IEEE 802.1 Minutes, November 2004

ATTENDEES

The following attended 802.1 meetings during the November 2004 session:

Osama	Aboul-Magid
Paul	Amsden
Floyd	Backes
Les	Bell
Mike	Borza
Paul	Bottorff
Richard	Brand
Rudolf	Brandner
Robert	Brunner
Jim	Burns
Dirceu	Cavendish
Frank	Chao
Charles	Chen
David	Chin
Paul	Congdon
Arjan	de Heer
Craig	Easley
Anush	Elangovan
Hesham	Elbakoury
David	Elie-Dit-Cosaque
Don	Fedyk
Norm	Finn
David	Frattura
An	Ge
Anoop	Ghanwani
Ken	Grewal
Takashi	Hasegawa
Asif	Hazarika
Gopal	Hegde
Ran	Ish-Shalom
Vipin	Jain
Tony	Jeffree
Peter	Jones
Ulf	Jonsson
Tetsuya	Kawakami
Yongbum	Kim
Sreenivas	Kottapalli
Gadi	Lahat
Loren	Larsen

Kun	Lu
Jeff	Lynch
David	Martin
Tom	Mathey
Bill	McIntosh
John	Messenger
Dinesh	Mohan
Kevin	Mooney
Bob	Moskowitz
Satoshi	Obara
Colin	O'Brien
Don	O'Connor
Hiroshi	Ohta
Glenn	Parsons
Karen	Randall
Oscar	Rodriguez
Josef	Roese
Allyn	Romanow
Dan	Romascanu
Jessy V	Rouyer
Ali	Sajassi
Panagiotis	Saltsidis
John	Sauer
Mick	Seaman
Curtis	Simonson
Hyun	Surk Ryu
Muneyoshi	Suzuki
Yoshihiro	Suzuki
Keiji	Tamaka
Pat	Thaler
Geoff	Thompson
Genadi	Velev
John	Viega
John	Vollbrecht
Dennis	Volpano
Karl	Weber
Ludwig	Winkel
Michael D.	Wright

Pre-Meeting Monday, November 15, 2004

Project Proposal for an MSTP-MIB – Paul Congdon

Current documents are at http://www.ieee802.org/1/files/public/docs2004

Questions:

        Is this an amendment to 802.1Q Rev?

                Probably will have to be an amendment to .1Q

                Not wise to get PAR yet, wait until .1Q rev is further along

Is it a standard or recommended?
>   Discussion about the vocabulary differences between IETF and IEEE 802

Do we have a committed editor?
>   Discussion about having an editor who attends IEEE 802 meetings versus doing most work by email
>   Somebody has to be here and deal with the IEEE 802 discussions that happen at meetings and handle the IEEE 802 issues
>   Is Paul going to check with the potential editors to see if they can and will work on the MIBS?
>>   Paul will contact the folks that have said they would consider being editor.

Do we need to create an RFC?
>   Probably not
>   What about using the resources of IETF for getting MIBS right?

Potential Deliverables
>   PAR – not until March at the earliest
>   ASCII MIB

Straw man PAR review

Scope
>   Discussion about the scope for the PAR
>   Allow the base standard to be changed however limit the change scope to those things that must be changed to support the MIB. For example, variable definitions

Purpose

5 Criteria

Further discussion
>   We can get a lot of the work completed before starting the PAR to coordinate with 802.1Q Revision
>   Maybe interim meeting can be in a more convenient location

802.1ae MIB – Mick Seaman
>   Talk about how MIB can be fitted into the existing document
>   Ae is almost finished
>   The MIB is one big item to complete
>   Management has to be able to help get MacSec up and running
>   Security is really about making sure unknown folks don't do unknown things to you
>   If you want to deploy confidentially need to do the integrity first and then confidentially so when things go wrong you can determine where the errors are and get the bugs worked out of the deployment
>   Need work about what information is kept on dropped packets
>   Need feedback from MIB folks about the nesting of variables
>   Object class diagram for the Secy needs updating
>   Need to document the relationship between physical layer interface and this interface
>>   This won't be an issue because this is a port so this should not confuse anyone

Is this the right structure for this information and how does it relate to how other standards do this

