IEEE 802.1 Minutes, November 2000

Pre-Meeting, Monday Morning, November 6, 2000

802.1w Simulator - Mick Seamen

Mick Seamen and Roger Pfister discussed and demonstrated a Visio plug-in simulator for 802.1w. This plug in will be placed on the 802.1 web site.

Opening Plenary, Monday Afternoon, November 6, 2000

Administrative Issues - Tony Jeffree

Recording secretary - Michael Wright

Motion to accept the July and September minutes will be voted on Thursday.

Website - Tony Jeffree

Review of this mornings Executive Staff Meeting - Tony Jeffree

Record attendance in July

1 giga-bit TR passed all of its ballots

OIDs – Could use existing ISO track arc structure. Some more discussions about using this one. We will go ahead and create procedure for using this arc. This arc is owned by 802. We should right a short paper on how to manage this arc and create an arc for each on the current working groups. There was a discussion about how to handle the existing arcs. How to resolve the procedure? Handle by writing up procedure and send to SC6. They will be happy that we are taking over and will let us manage it.

No tech plenary

Cookie budget, \$35/dozen \$7000 total

Standards distribution, 802 desires to get standards out as cheaply as possible. July idea of corporate funding probably will not work.

802 hosted interim meetings – Discussion of how interim meetings work. Should they continue to be organized by each working group or should 802 host the interim meetings. Buzz has a proposal: 802 will be the host and provide the infrastructure, therefore no host company. The first time this could happen is May or September 2002.

Straw Poll: For 0 Against 12

Review of PARs that will be voted on Thursday

2001 CD will be distributed Wednesday

802 passed IEEE audit

Discussions taking place about ISTO, which is operating in the .16 world

Exec make up. The number of appointed exec members is likely to start out numbering WG chairs.

Hilton Head Hyatt may become a Marriott. Also, it is not the only Hyatt in the area.

There is an exploder that updates 802 meetings info. If you want to subscribe see the front page of the registration form.

Paper versus electronic distribution form of tutorials. Rule have to change to allow.

802.1 Patent Policy - Tony Jeffree

Discussion of the current 802.1 policy. If a standard is published that contains a patent the company must agree to license the patent for a fair and reasonable basis. This is for patents and patent pending. If you implement any of the standards you still have to get permission from the owner yourself. The standard does not allow you to implement without getting permission. The letters are on the web page so you can determine which companies you need to contact.

RC4 Patents as related to 802.1X - Tony Jeffree

802.1 may still need a release letter from RSA Security Inc. for RC4. Tony will clarify this issue.

Interim meeting in January - Tony Jeffree

802.11 Bay area Jan 15-19

802.3 Irvine Jan 8-11

Straw Poll: Irvine 15 Bay Area 1

<u>Task Group Schedule – Mick Seamen</u>

P802.1X – small number of comments to resolve, no outstanding no votes, .11 has asked for a change about key transmission. Need 2 hours. Confirmation ballot. Monday pm

P802.1t – 2 hours Sponsor ballot Wednesday am

P802.1u – 2 hours Sponsor ballot Wednesday am

P802.1v – 2 hours Sponsor ballot Wednesday am

P802.1s – Norm will get something out in next couple of weeks. No work this meeting. Hold until next ballot

P802.1w – working group ballot resolution do as much as possible

W on Tuesday, Wed pm, Thursday am

P802.1X – Confirmation Ballot review – Tony Jeffree

No outstanding no votes as of today. There are eight comments to review.

See the disposition of ballot comments for the official resolution of the ballot comments.

Comment 1 - Cut and paste bug

Comment 2 - Cut and paste bug

Comment 3 – Syntax error in MIB definitions

Comment 4 – four digit year. It is required but MIB compilers have not caught up. Les is going to check to see if it should be four digit year

reAuthMax is introduced in D8. No way to modify by management. This variable was created to help with single packet loss issues. Discussion. Did you want vary degrees of packet loss? Decision leave as a constant. Currentld is incremented in CONNECTING state of Authenticator PAI state machine. Should it be incremented at this point. A later comment says don't do this here. (Comment 6)

Comment 6 - Where Currentid is incremented. Need to remove from connecting.

Discussion. Accept comment.

Back to comment 4 to make sure there is not an ordering problem. It suggests do the increment before the transmission.

Comment 7 – IANA has assigned RADIUS values, update the annex values.

