

# 802.1 opening plenary (Mon pm)

- Attendees: Bernard Aboba, Glenn Algie, Bill Arbaugh, Paul Congdon, Hesham Elbakoury, Norman Finn, Bob Hott, Ran Ish-Shalom, Neil Jarvis, Tony Jeffree, Mohan Kalkunte, Loren Larsen, Raphael Lee, Arunesh Mishra, Frank Reichstein, John Roese, Mick Seaman, Michel Thorsen
- Since nobody volunteered to take minutes this greatly honored job was put to the keyboard of Michel Thorsen
- For Tony's presentation showed look also at <http://www.ieee802.org/1/mirror/8021/docs2002/opening-plenary-02-03.pdf>
- Showed Current Voting Members List
  - Les Bell, Paul Congdon, Norm W. Finn, Bob Hott, Neil Jarvis, Tony Jeffree, Shyam Kaluve, Hal Keen, Loren Larsen, Leroy Nash, Roger Pfister, Frank Reichstein, Mick Seaman, Ranish Shalom, Curtis Simonson, Michel Thorsen, Michael D. Wright
- Walkthrough of membership rules
- Re-election of Chair and Vice-chair. Both Neil and Tony are willing to take another turn, but until the closing plenary Thursday there is time for further nominations. Contact chair for Nomination.
- RAC information and discussion
  - Geoff Thompson, Mick Seaman are 802 reps; Tony Jeffree is RAC chair
  - SC6 formal liaison to the RAC is likely to be Robin Tasker as he is already liaison between 802 and SC6 (Robin not present)

# 802.1 Opening plenary (2)

- SEC meeting report out
  - Closing SEC meeting time: Friday 1:00 – 6:00
  - Closing SEC meeting in July: 1pm to 5pm
  - Tutorials
    - High speed mobile data, Dedicated short range communications, Gigabit millimetre wave radio, Ultra wide band communication
  - WG chairs need to be re-elected
    - Need to be confirmed at closing SEC
    - Notify Bob O'hara if you aspire to chair of 802
  - New org proposal for 802 with a 2nd vice chair
  - BoG has increased the period in which the IEEE 802 standards must be paid (before getting free) from 6 to 12 month.
    - <http://www.ieee802.org/1/mirror/8021/docs2002/get-ieee-802.pdf>
    - It was not revealed whether the program actually was costing money.
    - SEC voted to withdraw the financial support to the program and it passed unanimously.

# 802.1 Opening plenary (3)

- Trademarks and Certifications (Jerry Walker)
  - See also <http://www.ieee802.org/1/mirror/8021/docs2002/ieee802march-certification-and-trademarks.pdf>
  - Front Matter Statement discussion (slide 10)
    - Audience: Meant to protect IEEE and 802 trademarks
    - Audience: It includes statements so you can't be IEEE xxx compliant without obtaining a license
    - Audience: Maybe they are looking into certification testing. But certification doesn't give you interoperability
    - Seaman: IEEE could be forced to give patentholders of IEEE technology a License fee...
    - Finn: Would your company give away IP with the chance of not having a compliant device itself.
    - 802.1 is OK with the Certified statements but not conformant or compliant wording.
    - Please feed Tony with official statements from your company with regarding this issue.
  - Open meeting regarding 6-12 months change and the certifications 1-3 pm on Tuesday

# 802.1 Opening plenary (4)

- 802.11 issues with balloting/quorum/due process
- Patents policy reinforced.
  - Look at <http://www.ieee802.org/1/pages/patent.html>
- Offer from 802.3 to join the interim in Edinburgh 23-24 of May 2002
  - Enough work to justify for an interim meeting
  - No objections towards colocating with .3
  - 802.1 would not like to be hosted in Livingston (Sponsors facility) but rather the Hotel.