The issue of how to deploy this and have the tools in place to help get MacSec deployed will create a certain level of complexity that we must understand

Opening Plenary, Monday, November 15, 2004

Administrative stuff – Tony Jeffree

    Review of voting membership rules

802.1 WG and TG operation – Tony Jeffree

TG, WG, and Sponsor ballots – Tony Jeffree

IEEE Patent Policy – Tony Jeffree

    The IEEE patent policy was reviewed to insure that everyone in the room is familiar with the IEEE policy and the two required slides were shown and read. The following questions were raised:

    If voting rights are changed to entity balloting how does these effect individuals that become disenfranchised? Are these folks then held to this patent policy?

Future meetings – Tony Jeffree

    Jan 10 -13 Sacramento Hyatt

    May

        Barcelona or Edinburgh

    Need to start thinking about next meetings

Liaison reports

    TIA work David Futtura

        Working on adopting 802.1ab for TIA TR41.4

        802.1ab will be required within this standard

        Will be used in E911 work

        Anything that could create a security problem – that is a port

        We have to make sure not too much gets pushed into 802.1ab

        We have to balance the success of 802.1ab with allowing it becoming a transport protocol

    We need to a new 802.3 liaison since Don Pannell can no longer continue in that role

Executive committee report – Tony Jeffree

    Attendance already exceeds 1500

    Proposal from IEEE to stop free paper copies of standards

    Online training program – ongoing

    Tutorials

        RF management Tuesday 6:30 AM

        Congestion management Tuesday this may involve 802.1

    Policy and Procedures – ongoing work to get in shape

    802.3 finances – fallout from interim meeting

        Our last interim turned out to be sponsored by 802.3 not Nortel

    New "Member Emeritus" role

        This is actually a role so the chair has an extra person

    802.11/SC6 & Chinese security proposal (WAPI)

China has submitted a proposal to SC6 to include WAPI into the ISO standard of 802.11

It appears that 802.11 and China have agreed to work together on 802.11i and Chinese

This shows some of the issues with putting 802 standards in ISO

Architecture group

Meeting yesterday identifying architectural items that cross various working groups

Recommending changes to P&P to require working groups to state that the work at sponsor ballot is consistent with PAR and the interoperable part

PARs

Network services RFP

Current contract is up

Agenda – Mick Seaman

Bridge MIB plans

ITU Q3/13 P802.1ag liaison

MEF liaison

P802.1Q/rev

Agenda was updated and will be emailed

Bridge MIB plans – Dan Romascanu & David Herrington

This presentation is on the web site at

http://www.ieee802.org/1/files/public/docs2004/new-bridge-mib-transition-1104.ppt

IETF meeting last week

IETF is the management experts but not the content so the folks that have the expertise to do the content should be the ones to put the content in

Remaining issue is getting a qualified MIB editor to commit to doing this work and attending IEEE meetings to get this work accomplished

ITU-T Ethernet related standardization - Hiroshi Ohta,

This presentation is on the web site at

http://www.ieee802.org/1/files/public/docs2004/liaison-ITU-T-SG13-Q3-1104.pdf

DSL folks are considering using Ethernet backbone

Have to apply Ethernet OAM functions to DSL systems

Metro Ethernet Liaison Statement to IEEE P802.1– Paul Bottorff

This presentation is on the web site at

http://www.ieee802.org/1/files/public/docs2004/ah-bottorff-presentation-1104-v5.zip

MEF would like to use one of the reserved addresses and they would like to discuss the uses to insure correctness.

Paul will get some off-line discussion and formulate a response to be reviewed by the committee

Discussion about the how to make this work

The Ethertype following will be an MEF allocated Ethertype for this purpose

This will be discussed Thursday in the closing plenary

More discussion about how allocating the address works

There is no actual assignment but 802.1 will state whether this is an appropriate use of the address

