IEEE 802.1 Minutes, November 2005

Pre-Meeting Monday AM November 14, 2005

P802.1ag Draft Discussions – Norm Finn

The official ballot comment disposition document is on the 802.1 web site

Mick’s restructuring comments

Clause 18 – Maintenance
Clause 19 – Protocols
  Fault alarms – SNMP traps
  State machines
Clause 20 – Encoding of Data Units and TLVs
  Separated the use of TLV versus description of TLV format
Clause 21 – Entity Operation
Clause 22 – CFM and Systems – How they fit into bridges

Discussion of how to handle Figure 21-1, drop eligibility, and the CFI
  This will need a maintenance item and/or discussion about how to handle drop eligibility and CFI. This will probably need to be an item in P802.1ac

Move Clause 21 before Clause 19 so the entities operation are defined before the state machines

Clause 22

Section 22.3 Scalability Issues
  Making the whole bridge a maintenance point and annex n needs to go into this section

Agreed that annex n should move to clause 22

Discussions Figure 18-7 Failure notices and is the AIS dead

Continuity checks, AIS, and why ITU likes AIS

The observation that the AIS was a suppression mechanism for alarms in the multipoint case was discussed
  Folks in ITU withdrew this idea because it did not work
  AIS has never had a clear definition and purpose, which makes it very difficult to put it into the standard
  AIS exists to stream bits and if no bits are being received then send an AIS, which is the analogy of what occurred in the old days of telecommunications

Discussion about continuity check rate
  AIS causes overhead during fault but continuity causes overhead all the time

Further discussions about AIS, Continuity checks, and do we need AIS and/or can continuity checks perform all required functions
  If someone wants AIS then they need to define it, establish its purpose, and get a coherent design before it can be included in AG

Continuity Checks (CC) and Headers

Table 20-3 CFM Protocol Data Unit

Should the Transaction Identifier/Sequence Number (TI/SN) be removed?
  If you lose every other CC not fault will be raised
With the TI/SN this fault can be detected
Discussed putting timer in so jitter can be measured, which implies that TI/SN is required
Are we willing to obligate the transmitter to put in TI/SN in place?
  This could be optional
  Isn’t this frame loss?
    There are other mechanisms to do this; hence TI/SN and timestamps could be eliminated
    But this is a quick and easy way to handle this case
    A single stream handles Jitter and Packet Loss
    TI/SN allows detection of occasional lose of CC
We can discuss the requirements of other organizations and require the presence of TI/SN could be zero or increment it and the timestamp can be zero or the correct time of the transmitter
May need time received in the header, which could be set in low levels and used in the upper levels
This is useful for performance management
We may need to create a liaison to define this
There is more time later in the week so we should get the frame format and send this to ITU
Is this too early for frame format for performance?
  ITU has had lots of discussion but we had not had a chance to discuss here
  Want to sample at random times
Discussion of frame format, what should be included, and is the format going down the path of performance
Two conflicting scenarios for using CC
  Point to Point services – carry a set of packet counters
  CC used in the interior/multipoint
  These two requirements are in conflict
Solution – have the fields but don’t have to use them
We have to be careful how far down this slippery slope we want to go
Time originated and TI/SN gives useful information in both point to point and multipoint
  Having time originated and time received is useful
  Distinguish between fields that can be used in all environments and fields that can only be used in point to point
  If we get a specific proposal from ITU then we will consider but we need concrete proposals from ITU
Norm will have a specific proposal later in the week to insure that there is a consensus within 802.1 and then work with ITU to make sure it works for everyone
We can do this without raising too many items that cause controversy within 802.1, which will delay AG
We want to have agreement by Jan 9 so we can take this to the ITU meeting, which is the next week
Do we want to go to WG ballot?
   Probably not because WG requires a month, which will be tough because there are 300 ballot comments
   Do a TG ballot, which can be closed before January interim
Payload and the like will be discussed on Thursday

**Opening Plenary Monday PM, November 14, 2005**

Agenda – Tony Jeffree
   Administrative stuff
   IEEE Patent Policy
   Exec Stuff
   Interim meetings
   Task group stuff

Officers
Website
Voting membership
   Review of the voting membership rules
May have to generate “policies & procedures” for 802.1
   There was a possibility that we would have to produce a P&P document
   Tony believes he has sorted this out and we do not have to create a P&P
   It is likely that IEEE SA will require this in the future

Voters
802.1 TG and WG Operation
   Consensus not Robert’s rules
TG, WG, and Sponsor balloting
Patent Policy
   The patent policy was explained and discussed, and the advice section was explained, and the two required slides, clause 6 and Inappropriate Topics, where shown and read so everyone in the room understands the IEEE patent policy