# 802.1 Opening Plenary (5)

- Task Group Agenda
  - 802.1s MSTP (Tue 9am)
    - Editors report on D11 resolution
    - Discuss steps to WG ballot
    - Proposed enhancements (Seaman)
  - 802.1X Port based access control
    - Maintenance items (Thu am)
    - Security issues: Holes vs Opinions (Mon)
  - 802.1y Mac Bridge-maint (Wed pm)
    - .1y Progress
    - Topology change stretching
  - Topology Discovery protocol (Tue 3pm)
    - Presentation (Larsen)
    - PAR proposal (Congdon)
  - Play Pen Ethertypes (Mon pm)
    - PAR and first Draft (Jeffree)

# 802.1 Opening Plenary (6)

- Technical Plenary
  - Wed 8.30-10 802.3 (EFM/EPON) and 802.17 (RPR) in their Regency C
  - Wed 11.00 .1X with dot11 (Grand D)
- It is acceptable to put the .1X MIB into a RFC?
  - Background
    - SEC is not to happy with RFC but would post a textfile on the web that can be refered to.
  - Discussion:
    - Jeniffer: No info really, but told as a general rule IEEE try too keep copyrighted information under own control, but freely accessible.
    - Jeffree: would like to put this into a RFC (as it has been our intention from day 1)
    - Requested a new (more elaborate?) answer from Yvette HoSang.

# 802.1X (Mon pm)

- Bernard Aboba presents background for discussions around the 802.11/802.1X Security Issues
  - Look in <http://www.ieee802.org/1/mirror/8021/docs2002/11-02-XXXr0-I-EAPUpdate.ppt>
  - Should mutual authentication be mandatory
  - Denial of service attacks
  - Modification attacks
  - A lot of issues are related to 802.11 only
  - Plain Implementation specific problems exist (go fix)
  - Cryptographic protection will solve most of the rest
    - Secure channel for the EAP conversation itself
    - Could require New message types (ACK'd success/failure)
    - Or NAS pass through of final message (802.1X change)

# Play Pen Ethernets (Mon pm)

- Jeffree made a walkthrough of 802a/d0  
<http://www.ieee802.org/1/mirror/8021/802-a-drafts/d0/802a-d0.pdf>



# 802.1s Tue am

- Walkthrough of 802.1s/d11.2
  - Clause 12.8.1.1, we might have some useful information from N. Finn back in D9 based on configuration with FIDs
- Seaman: introducing the Spanning Vines paper.
  - <http://www.ieee802.org/1/mirror/8021/docs2002/Spanning%20Vines005.pdf>
  - Improvement on top of MSTP, but maybe too much to put in standard at the current time.
    - Roese: Changes needed in detection or failure detection?
    - Seaman: The logic for e.g. Failover already exists in MSTP – but of course need to be applied here as well.
    - Finn: Convinced it can work, concern is when is Draft ready with this proposal fleshed out, without compromising the 802.1s progress
    - Seaman: Before next ballot it will in or else go in the Amendment clause
  - Will not work on VLANs which share a FID somewhere (all independent is the trend).
  - Will benefit most to networks with a hierarchical structure (vs a ring structure)
  - Aim for inclusion in Draft 12 April 15<sup>th</sup>; leave out if this will impact D12 timescale.

# LLDP Tue pm

- Loren Larsen presented  
<http://www.ieee802.org/1/mirror/8021/docs2002/Topology%20Discovery%20Requirements2.ppt>
  - Larsen: Prez should be seen as a baseline statement about what I would like to know about a device (not how we actually do a standard)
  - Finn: A lot of the information shown is already obtainable in other ways.
  - Congdon: We need to think about requirements about how to act (or act at all) upon reception on topology information.
  - Finn: Would like to add information whether a link is bidirectional.
  - Finn: Information transferred in protocol should be just enough for getting to a switch's neighbors for a given interface. (necessary and sufficient)
  - Roese: This standard should go further than the network core devices but also include the edge devices (like .1X) – this is what is needed in the real life.
  - Jeffree: We want to keep this protocol simpler than implementing SNMP.