Comment 8 – Tim Moore's proposed additional clarification when the authenticator sends key. Accept Tony's proposed wording. Make it clear that the Authenticator itself takes no part in the decision as to which key values are transmitted.

Comment 9 – Change to meet the .11 needs. This is tied to Comment 8. Discussion.

Accept. Michael Wright to liaise with 802.15 to see whether they are happy with this too.

Tuesday Morning, November 7, 2000

802.1w Ballot Comment review - Tony Jeffree

3 no votes 65% response, valid ballot and it passed

See the disposition of ballot comments for the official resolution of the ballot comments.

Comment 1 – Typo

Comment 2 – BPDU format, discussion of wording, Modify to make it clear that the parameters and specified values are encoded.

Comment 3 – Typo

Comment 4 – Add text from .1t to make consistent

Comment 5 - Move definitions

Comment 6 - typo

Comment 7 – typo

Comment 8 – Typo

Comment 9 – replace variable name with current version

Comment 10 - Typo

Comment 11 – Topology changes, add note to explain.

Comment 12 – Topology changes, Discussion, see comment 11, if the transitions occur within a TCWhile period, no extra TC's get generated.

Comment 13 – ConfirmedRootMsg, Accept, The agree flag should be checked as part of the determination of the confirmedRootMessage return value. The vector comparison should be for equality. Need to check that the path cost component for the Port is not being added in before transmission.

Comment 14 – Port Information state machine. Betterdesignatedmessage. Discussion. Change definition of "other" to be "none of the above" (including TCN BPDUs). Make sure that the overview description mentions this case (17.8 line 34 needs improving) Comment 15 – Topology change state machine. Discussion. Fix by adding an extra state above NOTIFIED & split the entry point so that rcvdTcn enters the new state. Use this state to set tcWhile for the reception Port; UCT into NOTIFIED to set tcWhile for the others.

Comment 16 – forceVersion. Put the force version mechanics into the definition of the recording procedures, and remove the version tests from elsewhere. Use a similar approach on transmission. Still need to disable the Root transitions from within the state machines.

Comment 17 – Port Role Transitions state machine. Discussion. The comment is correct, that "&& selected" is the correct qualification to apply to these transitions. Should also be "&&!updtInfo"

Comment 18 - "Making Waves" paper issues. Skip for now.

Comment 19 – TxHoldCount issue. Put a Note in to the effect that existing implementations to the 1998 version of D will be conformant to this requirement. Comment 31 – priorities, Discussion, Accept. Need to create an update priority vector variable for the Port. Choose better names for these vector variables.

Comment 18 – "Making Waves" paper. Review the making waves paper.

Tuesday Afternoon, November 7, 2000

Resilient Packet Ring Study Group (RPRSG) - Tony Jeffree

They will attempt to pass PAR Thursday and form new working group. We need to have a position by Thursday. Review 5 criteria. Please review the documents so we can have a clear and concise position.

There will be a joint meeting tomorrow morning with RPRSG so they can explain what they are doing.

802.1w Ballot Comment Review - Tony Jeffree

See the disposition of ballot comments for the official resolution of the ballot comments.

Comment 18 – Resolution: Mick proposes to discuss this further to make sure we understand the issues. The latest version of the "Making Waves" paper will be distributed this afternoon.

Comment 20 – C Code, Roger Pfister supplied C Code. Reviewed the code. Change these code fragments into something more readable/understandable.

Comment 21 – C Code, Roger Pfister supplied C Code. Reviewed the code. Change these code fragments into something more readable/understandable.

Comment 22 – C Code, Roger Pfister supplied C Code. Reviewed the code. Change these code fragments into something more readable/understandable. Need to use "better" and "worse" rather than "higher" and "lower"

Comment 23 – Port Migration State Machine needs a disable state. Add state.

Port Timers state machine - Setting Tick false. Accept, move the setting of Tick false.

Port Role Transition state machine – selectedRole is not initialized. This is done in port role selection machine.

Port Role Transitions state machine – no variable that tells you what state you are in and there is not a way to easily determine it. Leave as is.

802.1v Ballot Comment Review - Tony Jeffree

See the disposition of ballot comments for the official resolution of the ballot comments.

Comment 1 – Make the sentence align with the conformance clauses 5.1 and 5.2

Comment 2 - Accept

Comment 3 - Accept

Comment 4 – Accept in principle. Accept all proposed changes. However, Overview and Architecture (Std. 802) refers to the entire 5-octet field as the protocol identifier, not just the last two octets. Nonetheless, it will do no harm to add a note pointing out what the field contains.

