802.1aj terminology for link status propagation

John Messenger, November 2007
Understanding the terminology

- 802.1aj draft 2.2 uses several terms to decompose the link status notification process
  - MAC status
    - notification (3, 23.1, 23.3, 23.4, 23.6, 23.7, 23.9, 23.10)
    - propagation (3, 23, 23.1, 23.3, 23.5, 23.6, 23.7, 23.9, K)
  - Link status
    - notification (3, 23.1, 23.3, 23.4, 23.5, 23.6, 23.7, 23.9, 23.10)
    - propagation (23.6) – thought to be a typo for “LAN…”
    - propagation protocol (23.6) – thought to be a typo for “LAN…”
  - LAN status propagation
    - protocol (4, 23.6, 23.8, 23.19)
    - PDU (4, 23.19)
    - entity (4, 5.14, 12.17, 23.5)
    - configuration (12.17.4)
    - parameters (12.17.4)
    - table (17)

- These terms can be confusing to the reader (they were to me!)
  - Are these terms used consistently in the draft?
  - Is it necessary to clarify the terminology?
  - Could the definitions be usefully expanded?

“Link status propagation” has been removed from Mick’s new clause 23.

“LAN status propagation” has been removed from Mick’s new clause 23.
These terms are described in 23.3

- Notification
  - Local signalling across a single link segment
    - From a bridge to an adjacent bridge

- Propagation
  - Signalling through one or more relays
    - Through a single bridge
    - Or through several bridges
  - Requires an active protocol entity in each bridge (the LAN status propagation entity)
Types of Notification

- Also described in 23.3

- MAC status notification
  - Signalling LinkStatusOfTheOtherPort by forcing MAC_Operational down
  - Disruptive to management and OAM

- Link status notification
  - Signalling LinkStatusOfTheOtherPort by using a (frame-based) protocol
  - Allows management and OAM to continue
Types of Propagation

- The LAN status propagation entity
  - Performs MAC status propagation (see 3.5 and end of 23.3)
  - Uses both MAC- and Link- status notification to do so

- I am not sure that there is a need for both these terms:
  - MAC status propagation
  - LAN status propagation (used but not defined)
  - Would significant meaning be lost by eliminating one of these terms?
  - MAC status propagation is the exclusive term in Mick’s new clause 23.

- The term “link status propagation” is only used twice (23.6)
  - Once in “link status propagation protocol” which is a typo for “LAN...”
  - Once in a context where LAN status propagation would be better
  - I suggest this term is removed.
    - (Removed in Mick’s new clause 23)
Thank You

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