

## Segment Protection Phone Discussion Minutes

April 8, 2009

Bob Sultan

Attendees:

Bob Sultan (Huawei)  
Ben Mack-Crane (Huawei)  
Vinod Kumar (Tejas)  
Ken Young (Gridpoint)  
Corona Wei (Wei YueHua; ZTE)

NOTES: There are some problems with use of the Yahoo group. Vinod indicated that he has difficulty receiving Yahoo email and that download is significantly slower than that provided by the IEEE server. Corona also had difficulty with the time required for download. Vinod indicated that .pptx files are significantly smaller than .ppt files so this should be the preferred format. For people like me who don't have Office 2007, a plug-in can be downloaded. Files can also be uploaded to the 802.1 server (using the 802.1 file name conventions) as well as the Yahoo group.

### Agenda:

- Discussion of agenda;
- Comments on meeting minutes from last week;
- Presentation from Tejas on M:1 protection;
- Presentation from Tejas on LoP;
- Review of revised PAR slides from last week.

There were no requests to add items to the agenda.

There were no corrections to the meeting minutes from the April 1 meeting.

### Supporting M:1 Segment Protection

Vinod presented his slides on M:1 Segment protection

[http://tech.groups.yahoo.com/group/segprot/files/M-1\\_Segment\\_Protection\\_RSTP.zip](http://tech.groups.yahoo.com/group/segprot/files/M-1_Segment_Protection_RSTP.zip)

Bob commented that slide 2 makes a strong case for the M:1 segment protection requirement, consistent with slides previously shown in 802.1 meetings. Bob observed that slides 3-7 make the argument M:1 Protection is feasible to implement in a Bridge because STP already supports M:1 Protection and supporting this in PBB-TE requires simple state machines. Ken observed that STP does not provide M:1 protection; it provides M:1 *restoration*.

Ken suggested that the scope of the PAR should be limited to 1:1 Segment Protection. If there is a requirement for M:1 Protection, it can be met with the

client-server method, deploying a PBBN network to provide M:1 restoration. Ben asked for a clearer description of what such a solution would look like. Vinod commented that such a solution is outside the scope of the PAR we are developing because it involves encapsulating the PBB-TE traffic (ie., over another PBBN).

Bob suggested that the argument for supporting M:1 Protection could be made by showing that the state machines supporting 1:1 Segment Protection can be simply extended to support M:1 Segment protection and outlining a mechanism for supporting priority among backup segments. Ken agreed that if it was demonstrated that M:1 Segment Protection was a sufficiently simple extension to 1:1 Segment Protection, then including this in the scope of the PAR would be more acceptable.

Vinod indicated that he will provide a presentation describing this next week.

### **Draft PAR Review:**

The group reviewed version 2 of the draft PAR posted by Bob.  
<http://tech.groups.yahoo.com/group/segprot/files/segment-protection-draft-PAR-v2.ppt>

Vinod asked that the first bullet be reworded to indicate that the specified Shared Forwarding Paths must be associated with PBB-TE. Ken observed that we could make this change now, but we would want to restore the text if Zehavit Alon's proposal to extend segment protection to non-TE environments is accepted.

Bob indicated that the second bullet was added to explicitly address Alan McGuire's concern that one should have the ability to exclude any particular TESI from Segment Protection. Ken pointed-out that Alan's concern is not fully addressed by this since, if two TESIS shared a common Shared Forwarding Path (shared a common destination), then they must both be included or both be excluded (ie. share fates). Ben suggested that this means that, to meet Alan's requirement, you would simply need to construct TESIS such that if one TESI is included in a segment and another is excluded, then the two TESIS must be associated with different Shared Forwarding Paths.

There were no further concerns expressed about the wording of the Draft PAR.

### **Presentation of Coordination between Segment Protection and End-to-end protection:**

The group reviewed slide 2 of 'Coordination between SegProt and e2e Prot' posted by Vinod: [http://tech.groups.yahoo.com/group/segprot/files/Coordination between SegProt and e2e Prot v2.zip](http://tech.groups.yahoo.com/group/segprot/files/Coordination%20between%20SegProt%20and%20e2e%20Prot%20v2.zip)

Vinod explained that he had previously associated this issue with Lockout of Protection (LoP) but that this was really the coordination between Segment Protection and End-to-end Protection required when both are active. The slide shows the set of possible cases that may exist. Due to lack of time, Vinod will present the detailed material at the next meeting.

On the fourth bullet Vinod asked whether it should say 'do not require change in length' rather than 'do not require modification'. Ben commented that the current wording does not preclude VID translation, for example, but says the description of such an activity is outside the scope of Segment Protection. It was agreed that we would leave the text as it is.

### **Next Week:**

We will have another phone meeting at the same time next Wednesday April 15 at 9AM New York time (6:30PM India, 9PM China, etc.). On the agenda will be:

- Vinod presentation on how 1:1 Segment Protection mechanisms can be extended to provide M:1 Segment Protection;
- Completion of Vinod's presentation on Coordination between Segment Protection and End-to-end Protection.

### **Minutes:**

Please send any comments on these minutes to [bsultan@huawei.com](mailto:bsultan@huawei.com) or to [segprot@yahogroups.com](mailto:segprot@yahogroups.com)