No photography/recording devices & other techno toys

Future meetings
Jan interim
   Sacramento, Meeting Fee (100 - 150) Jan 10 – 13
      Large room will hold 54
   Phoenix
   New Delhi – not acceptable – too far to travel
   Straw Poll – 45 would attend Sacramento or Phoenix
   Discussion about the value of meeting with 802.3
   Who favors Sacramento? 27
   Who favors Phoenix? 23

May
   May 8 is the current working week
   Barcelona?
      If 60 people then 585 euros registration fee
Consensus – No
We could get May 2007 at the hotel we had last time

Edinburgh - 36
Seville – 23

Exec Stuff
1400 this meeting
11e approved
.1ap, aq, ar – approved

Ballot rule change being considered that a passing WG ballot is based on majority of voters
This may require a forming of a WG ballot pool like sponsor ballot
If we go to a WG pool then the rule will be draconian and a single miss would result in loss of voting rights
Observation - this may cause standards to not be accepted

Anti-trust – IEEE SA is looking at this and the bylaws may change with regard to ballots. The area they are looking at is one organization having undue influence in a single working group. Also, each participant may have to disclose their association

European patent office may get access for prior art research

Dispute with IDEAL, IS folks, went to court and IEEE 802 lost, the legal bill was 45K and IEEE 802 has to pay 11K

Tutorials – gigabit WLAN and detection of low power devices

China update – WAPI and 11i
This is becoming a major international problem
There is push-back from other nations against WAPI

802 is looking at electronic attendance

Discussion about lack of access to other groups drafts and other documents
Tony will discuss this in the exec

P&P changes
Existing rules allow someone to get quick voting rights but slow to time out. This causes problems getting ballots closed
Change to allow timeout over 3 plenary meetings

Straw Poll: 2 out of last 3 - 19
2 out of last 4 – 20

March 2006 Plenary – Denver 5th through 10th
March 2008 – New Orleans

Jan 14 – 19, 2007 London IEEE hosted interim at the London Metropole, will not be cheap
WG officer elections due in March 2006

Liaison reports
P802.1AM Par – Floyd Backes
802.11v – wireless management got going
Channel selection
Load balancing
AM work will be dropped
This week’s agenda – Mick Seaman

2.30-3.00 ITU Liaison (Ohta, Mohan)
3.30-4.00 Residential Ethernet (Teener)
4.00-5.00 IETF Liaison (Congdon)

- GELS
- EMU
- TRILL charter and 802.1 dependencies
- 802.1 MIB transfer
  - Copyright transfer issue
  - IETF transfer process document
  - Status of bridging MIBS

Tuesday

9.00-12.30 P802.1AE WG []
9.00-12.30 P802.1AG CFM
1.30-3.00 P802.1AF []
1.30-2.15 P802.1AK MRP
2.15-3.00 P802.1AJ TMR
3.30-5.00 P802.1AQ

Wednesday

9.00-11.00: P802.1AR Secure device identity (Borza) []
9.00-12.30: P802.1ah Provider Backbone Bridges (Bottorff)
1.30- 3.00: Residential Ethernet (Teener)
3.30- 5.00: P802.1ah Provider Backbone Bridges, cont. (Bottorff)
  - DSLAM support (Suzuki)
3.30- 5.00: P802.1AE WG sponsor ballot resolution (Romanow)[]

Thursday

9.00-11.00 Congestion Management
  - Discussion for PAR and 5 criteria
11.00-12.30 P802.1AH
  - I-TAG Interface
  - Selective Encapsulation
2.00-4.00 802.1 WG Closing Plenary
  - Finalize text of sponsor ballot resolution; draft PARs for further interim meeting consideration
  - IETF and ITU liaison proposals and finalize text

ITU-T SG13/SG15 Updates – Hiroshi Ohta, NTT
Residential Ethernet Study Group Opening Plenary Report – Michael Teener

- Most of the work should be in 802.1
- Start the process of moving the work to 802.1
- Discussion: The object is too discover “unmanaged bridges” are in the middle and make sure the connection is not setup
- Goals for the week – finish the process of moving work into 802.1, understand where the work fits in existing documents, and recommended practice
- Discussion about the process
  - At the closing plenary approve a set of conference calls so everyone is aware
We have to put everything on the reflector so no one is disenfranchised and avoids anti-trust issue

What can realistically be achieved this week?
Can we get PAR ready that could be approved at interim and be able to move forward in March
Need to get recommend practice which has an extensive background work so everyone can understand the context of this work. This will provide the necessary information so everyone can understand the PARs and what is trying to be achieved.

