Meeting Minutes 802.17 RPR WG

Interim Session: January 25/26/27, 2005

Ottawa, Canada

January 25, 2005

Attendees on site:

Yan Robichaud, Michael Kelsen, Peter Jones, Glenn Parsons, Robert Castellano Marc Holness, Mike Takefman, YongDong Jin

Attendees on tele-conference bridge: Gary Turner, Nitan Gogate, David James

- 9:30 Meeting called to order
 - Agreement that a formal agenda would not be kept but all items that people are interested in discussing would be covered.
- 9:35 Mike Takefman: Boilerplate Overview Slides
 - Patent Slides presented
- 9:45 Mike & Glenn: Updates on dot 1 (no slides)
 - Norm Finn working on a grand unification theory for .1 bridge model idea is to get the layering right vis-a-vis security etc, oam, link-agg, .11 APs
 - Frame Size Expansion task force
 - o Expansion is needed for:
 - provider bridging
 - backbone provider bridging
 - MPLS (considered header and not payload)
 - Security
 - o the "header" is anything that isn't the 1500 byte ethernet payload
 - the "header" is actually part of the SDU
 - o possible sizes are 2000, 2048, 1875
 - o ethernet is likely to remove mention of Q-tags in their document and make the frame, DA, SA, type, payload, FCS
 - o Discussion of what to do with RPR?
 - jumbo capable nodes are likely not affected in reality, but then the standard has to define the SDU to be no more then X bytes including all user payloads, shim layers, etc
- 10:30 Discussion on group size of dot17 (as we are at 25 members) but about 7-12 participating on a regular basis
 - Getting close to the lower boundary of acceptable size (according to some EC members)
 - as long as we have an open PAR there are no issues

- raising a new PAR could have issues with some EC members
- need to generate some ideas on how to increase size
 - o too many companies now claiming compliance without having ever shown up to a meeting

Break

- 11:15 Mike Takefman: mlt_work_01.ppt
 - first pass over the document to determine what work items need to be covered as part of dot17b. The idea is to fill out each area more fully during the week to determine what has to be done for the next meeting
 - Brief discussion on all points
 - Agreement that the document covered all items that would be in a formal agenda.
 - Continued agreement that a formal agenda would not be necessary

Lunch

- 1:40 Restart
- 1:45 Mike Takefman: Req_17b_01-25-05.xls: Review of requirements document
 - Requirement 2:
 - o Robert not happy with limitation of scope.
 - o renamed item 1 to item 0 and added a new item 1, which was the same as the original item 1
 - Requirement 11b:
 - much discussion on reorder and whether USERs should get the ability to force a reorder or potentially have packet drops to cope stopping the reorder
 - o ACTION: Mike to ask norm / tony on whether permissive mode would be acceptable and would fly
 - Requirement 12:
 - o changed wording as it was not actually the correct intent.
 - o discussion on whether a host can sit above the RPR MAC and know about VLANs.
 - o ACTION: Mike to ask norm/tony about hosts and vlans (not strictly an RPR Q)
 - o ACTION: Mike to ask norm/tony if there is anything in 802 standards that precludes a host from adding VLANs and what if any parts of the bridge stack has to reside on the host?
 - Requirement 14:
 - o discussion on whether this means that a client specified function operating on top of the RPR MAC is safe from being broken
 - o Mike stated his opinion that it does not, since one can never guarantee non standard extensions
 - o other opinions on both sides of the issue no attempt to gauge consensus
 - O Robert was unhappy with the addition of the last sentence on exceptions being looked at on a case by case basis.

- Requirement 20:
 - o idea is to allow any given station to either transmit SAS and not use the 4 address method, or to turn off SAS and use the 4 address method. I.E. its a configuration parameter and not a frame by frame method
- 4:45: Took a mental break and quickly reviewed Agilent webinar slides
- 4:50 Requirements continued
 - Requirement 21
 - o discussion on security and whether security should go under SAS in the MAC
 - o no consensus aside from security being a bit of a rats nest

5:30 Recess

Tuesday January 26, 2005

Attendees on site:

Michael Kelsen, Peter Jones, Glenn Parsons, Robert Castellano Marc Holness, Mike Takefman, YongDong Jin

Attendees on tele-conference bridge: Gary Turner, Nitan Gogate, David James

- 9:25 Meeting Called to Order
 - Discussion on where to hold May meetings.
 - O Dot 1/3 are in barcellona, which would be nice but would appear as a junket
 - o We can always meet for free at IEEE head quarters in Piscataway giving the US east coast people an easier trip.
 - o Consensus on either Ottawa or Piscataway would be acceptable for May
- 9:40 Marc Holness: MH_SAS_RingSelect_Flood_01.ppt: Ringlet Selection
 - Big discussion on table slide 5 where there should be no distinction on uniflood versus biflood and subsequent unidir
 - Large discussion on when you really need to flush FDB
 - Marc updated slides with a new set of rules
 - Discussion on where ringlet selection is really done in systems and a model for how that maps in the protocol stack
 - Concensus appears to be that flushing an entry is necessary on a node leaving the topology and the entry has to be updated or flushed if the ringlet existing ringlet select would do the wrong thing.
 - Decision to try to draw some model diagrams after lunch to see how various models work with different physical implementations / architectures

11:45 Lunch

- 1:40 Marc Holness: MH_SAS_SpanningTree_01.ppt: SAS Spanning Tree
 - Spanning Tree does blocks data traffic to the MAC, but doesn't stop the MAC from being on the ring and participating in protection / topology etc.
 - If spanning tree changes occur, then there is a need to unlearn because the reachability to an off ring node has changed.
 - ACTION: Need to work out how to decide how to remove entries from the SDB, i.e. is it all entries, entries of a given VLAN or FID, all entries that match a particular associated ring station
 - o Found in 802.1D-2004 S17.11: it is legal to clear the entire database as it is simpler in HW, it is not necessary, (although desirable) to clear just some entries. Therefore, we are certainly safe to whack the entire database as a default operation.
 - Discussion on how a FID table would be populated. Peter wants to avoid the creation of a new MIB, since the FID in SAS has to match the FID in the FDB anyway
- 3:00 White Board pictures of SAS on a "router" and a basic "switch"
 - discussed how ringlet selection, SDB, and MAC DP are instantiated on a dual linecard system.
 - Discussion on whether SAS should be structured as a media independent layer and a media dependant layer that describes additional requirements on ringlet selection.

5:00 Recess

Thursday January 27, 2005

Attendees on site:

Michael Kelsen, Peter Jones, Glenn Parsons, Robert Castellano Marc Holness, Mike Takefman, YongDong Jin

Attendees on tele-conference bridge: Gary Turner, Nitan Gogate, David James

- 9:00 Mike Takefman: mlt work 01.ppt (updated slides on the go to rev 02)
 - Discussion on the fact that wrapping versus steering is not likely as important as ringlet selection changes based on protection events.
 - Admittedly, wrapping has the advantage in that ringlet selection changes need not be made for connectivity to remain (of course for the less then ideal BW implications).
 - Discussed where the multicast scope limiting tables belong.
 - o the issue for it not being in the FDB is that all other media are broadcast so dot1 might not want it in

- o the alternative is to put it in ringlet selection
- ACTION: Mike to ask norm about multicast flooding scope and the grand unification theory
- Lots of discussion on whether security needs to be handled at all in SAS, or handled just slightly in SAS
 - o Marc will be putting together a presentation

11:30 Grab Lunch

- 12:00 Continued work on the mlt_work_02.ppt presentation
 - added a page with work to be done for the february / march meetings
- 2:00 Adjourn (unanimous)