

## 802.1 Interim Meeting – St Louis, 21-22 May 2001-05-21

### Minutes

#### Attendees:

Tony Jeffree  
Mick Seaman  
Neil Jarvis  
Shyam Kaluve (Monday only)  
Loren Larsen  
Les Bell  
Gerard Vergnand (Monday only)  
Curtis Simonson  
Ich-Shalom Ran

Mick Seaman opened the meeting and identified the topics for discussion:

1. 802.1s
  - a. Synch and cut propagation
  - b. Region boundary determination
  - c. Priority vectors for MSTI
2. 802.1w Defect report
3. EFM related
  - a. OAM&P
  - b. Stacked tags, tags in MPLS
  - c. PONS security? (WEP?)
4. 802.1X – new key descriptor formats?
  - a. New standard one for 802.11
  - b. Vendor specific values

#### **1. 802.1s – Monday AM**

Shyam Kaluve made a presentation on various aspects of 802.1s (see powerpoint file on website – <http://www.ieee802.org/1/mirror/8021/docs2001/802-1s-stlouis.ppt>). Main aims are to achieve independence between MST and CST computation.

Mick presented the current state of his work on the S draft – not finally complete, but getting close. It seems that Mick's approach is equivalent in functionality to what Shyam is proposing, but can be made to fit in with existing mechanisms (minor mods to the .1w state machines). One of the changes would be to propagate topology changes on port role (not port state) changes. Not necessary to propagate on changes between Root and Designated.

Some re-doing of clauses 6 and 7 needed in order to align with 802.1D and remove extraneous stuff.

Need to make sure that the resultant 802.1Q+802.1s defines what a single spanning tree, RSTP-based, VLAN Bridge looks like; i.e., what the conformance requirements are for a (current) VLAN Bridge that runs RSTP instead of STP. This is essentially a

case of fixing up the conformance requirements & the PICS – allowing 802.1w Clause 17 support to be substituted for 802.1D Clause 8 support - there should be no impact on the rest of the document.

### **802.1w Defect Report**

The changes to the definition of the rules for incoming BPDU validation (clause 9) make it impossible for the agreement mechanism to work correctly. (Page 33 of the w/D10 draft). Possible solution is to enhance 9.3.4 (c) to make sure that loopback is distinguished from an agreement returned by the downstream root port. We need to develop some proposed text & agree to fix this as part of the maintenance process. May need to feed the loopback state back into the state machines & use it as a means of preventing the Port from going Forwarding.

Actions:

- Raise a maintenance PAR
- Email the list to make it clear that this is a bug & to point at the likely solution space
- Develop candidate text for the maintenance document

### **802.1X Key Descriptor extensions**

- Existing structure is inflexible & only identifies one code point
- Need to define a more flexible overall structure to handle upcoming request from .11 for new descriptor type.
- Not a good plan to define a “playpen” type identifier – future additional descriptor types will be defined as amendments to X.

### **MPLS documents**

Robin Tasker raised concerns (via Email) regarding the statements in the Martini drafts <ref>. These concerns are twofold:

- Possibility of Q tags being overwritten;
- Ethernet frames carried without their FCS.

Seems like it is inevitable that some uses of MPLS to carry Q frames will involve changing tags on egress.

Concerns expressed over stripping the FCS. Without the FCS in place, any expectations re Ethernet bit error rates may be seriously compromised. If Q tags are modified on egress, the frame should be FCS checked before the tag is changed.

### **802.1s – continued**

Mick produced a “work in progress” draft overnight for discussion. More or less reflects discussions so far, but not completely edited as yet.

Useful improvement would be to suppress sending of M-records on edge Ports.

Need to have terms to describe the whole CST (currently CST), plus the portions of the CST internal & external to a MST region.

Add a version number to the MST region identifier. Make it integer 32.

Optimise the M-records to remove redundant information.

September Interim meeting: may need to consider alternatives to Copenhagen due to various personal commitments. Decide this in July.

Overall schedule:

- WG ballot after July
- Sponsor ballot after November
- RevCom early 2002.

### **Manually configured aggregations**

Les Bell observed that it is possible to mis-configure aggregations such that a single aggregation at one bridge is connected to 2 (or more) bridges. As the BPDU goes only one way, loops can form. May be possible to use a bridge detect-like mechanism to detect this state & to disable the port under this condition – look for persistent conditions where more than one Bridge originates incoming BPDUs.

Looks like a D maintenance item.

Meeting adjourned on Tuesday 22<sup>nd</sup> at mid-day.