P802.1Q Revision – Tony Jeffree

There are a number of amendments that have been produced and a re-affirmation ballot in 2003
Amendments s, u, and v have been added to the base line document without an attempt to make things clean
There are several items that need to been cleaned up such as references
Also, several items in P802.1ad that are Q revision items have been moved into this revision so P802.1ad can be a Provider Bridge standard
P802.1D gets referenced in two different ways in this draft, if the reference is P802.1D then that means the latest P802.1D – 2003. If the reference is to a specific revision then the reference is spelled out.
Pulled in the required definitions from P802.1ad
The cross references was cleaned up
The terminology (shall and can) was tighten up and the terminology was defined.
Between now an March this should go to WG and re-circulation ballot so at the March meeting it will be ready to go to sponsor ballot
PICS is a major area of work before the document is finished
P802.1ad will now show the deltas and P802.1Q will have the base stuff

Tuesday AM, November 16, 2004
Joint meeting with 802.3 for congestion management – Ben Brown
Analysis, history, and viable options – Mick
This presentation is on the 802.3 web site
Discussion
Since this proposal is for short networks under a single management control then there is a possible solution
A viable option would be to use dropped precedence from provider bridges
Do we have the right information passing through the bridge to inform the right entity of the congestion? The interface should not be a problem model as a operState variable
Much of this work requires new behavior for end stations; however, end stations manufactures do not read 802.1 may need to consider 802.1 for end station behavior
Observation that in the data center does not always use IP
Do the protocols other than IP have a congestion indication? If so then tweak that way in the face of congestion
First need to identify what it is we want to do then figure out how to do it
The how may be a new standard or it could be a recommended practice
Is the non-IP an issue?
What about old bridges? Only have to do this a congestion point bridge
Observation - End station implementers will have to follow this standard
802.3 congestion management has a tutorial tonight – will be discussing the market space for this work, blades, data centers, or high performances clusters

How to convince 802.1 that this is a big enough market to get the work done? The work in 802.1 is done by individuals most of the major switch vendors are in the room – convince the individuals

P802.1ad ballot resolution – Mick Seaman

Steve Haddock will be taking over as the primary editor

Mick expects a resolution to move this to working group ballot Thursday

A large part of the document will disappear and reappear in P802.1Q revision

Tuesday PM, November 16, 2004

P802.1ad ballot resolution – Mick Seaman

After the break the MACSec and Provider Bridge activities met in parallel

There was a discussion about congestion management and how to proceed in the provider bridge meeting

MIB discussions – Mick Seaman

.1ae Management Info – Frank Chao

This presentation is on the web site at

http://www.ieee802.org/1/files/public/docs2004/ae-chao-mgmt-1104.ppt

Discussion about what is the definition of enable/disable and how granular the enable/disable functionality should be

Discussion about the architecture – Mick Seaman

Roll out checks

There was a comment yesterday about wanting to know what packets are encrypted and decrypted at the controlled port

This is a deployment issue

Wednesday AM, November 17, 2004

Trusted Computing Overview – Paul Congdon

This presentation is on the web site

http://www.ieee802.org/1/files/public/docs2004/af-congdon-tcg-overview-1104.pdf

What needs to be accomplished for DevID work in P802.1

There may be patented stuff that must be licensed to use TCG

Trusted Platform Module (TPM)

DevID relationship to TPM – Mike Borza

This presentation is on the web site

http://www.ieee802.org/1/files/public/docs2004/af-borza-devid-and-tpm-1104.pdf

Suggestion to use the Platform Credential as the Device ID

This does tie DevID to TPM

There is resistance to tying Device ID to TPM

Discussion

What is the scope of the specification?

Use existing standards as much as possible, simply reference those standards and possible how the those standards should be used within the context of this standard

Review of IETF EAP network discovery draft – Paul Congdon

This presentation is on the web site at

http://www.ieee802.org/1/files/public/docs2004/af-congdon-net-discovery-1104.pdf

        IETF draft is Draft-adrangi-eap-network-discovery-05

        This work is for end stations

        Image a wired hotspot where multi supplier can deliver services – this allows

        Wayport and/or T-Mobile

        Multiple different service providers through this same wire

        Network services are referred to as realms

        Status working group last call

        Discussion about how to discover the particular service or the particular CA that a

        given station wishes to be on

TCN – John Vollbrecht

        Picture of the various tunnels that exist with the authentication frame work

        Allow third party systems to communicate to do integrity checks

        IMC – Integrity management client

        IMV – Integrity management verifier

        There are some that would like to see a layer three solution rather than doing EAP