Comment 5 - Accept

Comment 6 - Accept

Comment 7 – Accept. Also, Re-phrase to not use passive voice. Make sure this is reflected in the PICs.

Comment 8 – Accept. Include a reference to 9.1 at the end of the second sentence.

802.1u Ballot Comment Review - Tony Jeffree

See the disposition of ballot comments for the official resolution of the ballot comments.

Comment 1 – Accept in principle. The existing architectural diagram in Q covers the case of the MAC Bridge; the tagging/untagging function is clearly shown above the Internal Sublayer Service (ISS). Remove the two instances of "shall", one in the main text, one in the Note. Re-word as "... are not tagged". Issue maintenance requests to other WGs as appropriate. Add a Note explaining that future maintenance requests actions on the MAC standards to reflect the requirements stated here.

Comment 2 – Accept in principle. This diagram was intended to make use of the architectural conventions stated in the Overview and Architecture, not the 802.3 architecture. To make this diagram correct, the two boxes should simply be labeled "MAC" and "PHYSICAL". Add a NOTE to the diagram referring the reader to Figure 3-1 of IEEE Std. 802.

Comment 3 – Reject. One person's simplicity is another person's lack of functionality. The additional sentence was not felt to be sufficiently useful.

Wednesday Morning, November 8, 2000

Joint meeting with Resilient Packet Ring Study Group (RPRSG)

Review PAR and 5 Criteria of RPRSG

Discussion of address size, 64 bit versus 48 bit

Discussion of Distinct Identity. Is this really different than existing standards or technologies?

802.1 will have to take a position on this at tomorrow's closing plenary because there will be a vote on the PAR Thursday night at the 802 Executive meeting.

Wednesday Afternoon, November 8, 2000

802.1t Ballot Comment Review – Tony Jeffree

Sponsor ballot passed, 1 no vote

See the disposition of ballot comments for the official resolution of the ballot comments.

Comment 1 – rewording

Comment 2 - skip for now

Comment 3 - Reference fix

Comment 4 – Accept in principle. Change the sentence as follows. "The term LLC Entities, used in Figures 7-3 and 7-9, refers to the union of the link Layer capabilities (which include demultiplexing), provided by LLC (IOS/IEC 8802-2), and the Type interpretation of the Length/Type field specified in IEEE Std 802.3 (which include demultiplexing).

Comment 5 – Accept in principle. Replace with "...with a resolution r seconds, where 0 < r <= 1". Note: Need to make same fix in P802.1w

Comment 6 – Accept in principle. Also change the reference to: "... Spanning Trees (P802.1s, a supplement to IEEE Std 802.1Q) to ..."

Comment 7 – Reject. There is no change in the way these fields are interpreted from the point of view of the operation of the algorithm or protocol, simply a change in the way they are interpreted by the human operator. This changes do not make previously conforming devices non-conformant, nor does it cause interoperablility problems, as has been demonstrated in practice. The substitution of an old Bridge for a new one does not result in any changes to data forwarding, the only changes are in the manner in which the bridges are configured in order to produce the same BPDUs. There are two problems with the proposed "transparent version identifier" approach; a) there is nothing that a new bridge would do differently as a result of testing the field; and b) adding new flags and/or fields to an existing BPDU version is strictly disallowed by the standard.

Comment 8 – Accept in principle. Add text to the NOTEs in 9.2.5 & 9.2.7 to make it clear that only the 4 most significant bits of the priority values are encoded; i.e. the set of values that can be encoded is restricted relative to old Bridges, as the least significant 4 or 12 bits are re-assigned.

Comment 9 - Accept

Comment 10 – Accept in principle. It is not possible (other than by removing all recommendations for these values) to devise a set of default values that satisfy all constraints (backwards compatibility, plus accommodation of current and future increases in link bandwidth). The defaults were therefore chosen with a view to the future. In cases where old Bridges are not reconfigurable, there is an alternative that the new bridges be reconfigured. Change the text to say "... are required to interwork, either the older Bridges will need to be reconfigured in order to make use of the Path Cost values shown, or the new Bridges will need to be reconfigured to make use of Path Cost values compatible with the values used by the older Bridges. The range of Path Costs that can

be configured in older Bridge is insufficient to accommodate the range of data rates available."

