

# 10 Gigabit Ethernet

## MAC and LAN PHY

Howard Frazier - Cisco Systems

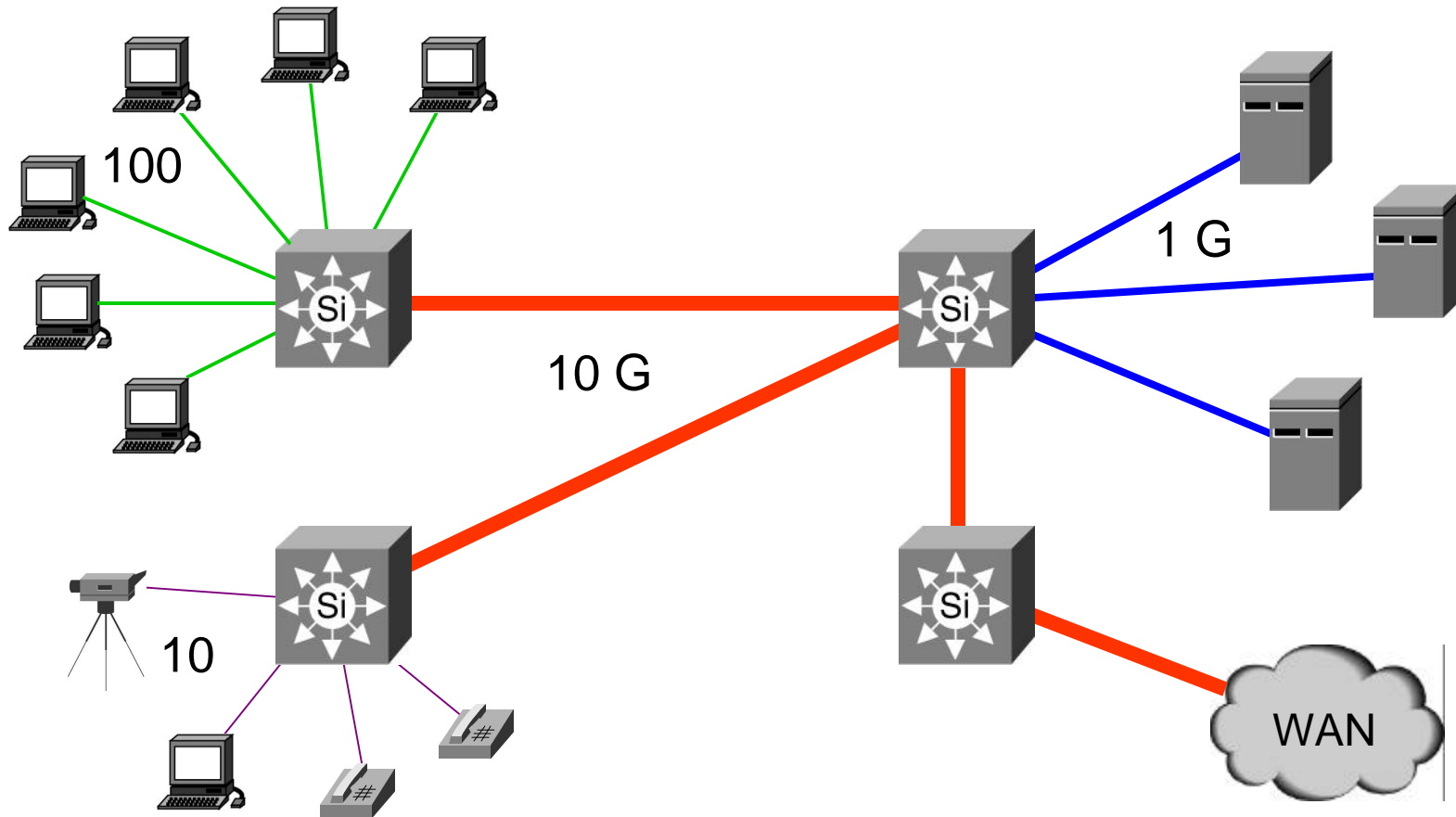
IEEE P802 Tutorial

Kauai, HI

8-November-1999



# The Enterprise Backbone

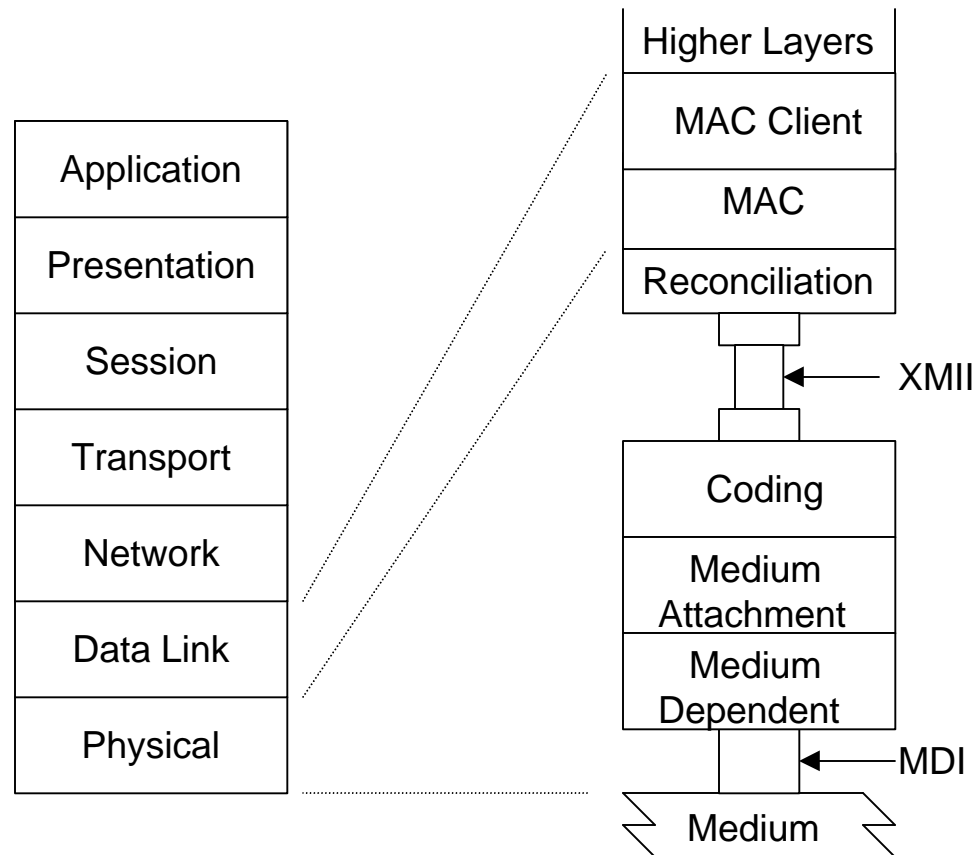


# 10 Gigabit Ethernet LAN Features

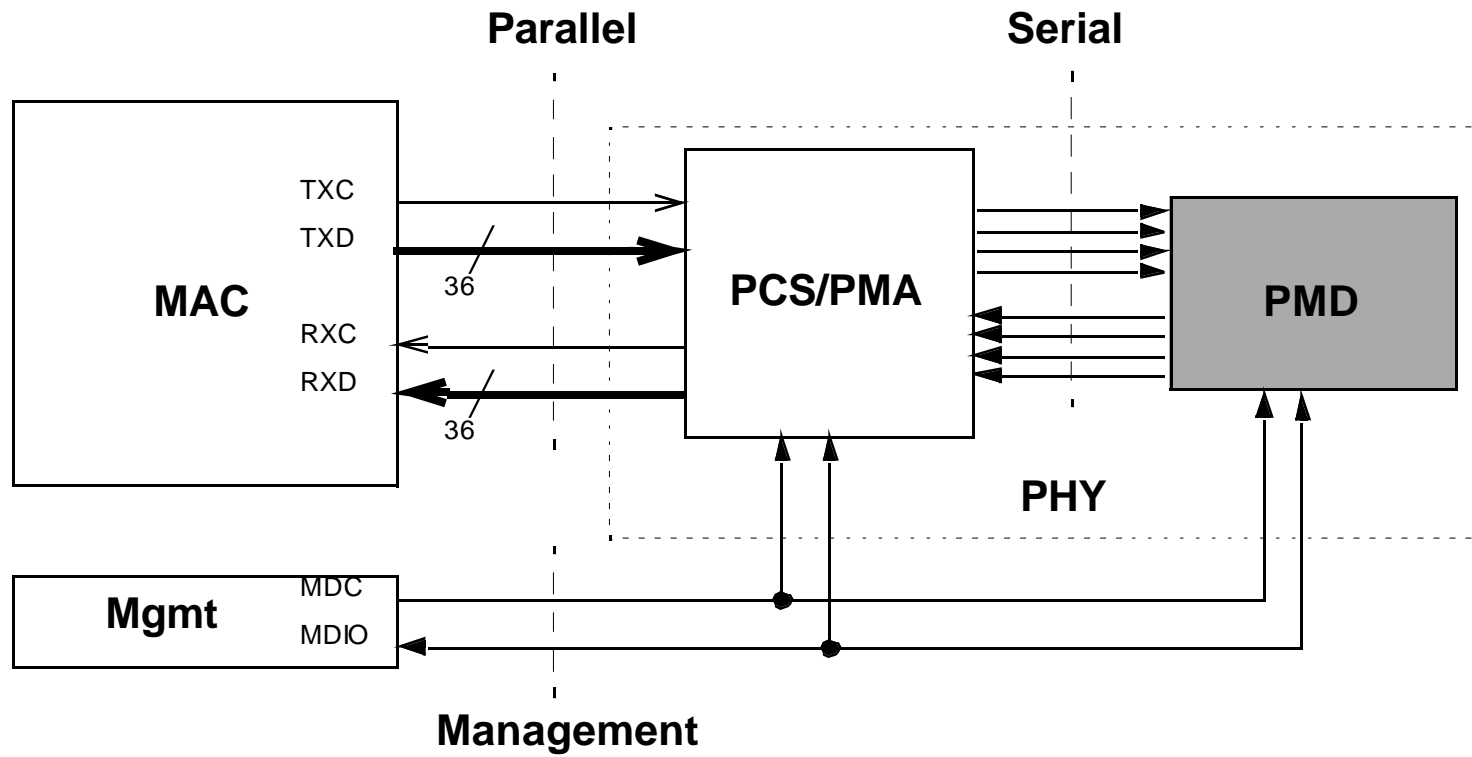
- Full Duplex 802.3 MAC operation
- Fiber optic medium
- 10,000 Mb/s data rate
- Consistency with 10/100/1000 Mb/s
  - frame format
  - services
  - management attributes



# Layer Diagram



# Interfaces



# Possible LAN PHY Features

- Block Code (e.g. 8B/10B, MB810)
  - Similar to 1000BASE-X
  - Rapid development of Std and products
- Media Independent Interface - XMII
- Flexible interface to PMD
  - CWDM, Parallel, Serial, MAS, Scrambled



10 Gigabit Ethernet  
The World's Favorite LAN  
Going Faster (again!)