        extensions

Wednesday PM, November 17, 2004

Ballot resolution P802.1ad continued – Mick Seaman

        The official ballot comment dispositions are on the web site

        Completed review of all of the comments

        There will be a ballot resolution Thursday to allow this to go to working group

        ballot out of the March session

Discussion about media converter PAR – Mick Seaman

        Pat Thaler noted that the title is not intuitive and we should modify it

        P802.1 will put some pointers on web site to help out

Attendance sheet – Tony Jeffree

        Tony reminded every one that signing the attendance sheet means they are here

        for 75% of time of that meeting

Two Port MAC Relay – Norm Finn

        The presentation is on the web site at

http://www.ieee802.org/1/files/public/docs2004/aj-nfinn-two-port-relay-diagram-1104.pdf

        Norm would like to get who the editor for this work will be settled before the end

        of this week

P802.17 Interworking Issues – Marcus Holness, Mike Takefman, chair of 802.17

        Spatially Aware Sub-layer

        Frame expansion

        Security

        Issue – If requested, would 802.1 be willing to allocate one of the reserved group

        addresses to be used for this purpose?

                In the current the P802.1D there is a set of addresses that already fulfill the

                requirement

        Discussion about how 802.17 views S-Tags, C-Tags, and no tag.

        Security and VLANs – We intend SAS to be VLAN aware. Do you see any

        issues with security encrypting or moving the Q Tag

Question where is the Q Tag and how to read it in the face of encryption
Discussion

Lots of discussion

This could be viewed as yet another P802.1Q

Another way to approach the problem is the same as link aggregation and P802.17 must specify where the MACSec must go relative to an P802.17 shim to be able to access the VLAN tag so the packet can be sent to the correct destination without broadcast

Issue #3 Frame expansion

Please advise us on the current status of the request to 802.3 and what should 802.17 be prepared to support?

Discussion

What did P802.1 ask for and what did P802.3 say?

P802.3 is putting a PAR forward and the task force will meet in January. Currently, P802.3 is around the 2048 byte frame size

Another issue – How does security operate in P802.1? (This is paraphrasing the question)

Point to Point looks a similar to a broadcast as possible

What needs to be done next about the shim?

First need some thinking about how this works

How would the shim thingy be specified?

Have to worry about the security claims and insure that the shim and its position effect the security claims

As long as P802.17 is within its boundary then this could save you some grief

Thursday AM, November 18, 2004

Joint meeting with 802.11

Scope of Ad-Hoc Work - Dorothy Stanley, Chair of AP functionality

Formed a group to look at AP functionality

Document number 80211-04/1428

Descriptive task rather than creating functionality

TGM is a maintenance work that will be a revision of 802.11 2003 the AP work will be put in TGM

AP Architecture Thoughts – Mike Moreton

Document IEEE 802.11-04/1191r5

Discussion about how the 802.11 AP model can be tweaked to be like an 802.1D

Virtual ports to stations can be operEdge bridge ports with a small tweak

P802.1 may need to create a new port definition for this to work

Should 802.11 define it's own (enhanced) Relay Entity, or should the standard 802.1D Relay Entity be enhanced to support 802.11i?

Discussion

How to make this work

How not to break existing AP

This will take some time so the legacy equipment will not be much of an issue

Format for organizing this
- This could be done within P802.1 without any wireless stuff
- P802.11 could ask us to do this work

Straw poll
- Should 802.11 define its own Relay Entity
  - P802.1 – 0
  - P802.11 – 0
- Should 802.11 and 802.1 work on P802.1Q Relay Entity to make it work
  - P802.1 Yes 31
  - P802.11 Yes 16

We should proceed with how to work together to get this project underway

What formal documents would be needed to get this effort started?

802.1 AE/AF Platform considerations – Ken Grewal

This presentation is on the web site at

http://www.ieee802.org/1/files/public/docs2004/ae-grewal-linksec-observations-1104.ppt

Issue with data origin within a group – if you are a member of the group then you can impersonate anyone else in the group because this is a group association

There is a misconception about the security offerings because of the group associations

Node leaving the CA has the keys to the CA so a refresh of master keys is needed for the remaining nodes in the CA
- This can be broken down into detection and remediation

Maybe we need a section in the document that discusses security issues and how various configurations affect security

May not be necessary to couple P802.1ae and P802.1af
- Why did we want to hold P802.1ae up for P802.1af?
  - There should be a key management protocol and we need to make sure P802.1ae is complete that is P802.1af will test the P802.1ae architecture
  - The relationship of P802.1ae and P802.1af is not clear in the current draft. Allyn has this as a higher priority to clear this up.