IETF Liaison – Paul Congdon

802 Relationship Document RFC that is being developed
802.1 MIB Transfer document
Radius Extensions
EAP Methods
Bridging Alternatives
GELS BOF
TRILL

Discussion about how to bring the MIB into a document that can have a TG ballot
The document has to have all the MIBs moved into a single document because the PAR is for a complete MIB and the copyright has to be transferred to IEEE 802 from IETF

Radius Extensions
WG last call
Several issues remain outstanding and are being closed by email
Several attributes have been removed
VLAN attributes, Priority Attribute, and Filter Attribute (NAS filter rule)

Bandwidth Attributes
No progress
Feedback was provided by 802.1
No IETF decision to become a WG item

EMU = EAP Method Update BOF (Birds of a Feather)
Produce standard EAP methods
This will be useful for 802.1AE/AF Initial authorization
IETF network endpoint assessment extensions
EAP/TLS may be the framework

GELS BOF

GMPLS Ethernet Switching
A control plane for Ether switched data plane
Looking for a way to control bridge forwarding tables with GMPLS signaling
Goal is to NOT modify 802.1 forwarding (i.e. data plane), but have not ruled this out.
The GELS group would like to have a close liaison relationship with IEEE 802.1

Question – what is the point?
This question has not been answered
It is likely this question has not been asked in IETF
There is already GMPLS control signaling being that might be used
They want to use VLAN tags and/or MAC address
It was expressed that some that attending the IETF are confused about
what is being discussed
The main goal is getting GMPLS on Ethernet switches. Some folks
believed they could use P802.1ad and get the desired goal. It appears
there are several things that they did not consider
The point of this thing – target of opportunities if you control almost all
the devices then try to control all the devices
        There is a possible use for mapping VLAN to MPLS label, which
        may make this work
        If they change the semantics of 802.1 format then that is a problem
We have had the experience of “Ethertype stealing”
        We do not approve RFCs
        It would be a good idea that we send a liaison to GELS that they
        should use a different Ethertype to avoid the “Ethertype stealing”
        problem
This may not be a sufficient defense
        The liaison should be your device must be interoperable with our
        devices
Maybe we should comment on the IETF 802 relationship document that
says one of the goals is interoperable
What does semantics mean?
        Interoperable is the semantics
The earlier the message gets accepted by GELS group then the better it is
for everyone
Several groups are working on this so it is important to do an early liaison
with GELS
A statement by 802.1 that interoperability is real important
There has been lots of discussion on the IETF mailer about what is
bridging
Norm will draft a liaison letter

TRILL
Want to use an existing link state protocol
Want to create an RBridge
Looking at different schemes such as MPLS or loop free routing
There has been progress on several documents
They have been looking at Spanning Tree and its limitation
There was lots of excitement about this
Observation: This is an issue for pseudo-wire implementation
The goal is to maintain PNP and deploy in campus networks
They have not figure out that the current work will halve the bandwidth out of the
wiring network
        The center of the network will work but the wiring closet will break
        The shortest path bridging will solve this problem
Everyone in 802.1 should look at the problem statement and the architect document
Are they aware of the shortest path work?
  Yes, but they probably do not understand the technical details
  There is a real range of understanding of where the bridging world is at
  Many do not necessarily know about MST

**Pseudo-wire encapsulation – Glen Parsons**
Final stages of approval
802.3 expert review
  802.3x flow control
Of interest to 802.1
  The use of the word of tag – they mean MPLS
  Overwriting of VLAN tag
We should look at the 802.3x flow control because this was work within the purview of bridging world
802.3x must be viewed as a local concept not a global network thing
We should be aware of 802.3 reply
Hope they reply that this was created for a very limited scope

**Tuesday AM, November 15, 2005**
P802.1AG met in parallel with LinkSec
P802.1AE Sponsor Ballot – Allyn Romanow
  The official ballot comment disposition is on the web site

**Tuesday PM, November 15, 2005**
P802.1AE Sponsor Ballot – Allyn Romanow
  Continued review of P802.1AE sponsor ballot comments

