

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, were
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

.lap, 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 to 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 a 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 were 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

November 2005

Vancouver, BC

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