# LLDP (2)

- Paul Congdon presented <http://www.ieee802.org/1/mirror/8021/docs2002/LLDP%20Overview.pdf>
  - Seaman: Be specific about describing behaviour from different devices (like Bridges vs. Hubs using terms like "forwarding" statements)
  - Finn: What to do if there is more things on a link than you want to keep track of (discussing the PTOPO MIB). Answer Drop defined.
  - Finn: Vendor specific TLVs will destroy interoperability, eventhough everybody is conformant
  - Roese: Nowadays edge devices may need to pass more information than currently proposed
  - Issues and Questions slide comments
    - PTOPO is probably close to the right thing to populate, but issues regarding informational RFCs copyrights exist etc.
    - Slow protocols is OK to use
    - Don't allow messages larger than a single frame
  - Finn: Add Vendor specific TLVs to the list.
- Jeffree: There seems enough interest and no objections against doing a PAR

# LLDP (3) Wed pm

- PAR
  - Point 1: It will be 802.1ab
  - Point 4: The title should be "...Station and Media Access Control Connectivity Discovery"
  - Point 10: date 2004-11-14
  - Point 11: + 6 months
  - Point 12: Lot of changes. Congdon will post new suggestion on reflector.
  - Link layer devices also includes routers etc. So we better refer to them as Devices connected by IEEE 802 Link layer protocol
  - Point 15: A long discussion on Q5 No vs. Yes on registration and how really to interpret the question. The answer was No, and the Chair can be contacted for further elaboration on this extremely interesting and discussionworthy topic.
- 5 Criterias
  - Point 1: Many proprietary implementations exists but doesn't interoperate.
  - Point 2: Change 802 devices to LAN/MAN stations.

# 802.1 technical plenary (wed am)

- 8.30-10 Present were: 802.1, 802.3 EFM/EPON and 802.17
  - Suzuki (will make motion based on slide 1-12) (802.3)  
[http://www.ieee802.org/3/efm/public/mar02/suzuki\\_1\\_0302.pdf](http://www.ieee802.org/3/efm/public/mar02/suzuki_1_0302.pdf)
    - P2P emulation mode for .1D compliance using logical PHY tag in preamble (also supports Downstream BC mode)
    - Propose reconciliation sublayer in MAC (multiple logical MACs mu x/demuxed)
    - Suggestion: Future .1D work should support point 2 multipoint mode
    - The 15 bit PHY ID is not necessary the same for P2P and P2MP
    - Really large buffers if Pause frames support, just due to round trip delay (loong wires).
  - 802.17 prez
    - 802.1 Q1 Are 802.17 MAC compliant?
      - Jeffree:With current information revealed it is looking promising.
    - 802.1 Q2 Any architectural violations?
    - Finn: No guarantees that a packet (also unicast) on the ring are seen by all devices on the ring? Answer Yes all flooded.
    - Q: What if a given packet with dest address A are picked up by the station having this address? Answer Jeffree/Finn: This will affect the learning/flooding behaviour.
    - Haddock: Problems with frame duplication, it only works if you know how many stations are present on ring. Answer: Flooding technique is still under consideration

# 802.1 Technical Plenary (2)

- 11-12: discuss 802.1X with 802.11 meeting
  - Walker: Using .1X as fundamental piece of architecture. Issue with .1X architecture authentication first OK when the keys has been transmitted, which is a problem for the wireless clients.
  - Jeffree: .1X is aimed at p2p connections (truly or emulated) and the dot-groups using the standard have to do that emulation.
  - Moore: The .11 and .1X statemachines has to get locked to eachother. Established Virtual Port entry to .1X statemachines
  - Nelson: Decision to open port, is after authentication is acheived.
  - Moore: showed statemachine change proposal. Basically adding Virtual port which must be set to secure (by the owner of the virtualport), before sending succes message From his point of view this is necessary and sufficient
  - Congdon: Got clarified that this information couldn't be retrieved from the existing backend statemachine. But you don't want to have the success message decoded by the 802.1X
  - Aboba: You might not need all .1X message in .11 at all.
  - Roese: How do you recover from a failure? Answer: PortEnable=False clear whole statemachine.
  - Jeffree will get statemachine changes from Moore and take it into the maintenance draft.
  - Moore: We need new keydescriptor.
  - Jeffree: We have discussed this earlier, make key descriptor variable length framework, and hand over needed id's to .11 (minimum 2 key types needed)
  - Agreed on having a joint meeting at next plenary (july 2002)