Comment 11 – Reject. The field shown in the figure are what are carried in the BPDUs.

Components within a field components are not individually interpreted on receipt.

Comment 12 – Accept. Include a dummy clause identifying the placeholder for W.

Comment 13 – Accept typo

Comment 14 – Accept typo

Comment 15 – Accept typo

Comment 2 – Accept in principle. No change to the ISS are needed, as this is a protocol encoding issue, not a service definition issue.

Change P13 L41, 42 as follows. The number of octets in the mac_service_data_unit parameter is either

- a) encoded in the length field of the MAC frame, if the frame makes use of the Length interpretation of the Length/Type field (IEEE Std 802.3, 3.2.6); or
- b) determined from the length of the received MAC frame, if the frame makes use of the Type interpretation of the Length/Type field.

The octets of data are encoded in the data field (IEEE Std 802.3, 3.2.6). The Length/Type field comprises the initial octets of the data field. (IEEE Std 802.3, 3.2.7)"

802.1w Ballot Comment Review - Tony Jeffree

See the disposition of ballot comments for the official resolution of the ballot comments.

Comment 22 - Update roles procedure, clause 17.19.24. Mick has a proposal to update the text. Discussion. Inferior, Superior or the same for priority vectors comparison and better or worse for comparing messages. Use Equal, Greater than, less than for numerical comparisons.

Comment 24 – Accept

Comment 25 – Accept

Comment 26 - Accept

Comment 27 - Accept

Comment 28 - Accept

Comment 29 – Accept. New terminology for "better", "worse" will help with this.

Comment 30 - Accept

Comment 31 - Accept

Comment 32 – Accept. Use information from the proposal in Comment 22

Comment 33 – Accept

Comment 34 - Discussion of proposed changes to drawing figures. Accept

Comment 35 – Withdrawn

Comment 36 - Accept, covered in Comment 34

Comment 37 - Accept

Comment 38 - Covered by Comment 22.

Comment 39 – Reject. The statement is accurate as it stands

Comment 40 – Typo

Comment 41 – Typo

Comment 42 – This was a deliberate choice – there are cases where this behavior can make the convergence slower

Comment 43 – Accept

Comment 44 – Accept (although superseded by other changes)

Comment 45 - Accept

Comment 46 – Need to include explanatory text to describe why this is as it is.

Comment 47 – Clarify the formulation of infoAge.

Comment 48 – This has been fixed up along with the other state machine changes.

Comment 49 - This has been fixed up along with the other state machine changes.

Comment 18 - C Code changes need to be reviewed before the end of this meeting.

Closing Plenary will begin after the morning break. This first part of the morning will be cleanup.

Next steps. Create a new draft and get authorization for a confirmation ballot to be completed by the interim ballot.

Thursday Morning, November 9, 2000

802.1w Ballot Review - Tony Jeffree

See the disposition of ballot comments for the official resolution of the ballot comments.

Comment 9 – Accept. Note that the Annexes need to be checked for this & for the corresponding changes of state names. Review the document itself to see if we find any problems.

Comment 50 – This comment was created during the meeting so Tony would have a reference for the changes the committee found during the review.

Check clause 7 (of D and T) to make sure we haven't introduced any editorial inconsistency as a result of terminology changes etc.

In 9.2.9 and 17.28.1.11, the "Unknown" value cannot be generated by a valid implementation, however, should be accepted on receipt. Does not do any damage (the state machines treat it as an old style BDPD.)

9.3.4 check consistent with .1T

9.3.3 – RST BPDU type should be changed to 2. Check this is consistently described in the Annex

To avoid any further problems with compatibility with T changes, roll the T changes into the next draft.

Add a NOTE after 2nd paragraph of 17.3 that "The protocol cannot protect against temporary loops caused by the interconnection of two LAN segments by devices other than Bridges (e.g., LAN repeaters) that operate invisibly with respect to support of the Bridges' MAC Internal Sublayer Service."

F.2.1- Port states should be Discarding.... Etc

F in general – track the terminology changes ("agree..." etc.)

F.2.2 – note the change in BPDU Type. SendNew -> SendRSTP

Closing Plenary, Thursday Morning, November 9, 2000

Voters List – Tony Jeffree

List of the current voters was shown for the benefit of the attendees so everyone knew who could and could not vote during the closing plenary.

