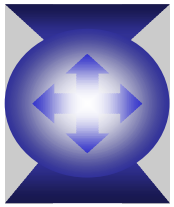

LANTERN COMMUNICATIONS

IEEE 802 Compatibility Considerations

IEEE 802 Resilient Packet Ring Study Group

July11-12, 2000

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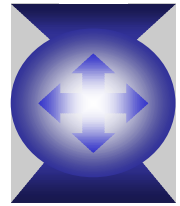
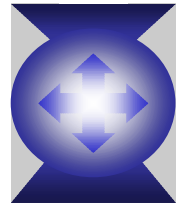
802 Overview and Architecture (P802/D27 Relevant Sections)



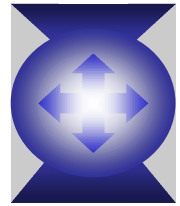
- Scope
  - LAN and MAN
  - Full Duplex media only (no shared media) – e.g. 10GE
- Reference and Implementation Models
  - LLC SNAP: Can use alternative Ethernet sublayer
  - LLC sublayers
    - Type 1 (Required): Connectionless – No Flow Control or Error Recovery
    - Type 2: Logical Link – Flow Control and Error Recovery Provided
  - Multiple physical ports attached to a MAC client is defined for 802.3ad Link Aggregation
  - Relaying and filtering by bridges
    - *Relaying and filtering functions are considered to belong entirely within the MAC sublayer*

Cont.



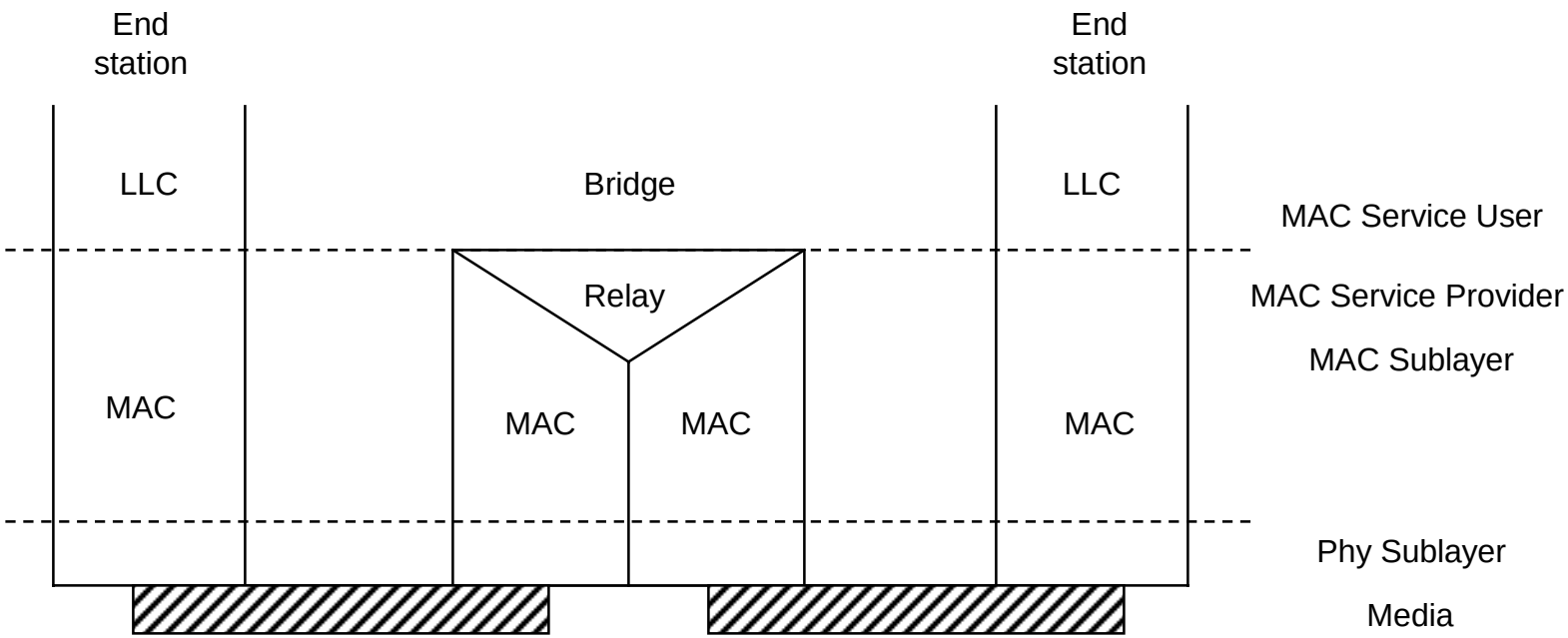
- General Requirements
  - Supported Services: Minimum LLC Type 1
  - Size and extent: 50 km for MAN or “expected to be determined by application needs and opportunities”
- Management functions
  - FCAPS (Fault, Configuration, Accounting, Performance and Security)
  - SNMP
  - 802.1F provides additional guidance for use of GDMO in LAN/MAN.
    - GDMO is converted into IETF SNMP MIB management objects

Issues



- 802.1D and Q (Bridging and VLAN)
  - Bridging between RPRs?
    - Can/should learning be automatic or administered?
  - Is VLAN sufficient to limit broadcasts?
- Physical Layer Service Access Points
  - Need a model that allows 2 physical ports attached to single MAC Client (e.g. 802.3ad)
- Others?

MAC Sublayer with Bridging



Possible Model