# Maintenance Drafts Wed pm

- We will keep the observations and answers currently in Annex Z in a public place after release of standard, but not as part of the standard
- Browsing of 802.1y-d2 (.1D maint).
  - Going through rationales
    - Z.3.2 Diagram not completely fixed yet.
    - Z.5.2 Tony will try to fix this offline.
    - Z.13.2 Long discussion -> Needs more thought (auto edge and fiddling with timers is not an obvious solution)
  - Extra/new proposals
    - Jeffree: Need to search reflector for issues since last interim
    - Seaman: Possible to change Designated port -> fwding rapidly, even if other end is alternate port
    - Seaman: Need a description for the whole initialization process
    - Jeffree: Need to retrofit S stuff that is relevant to D/w

# 802.1 Closing Plenary - 03/2002

## Agenda



# Topics

- Administrative stuff
- Elections
- Interim meeting
- Motions etc

# Administrative stuff

- Voting membership
- Approval of November & January minutes
- Website
  - <http://www.ieee802.org/1/>
  - Username: p8021 Password: go\_wildcats

# Elections

- Election of Chair
  - Candidates:
    - Tony Jeffree
    - Elected by acclamation
- Election of Vice Chair
  - Candidates:
    - Neil Jarvis
    - Elected by acclamation

# Interim meeting

- Have had an offer to join 802.3 interim:
  - Edinburgh, UK, week of 20<sup>th</sup> May
  - Probably need 2 days – go for the Thurs/Fri (23, 24)
  - Should be plenty to occupy us (s, maintenance items, discovery,...)
  - Want to hold the meeting in the hotel
- Motion to agree to hold meeting

# Motions

# MOTION

- 802.1 instructs the Editors for P802.1s to revise the document in line with the discussions in this meeting and to forward the document (D12) for a WG ballot by 15<sup>th</sup> April 2002. Pre-authorization granted to the Editors to forward D13 to confirmation ballot following resolution of D12 comments at the May Interim meeting.
- Proposed: Finn
- Second: Seaman
  - For: 8
  - Against: 0
  - Abstain: 0

# MOTION

- 802.1 instructs the Editors for P802a to revise the document in line with the discussions in this meeting and to forward the document (D1) for a WG ballot by 15<sup>th</sup> April 2002. Pre-authorization granted to the Editors to forward D2 to confirmation ballot following resolution of D1 comments at the May Interim meeting.
- Proposed: Jarvis
- Second: Larsen
  - For: 8
  - Against: 0
  - Abstain: 0

# MOTION

- 802.1 instructs the Editor for P802.1y to revise the document in line with the discussions in this meeting and to forward the document (D3) for a WG ballot, timed to close at least 1 week before the July 802 Plenary meeting. Pre-authorization granted to the Editors to forward D4 to confirmation ballot following resolution of D3 comments at the May Interim meeting, if WG ballot timing permits.
- Proposed: Congdon
- Second: Finn
  - For: 8
  - Against: 0
  - Abstain: 0



# MOTION

- 802.1 instructs the Chair to circulate the draft PAR for P802.1ab (Discovery) to the SEC in order to meet the 30-day rule for submission of draft PARs.
- Proposed: Congdon
- Second: Larsen
  - For: 8
  - Against: 0
  - Abstain: 0

# MOTION

- 802.1 resolves to hold an interim meeting in Edinburgh, UK on the Thurs/Fri of the week of 20<sup>th</sup> May 2002 (23<sup>rd</sup>, 24<sup>th</sup>), co-located with 802.3.
- Proposed: Seaman
- Second:Finn
  - For: 8
  - Against:0
  - Abstain: 0
- (Chair to invite 1 li participation)

# MOTION

- 802.1 approves the minutes of the November 2001 and January 2002 meetings of 802.1.
- Proposed: Jarvis
- Second: Congdon
  - For: 5
  - Against: 0
  - Abstain: 3