Frame Expansion
- Within P802.1ae you can define different cyper suites that changes the frame size
- Different cyper suites have different requirements on the nonce so a packet number can not be used as a nonce and another field would be needed
- Bottle line it is not possible to say what is the maximum expansion could be because of the number of variables

P802.1ab confirmation ballot summary – Paul Congdon

Need to ask for conditional approval to send document to RevCom

One note vote with 68 comments with 4 comments that should be discussed by the committee the other comments are mostly minor editor

Conformance Levels
- In clause 3 define may, shall, and should. Paul copied the text from 802 style guide

In Q Rev the definitions were put in the conformance clause

Probably best place to put is in clause 5 to be consistent with Q Rev

Numerical Representation

The explanation of how numbers are represented will be put in clause 3

Capitalization of field names

Fields are capitalized in the figure but not in the text

The case should be consistent

Organizations maintaining lists

Change to note so and change shall to are so in does not require conformance

OUI Transmission

Sorted out a definitions that was acceptable

David James will change his no vote will be changed to a yes

Confusion about Power MDI TLV

Rename the fields to clear up the confusion

Next steps

Submit the editor comments, produce D13, and run re-circulation ballot.

This ballot will be clean and this gets P802.1ab published early next year

P802.1ad dropped precedence change – Mick Seaman

Mick will post email to make sure the change is okay.

Everyone needs to check this out

Table of reserved addresses – time to freeze but can not really freeze until sponsor ballot

In the P802.1Q days had a gentlemen's agreement that the frame format would not change, we need a similar mechanism with the table of reserved addresses, which are always filtered in a provider bridges.

LLDP address in provider bridges

Need to discuss some more about the LLDP use cases to see the ramifications

If the changes are trivial then put in P802.1ad and if it is not trivial it has to go into P802.1ab

P802.1ae frame format

Need same sort of gentlemen's agreement that the frame format is frozen

There was good history with the gentlemen's agreement in P802.1Q

There will be a resolution in March but the agreement should be set in January and it will be discussed on the email list

Closing Plenary, November 18, 2004

Agenda

Officers

Voting Membership

TG and WG Operations

Patent Policy – The patent policy was reviewed and the two required slides where shown and read to the committee. Also, everyone was reminded that there was a call for any patents at the beginning of the week

Future meetings

> January 10 – 13 Sacramento hosted by Paul/HP
>
> May – where – Edinburgh does not look like it will happen, Barcelona but may require a fee
>
>> There are issues with paying the fee and getting the organization folks involved
>>
>> Norm is going to investigate about the issues of managing the fee to see if Cisco
>>
>> Barcelona is not required
>>
>> Who else would like to be with us?

Liaison reports

> Bob P802.11s, mesh with unreliable links, has a requirements document trying to live within the P802.11i security model but have to do a different keying mechanism.

Sanity check of PARs and PAR end dates

> Q Rev going to working group ballot

What are we going to do about:

> Bridge MIB – Dan is looking for editors. Wait until we have editor as far as a project but there can still be technical discussions
>
> 802.11 and Bridging – Need some technical input to scope the problem. P802.11 will need to request this. Need an official liaison request from P802.11 to get this going
>
> Wireless management – Tutorial was well attended and interest in doing this work. Biggest concern is there enough commonality that this work can be done? Floyd will have presentation at January about this issue. P802.11 has a group P802.11v, to work on this within P802.11. However, it has a bit of contentious Review of the proposed P802.11v PAR. Tony is now aware and will discuss at the exec committee if necessary. Based on the information gained in this morning's meeting there is new information that should be considered
>
> Congestion management – same as P802.11 and Bridging