**Wednesday AM, November 16, 2005**
P802.1ah met in parallel with P802.1ar
Review of P802.1AR/D0.1 – Mike Borza
  Review of Clauses 5, 6 and 7
  Is the creation of a local device identifier required or optional?
  Clause 7 specifies format
  Added service interface as required functionality
  Requires SNMP v3 in authorized and authenticated mode
  Discussion about how the information is stored and accessed
    How and what security mechanism are required
  Discussion about what security claims can be made within the scope of P802.1AR
  and that we have to be very careful about the assertions made in P802.1AR
  The observation was made that the analogy to use is a notary service
  Discussion about requiring a local device id and how many should be required
    There is a storage burden
    There would be a set of operations required to create the local id
Should it be a required ability to support at least one?  
Requiring a set of operations and extra storage for local id is too much of burden. Some manufactures would not like this requirement. 
Does the use and operations on DevID and LDevID cause different levels of security claims? 
Should it be possible to load IDevId from an external location at each system initialization and/or export/import an IDevID

Review of Clause 6
Informational Clause that describes the uses of Device ID

Review of Clause 7
Mike needs input on section 7.1 to get the security objectives sorted out
RFC 3766 – public key strength for covering a private key to establish an equivalent attack space

P802.1af – Mick Seaman
Discussion about the application space and its mapping to 802.1x – Clause 7
What scenarios have been missed?
Need to get AF ready for TG ballot
Need some help in 7.1.4 – the wakeup, remote control, and alert capabilities?

Wednesday PM, November 16, 2005

Thursday AM, November 17, 2005

Closing Plenary Thursday, November 17, 2005
Agenda – Tony Jeffree
Voting membership rules
Polices & Procedures for 802.1
We don’t have formal P&P right now
We do not have to create a formal one at this time
Voting member list
Patent Policy
The IEEE Patent policy was discussed and the two required slides where shown and read to the committee
No Photography and recording devices
Future meetings
Jan. interim – Sacramento 10th – 13th
Discussion about RES E having a separate meeting
Several folks thought this was a problem
Extending the meeting time won’t work because 4 days is the limit of people attending all of the meetings
We need to have some meeting time with all of 802.1 to get everyone up to speed and developing a consensus within 802.1
There will be a conference call to determine when and where to hold an interim
May 8th – Edinburgh, Scotland
Straw Poll - 29
Jan 14 – 19 2007 – London
Meeting fee will be larger than normal plenary
We will need to decide soon if 802.1 will do this
Linda Dunbar may be able to host in Beijing or Shanghai sometime
May select a beach area in South China Sea area, this could be Jan 2007
September may be possible also
Chair/Vice Chair elections
Will have to have elections in March
Will be at the closing plenary
Residential Ethernet
Establish this as a new Task Group called Residential Bridging
Will be a 3rd track at future meetings, but aim to avoid conflicts when topics need broad 802.1 coverage
TG Chair will be Michael Johas Teener
Liaison reports
11s V Mesh and Y Mesh – different views of routing and security, there is pressure for them to be done in Jan
Sanity Check
Q-Rev is done
AD is done
AC PAR has been extended; need a new draft by March
AE will have a Sponsor recirculation ballot in November/December
AG TG ballot out of this meeting and WG in January
AK going to WG ballot
AP PAR approved
AQ PAR approved
AR PAR approved, Editors draft out of this meeting
For Jan do security on Tuesday and Wednesday, this would give time for RES E
You must get with Mick and/or Tony before the Jan meeting to get schedule time because of the workload
Motions
Approve May, July and September minutes
Proposed Wright
Second Romanow
24 0 0

Hold interim in Sacramento, Jan 10th – 13th hosted by HP
Congdon
Wright
20 1 1

Interim session prior to the March plenary for RES E
Wadekar
Romanow
17 1 5
The TCG has requested 4-8 hour face to face ‘workshop’ with members of 802.1AR project team in early December, in the bay area
Congdon
Motion was withdrawn

January interim meeting to develop PAR/5C for Timing and synchronization
Seaman
Romanow
19 0 1

Pre-meeting in March (2 rooms)
Seaman
Messenger
21 0 1

Editor of P802.1AE to prepare a further draft
Romanow
Congdon
21 0 0

Conditional approval from the EC to forward P802.1AE to RevCom
Romanow
Wright
22 0 0

Editor of P802.1AG to prepare a further draft
Finn
Messenger
22 0 0

Editor of P802.1AH to prepare further draft
Bottorff
Wright
22 1 0

Editor of P802.1AJ to prepare further draft
Seaman
Wright
22 0 0

Editor of P802.1AK to prepare further draft for WG
Seaman
Wright
21 0 0
Editor of P802.1AR to prepare an initial draft and TG ballot
Seaman
Wright
20 0 1

Editor of P802.1AQ to prepare initial draft
Seaman
Finn
21 0 0

Forward the liaison responses to ITU-T Q9/15 and ITU-T Q5/13 as discussed during this meeting
Finn
Mohan
16 0 1

Motion to adjourn
Wright
Messenger