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)

"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 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?

ADVA™
Optical Networking

Notification versus Propagation

▸ 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

JMessenger@advaoptical.com