Approval of minutes from July and September - Tony Jeffree

Motion: Approve the July and September minutes.

Proposed: Michael Wright Second: Neal Jarvis

YES 6 NO 0 ABSTAIN 2

Website - Tony Jeffree

Discussed how to access and who should get the password

Interim meetings – Tony Jeffree

Joint locate with .3, meet Monday, Tuesday, and half of Wednesday.

Motion: 802.1 will have an Interim meeting collocated with .3 Jan 8 – 11

Proposed: Michael Wright

Second: Neil Jarvis

YES 10 NO 0 ABSTAIN 0

802.1X identifiers - Tony Jeffree

OID has been fixed, MAC address comes from the 802.1D set

Ethertype - requirements

Send request to RAC reflector Mart Molle examines & approves

Motion: Request 802.1 allocate both an OID and MAC Address and forward to the RAC a

request for an Ethertype. Proposed: Michael Wright

Second: Neil Jarvis

YES 10 NO 0 ABSTAIN 0

Free Standards – Tony Jeffree

Ad Hoc meeting proposal 1:

Continue the \$75 tax

Offer this on the basis that standards are free after 6 months

Ad Hoc meeting proposal 2:

Income from the OUI sales will hit \$1.25M in coming year, so we already paid the

tax

What is 802.1 view?

Free is only by electronic distribution

802.1 Position on the RPRSG PAR and SG to WG - Tony Jeffree

Discussion.

Sense of the room it is okay to for the PAR and to create a WG.

Editor Instructions – Tony Jeffree

Motion: 802.1 instructs the Editors for P802.1s to complete revision of the document in line with the resolutions agreed in this meeting and to forward the document (D9) for a further Task Group ballot to complete before the March 2001 meeting. Pre-authorization granted to forward the revised document (following TG ballot resolution) to WG ballot following the January Interim meeting if that is deemed appropriate at that time.

Proposed: Norm Finn Second: Michael Wright

For: 10 Against: 0 Abstain: 0 Motion: 802.1 instructs the Editor for P802.1t to revise the document in line with the resolutions agreed in this meeting and to forward the document for Sponsor re-circulation ballot. 802.1 instructs the Chair to take steps necessary for conditional approval to forward this document for Standards Board approval.

Proposed: Mick Seaman Second: Michael Wright

For: 10 Against: 0 Abstain: 0

Motion: 802.1 instructs the Editor for P802.1u to revise the document in line with the resolutions agreed in this meeting and to forward the document for Sponsor re-circulation ballot. 802.1 instructs the Chair to take steps necessary for conditional approval to forward this document for Standards Board approval.

Proposed: Mick Seaman Second: Michael Wright

For: 10 Against: 0 Abstain: 0

Motion: 802.1 instructs the Editor for P802.1v to revise the document in line with the resolutions agreed in this meeting and to forward the document for Sponsor re-circulation ballot. 802.1 instructs the Chair to take steps necessary for conditional approval to forward this document for Standards Board approval.

Proposed: Mick Seaman Second: Michael Wright

For: 10 Against: 0 Abstain: 0

Motion: 802.1 instructs the Editor for P802.1w to revise the document in line with the resolutions agreed in this meeting and to forward the document for Working Group confirmation ballot, to close 1 week prior to the Jan interim meeting. Pre-authorize a further confirmation ballot after the Interim (following resolution of comments) if needed.

802.1 instructs the Chair to take steps necessary for conditional approval to forward this document for Sponsor ballot.

Proposed: Mick Seaman Second: Michael Wright

For: 10 Against:0 Abstain:0

Motion: 802.1 instructs the Editor for P802.1X to revise the document in line with the resolutions agreed in this meeting and to forward the document for a further Working Group confirmation ballot, to complete before the January Interim meeting. Pre-authorize a further confirmation ballot after the Interim (following resolution of comments) if needed.

802.1 instructs the Chair to take steps necessary for conditional approval to forward this document for Sponsor ballot.

Proposed: Mick Seaman Second: Michael Wright

For: 10 Against: 0 Abstain: 0 Motion: 802.1 will hold a Pre-meeting beginning at 9am at the March Plenary Proposed: Michael Wright Second: Michael Sorenson

For: 10 Against: 0 Abstain: 0

Motion: Move to adjourn Proposed: Michael Wright Second: Neil Jarvis

For: 10 Against: 0 Abstain: 0