IEEE P802.3ar
Congestion Management Task Force

Report to 802.3 CSMA/CD WG

Atlanta, Georgia
14 March 2005
Agenda

- Reflector and web
- IEEE 802.3 standards process
- Objectives
- Report on January interim
- Straw polls
- Project timeline
- Plan for week
Reflector and Web

- List subscribers: **142** (as of 3/12)

- To subscribe to the Congestion Management TF reflector send an email to:
  
listserv@ieee.org

- with the following in the body of the message:
  
  subscribe stds-802-3-cm <first name> <last name>

- Congestion Management TF web page URL:
  
  http://www.ieee802.org/3/ar/
IEEE 802.3 Standards Process (1/4)

Idea

Call for Interest

802.3 Forms SG

Yes

802 EC Forms SG

No

RIP

Yes

Study Group Meetings

No

RIP

Yes

802 EC Approve

No

RIP

Yes

NesCom Approve

No

RIP

Yes

STB Approve

No

RIP

Yes

Approved PAR

No

RIP

Yes

5 Criteria

Objectives

PAR

Yes

802.3 Approve

No

RIP

Yes

802.3 Approve

No

RIP

Yes

NesCom Approve

No

RIP

Yes

STB Approve

No

RIP

Yes

Approved PAR

No

RIP

Yes

802 EC Approve

No

RIP

Yes

NesCom Approve

No

RIP

Yes

STB Approve

No

RIP

Yes

Approved PAR

No

RIP

Yes

802 EC Approve

No

RIP

Yes

NesCom Approve

No

RIP

Yes

STB Approve

No

RIP

Yes

Approved PAR

No

RIP
IEEE 802.3 Standards Process (2/4)

1. Task Force Meetings
   - Approved PAR
   - Objectives
   - Proposals Selected
     - Yes
     - No

2. Task Force Review
   - D1.0
   - D1.n+1
   - TF Review Done
     - No
     - Yes

3. To 802.3 WG Ballot
   - No
   - Yes

4. D2.0
   - A
IEEE 802.3 Standards Process (4/4)

LMSC Sponsor Ballot

LMSCLMSC

Sponsor

Ballot

> 75 %

Yes

No

RIP

Comments

Yes

No

D3.n+1

802.3 Forward to RevCom

D3.n

No

Yes

B

RevCom Review

RevCom Approval

Yes

No

B

STB Approval

Std

Yes

No

RIP
Objectives

1) Specify a mechanism to limit the rate of transmitted data on an Ethernet link
2) Specify a mechanism to support the communication of congestion information
3) Minimize throughput reduction in non-congested flows
4) Preserve the MAC/PLS service interfaces

Approved by IEEE 802.3 WG on 18-Nov-2004
January Interim

- 1-day interim, Sacramento
  - Co-located with 802.1, P802.3as
- Reviewed presentation on three rate limiters
  - objective #1
- Reviewed presentation on congestion notification
  - objective #2
- Held joint meeting with 802.1
  - Reviewed congestion notification presentation
  - Members of 802.1 requested formal proposal for consideration at March meeting
- Took several straw polls to gauge interest in rate limiters
Straw polls re: rate limiters

Do you agree in principle with defining:

- Defining fixed, per-packet overhead rate-limiter (7-0)
- Defining maximum payload rate limiter (7-2)
- Defining maximum packet rate limiter (6-1)
- Defining Clause 30 attributes for each rate limiter (9-0)
- Defining remote rate control request (3-3)
- Cleaning up MAC service interfaces (10-1)

14-16 in room
Straw polls re: CN

- Do you agree in principle with this statement? 9-0-2,14
  - In order to enable accelerated deployment of Ethernet into emerging limited-topology applications (clustering, backplanes, storage, data centers, etc.), IEEE 802.1 should specify a standard mechanism for MAC Clients to provide congestion information to L2 edge devices, using wadekar_1_0501.pdf as a basis

- Do you support packet marking as the means for forward congestion notification? (8-0, 14)

- Which method of packet marking do you prefer? (choose one)
  - Existing 81-00 EType VLAN tag’s CFI bit - 3
  - Separate L2 tag - 2
  - Insert new L2 tag
  - Change VLAN tag to new EType

Y-N-A, total
**Possible timeline**

- **Study Group formed**
- **PAR approved**
- **Created Task Force**
- **TF ballot**
- **WG ballot**
- **Sponsor ballot**
- **We are here**
- **Standard!**

**Legend**
- ▲ IEEE 802 Plenary
- ● IEEE 802.3 Interim
- ■ IEEE-SA Standards Board
## Plans for the week

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<th>Room</th>
<th>Activity</th>
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<tbody>
<tr>
<td>Tue 3/15</td>
<td>8:30a-12p</td>
<td>Montreal</td>
<td>Opening, presentations</td>
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<tr>
<td></td>
<td>1:30p-5:00p</td>
<td>Montreal</td>
<td>Preparation for 802.1 proposal</td>
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<tr>
<td>Wed 3/16</td>
<td>1:30p-2:30p</td>
<td>Hanover</td>
<td>Proposal to 802.1</td>
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<td>Thu 3/17</td>
<td>8:30a-10:00a</td>
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<td>Closing P802.3ar session</td>
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