volume (07-290r3) into SSC-3.
<<Remove from Agenda>>

6. New Business
6.1  General items
6.1.1  TapeAlert Cleaning Clarification (07-408r0) [Gilson & Cummings]
Roger made a presentation that updates 05-339r0.
There are suggestions for when to activate and when to deactivate various cleaning TapeAlert flags. One point that needs clarified is for flag 16h saying the flag gets asserted when it is determined that the cleaning operation cannot complete before expiration.
Discussion revolved around beginning to load, complete successful load, unload as part of deactivation condition.
<<Move to SSC-4>>
6.1.2 MAM and write protect (07-382r0) [Banther]

There was discussion on the meaning of Medium. Some think medium includes MAM; others think it does not include MAM but only the recording medium.

What is the definition of medium? (This could have ramifications throughout SSC-3)

a) The flexible substrate?

b) Everything within the volume that provides non-volatile storage?

c) Everything within the volume with host access that provides non-volatile storage?

d) Something else?

Should a device server allow host write access to MAM on a write protected volume?

AI: Several in the group took action items to answer these questions.

6.1.3 Volume model (07-409r0) [Banther]

Michael discussed this and pointed out that there are fundamental changes being proposed here.

Dave Peterson stated that he was not comfortable with this amount of change so close to the end of the cycle. Could it be postponed to SSC-4? Paul Suhler agreed. Michael stated he was happy to do that as long as it is added to the SSC-4 To do list.

Roger would like the Cleaning Model (07-219r1) proposal discussed at the same time as this proposal. Ralph stated he has been hearing that the term and definition of Medium needs to be well defined as the first item done in SSC-4 and that SSC-3 should be wrapped up immediately.

AI: Michael Banther to revise Volume model (07-409r0) and post

<<Move to SSC-4>>

6.2 Security-related items

6.2.1 SSC-3: Tape end-to-end data protection(Presentation) (07-373r3) [Butt]

6.2.2 SSC-3: Tape end-to-end data protection(Proposal) (07-374r3) [Butt]

6.2.3 SSC-3: Out of Band Encryption Key Management (07-361r0) [Ballard]

Curtis presented this proposal after determining it was more important to cover today than the Tape end-to-end data protection proposal.

There was discussion about what the data encryption capabilities are and why they need to be controlled. Curtis, Kevin, and Paul Suhler discussed how this relates to a proposal in ADI and how the library can modify what options are available for control over the primary port (i.e., host application client)

Curtis almost made it through the proposal, but there were several points where he stated he was not happy with it yet and wanted to make updates before we spent much time discussing it.

Time was called.
7. Liaison reports

7.1 P1619.1 Status report (07-411r0) [Ball]
Matt presented the report. P1619 and P1619.1 sponsor ballots have completed and resolution has begun.
go to siswg.net webpage and click on the meetings to find the meetings.

8. Project Status

8.1 Next Meeting Requirements (Las Vegas, NV)
Need as much time as possible.
Conference calls:
Oct 24 8:00 AM - 10:00 AM PDT
Oct 30 8:00 AM - 10:00 AM PDT

8.2 Last Technical Input - September 2007
Dave stated he was going to be very stringent on this.

8.3 Target date for letter ballot - January 2008
Dave stated we should move the Letter ballot target to January.
We have Michael’s MAM and write protect (07-382r0) proposal, Curtis’s Out of Band Encryption Key Management (07-361r0), and potentially Kevin’s Tape end-to-end data protection(Proposal) (07-374r3)

9. Review of action items

9.1 Old Action Items (Carried Over)
9.1.1 Dave Peterson: Bring in a White Paper on the value added with Explicit Command Set.

9.2 New Action Items (assigned this meeting)
9.2.1 Dave Peterson assign an owner for item 2.7 of 05-351r1 which is to provide a means for the library Serial Number to be reported by the Tape Drive
9.2.2 Kevin Butt Revise TapeAlert Delineation (06-138r5) and post.
9.2.3 Dave Peterson incorporate TapeAlert Delineation (06-138r6) into SSC-3
9.2.4 Michael Banther revise the Requested Recovery log page (07-046r2) and post as 07-046r3.
9.2.5 Dave Peterson to incorporate Requested Recovery log page (07-046r3)
9.2.6 Michael Banther will provide his companies definition of medium as a selection from Section 6.1.2.
9.2.7 Paul Suhler will provide his companies definition of medium as a selection from
Section 6.1.2.

9.2.8 Kevin Butt will provide his companies definition of medium as a selection from Section 6.1.2.

9.2.9 Erich Oetting will provide his companies definition of medium as a selection from Section 6.1.2.

9.2.10 Georg Boasson will provide his companies definition of medium as a selection from Section 6.1.2.

9.2.11 Paul Suhler to provide his companies answer to “Should a device server allow host write access to MAM on a write protected volume?”

9.2.12 Erich Oetting to provide his companies answer to “Should a device server allow host write access to MAM on a write protected volume?”

9.2.13 Michael Banther to revise Volume model (07-409r0) and post

9.2.14 Fred Knight to investigate if the version byte and the format byte from the LABEL field from Table 123 in SSC-3r3e can be removed.

9.2.15 Kevin Butt to revise Protecting a partially encrypted volume (07-290r2) and post.

9.2.16 Dave Peterson to incorporate Protecting a partially encrypted volume (07-290r3) into SSC-3.

9.2.17 Curtis Ballard to revise and post SSC-3: Out of Band Encryption Key Management (07-361r0)

10. Items for SSC-4

10.1 Add additional activation conditions to TapeAlert. See note in 05-154r3 to bring in new proposal for this additional info

10.2 Address the Volume model (07-409r0) proposal.

10.3 Address the Cleaning Model (07-219r1) proposal

10.4 Address the TapeAlert Cleaning Clarification (07-408r0) proposal

11. Adjournment

Dave Peterson made a motion for adjournment at 5:34 pm PDT. Seconded by Paul Suhler.