Motions

802.1 approves the July '2004 and October '2004 meeting minutes

Proposed Wright

Second Finn

Yes 19   No 0   Abstain 1

802.1 resolves to hold an interim session in Sacramento, Mon 10th January 2005 9:00 AM through Thurs 13th January 5:00 PM, hosted by HP

Proposed: Wright

Second: Messenger

For 20

Against: 0
Abstain: 2

802.1 resolves to hold a pre-meeting on the Monday morning of the March 2005 plenary session.
Propose: Seaman
Second: Wright
For 20
Against 0
Abstain 0

802.1 requests conditional approval from the SEC, as per current P&P, to forward the P802.1AB draft to RevCom following completion of recirculation balloting
Proposed Wright
Second Bell
For 22
Against 0
Abstain 0

802.1 instructs the editors of P802.1ad, Mick Seaman and Steve Haddock, to prepare a further draft taking into account the discussions during the Nov 2004 meeting, and issue the draft for a Working Group ballot.
Proposed Seaman
Second Finn
For 24
Against 0
Abstain 0

802.1 instructs the editor of P802.1Q-REV, Tony Jeffree, to prepare a further draft taking into account the discussions during the Nov 2004 meeting, and issue the draft for a Working Group ballot.
Proposed Seaman
Second Wright
For 23
Against 0
Abstain 0

802.1 instructs the editor of P802.1ae, Allyn Romanow, to prepare a further draft taking into account the discussions during the Nov 2004 meeting, and issue the draft for a Working Group ballot.
Proposed Romanow
Second Wright
For 21
Against 0
Abstain 1

802.1 instructs the editor of P802.1ag, Norm Finn, to prepare a further draft taking into account the discussions during the Nov 2004 meeting, and issue the draft for a Task Group ballot.
Proposed Finn
Second Wright
For 23
Against 0
Abstain 0

802.1 requests permission from the SEC to forward the P802.1ah "Provider Backbone Bridges" PAR to NesCom
Proposed Bottorff
Second Wright
For 20
Against 0
Abstain 4

802.1 requests permission from the SEC to forward the P802.1aj "Two port MAC Relay" PAR to NesCom
Proposed Finn
Second Bottorff
For 23
Against 0
Abstain 0

802.1 requests permission from the SEC to forward the P802.1ak "MRP" PAR to NesCom.
Proposed Finn
Second Wright
For 22
Against 0
Abstain 1

802.1 approves the attached liaison contribution to the MEF
Source: IEEE 802.1
Title: *Response to Progress on Ethernet related recommendations*
COMMUNICATION STATEMENT To:
MEF
Approval:
November 2004 meeting, San Antonio
Contacts:
Tony Jeffree, 802.1 Chair. Email: tony@jeffree.co.uk
Mick Seaman, Interworking, TF Chair. Email: mick_seaman@ieee.org

Response

At our November 2004 meeting, the MEF liaison to IEEE 802.1 was brought to our attention. We would like to take the opportunity to provide feedback on your current recommendations.

As you have correctly indicated four multicast addresses are available which are blocked by all 802.1D, 802.1Q, and 802.1ad bridges. These addresses are:
> 01-80-C2-00-00-06
> 01-80-C2-00-00-07
> 01-80-C2-00-00-09
> 01-80-C2-00-00-0A

One of these addresses would be the correct address to use for your E-LMI protocol. None of these addresses are available for exclusive use by protocols outside 802.1, however as you suggested non-exclusive use based on the MEF using a unique EtherType for the E-LMI protocol is acceptable.

The IEEE 802.1 committee does not assign the use to an address until an approved protocol exists which will use the address. On review we believe the correct address for your use would be 01-80-C2-00-00-07. At such a time as your protocol is an approved specification of the MEF we would be willing to approve an address for your use.

Thank you for your request. We look forward to assisting you further as you specification moves to approval.
Attachments
[1] IEEE P802.1ad Draft 3.0

Proposed Bottorff
Second Wright
For 19
Against 0
Abstain 0

802.1 appoints Geoff Thompson as a liaison to 802.3, to replace Don Pannell who is no longer able to fulfil this role.
Proposed Messenger
Second Wright
For 22
Against 0
Abstain 0

Motion to adjourn
Proposed Wright

November 2004   San Antonio, Texas

Second Messenger
Unanimous