

# IETF Power Ethernet MIB

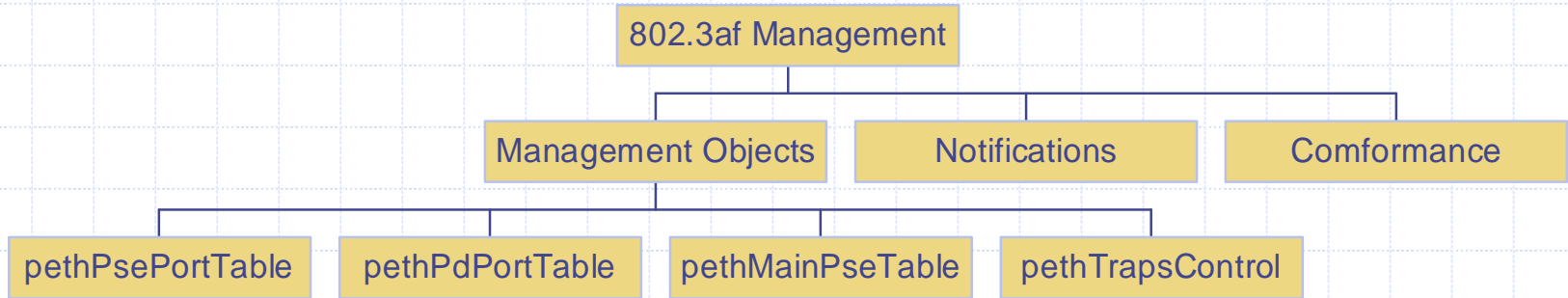
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# IETF Ethernet Interfaces and Hub MIB Working Group

- ◆ <http://www.ietf.cnri.reston.va.us/html.charters/hubmib-charter.html>
- ◆ The Ethernet Interfaces and Hub MIB WG is Chartered to define a set of managed objects that instrument devices, MAUs and interfaces that conform to the IEEE 802.3 standard for Ethernet. This set of objects should be largely compliant with, and even draw from IEEE 802.3, although there is no requirement that any specific object be present or absent. The MIB object definitions produced will be for use by SNMP and will be adequately consistent with other SNMP objects, standards and conventions. The WG will define new MIB objects to cover the following 802.3 technologies:
  - P802.3ae - 10 Gb/s Ethernet
  - P802.3af - DTE Power via MDI
- ◆ Schedule for completion – January 2002 forward the I-Ds to the IESG for Proposed Standard consideration
- ◆ General Discussion: hubmib@ietf.org  
To Subscribe: hubmib-request@ietf.org  
In Body: subscribe your\_email\_address

# Management Objects Structure



# The Power Ethernet MIB

## ◆ First official WG Internet-Draft

- <http://www.ietf.cnri.reston.va.us/internet-drafts/draft-ietf-hubmib-power-ethernet-mib-00.txt>

## ◆ Significant changes from the previous version

- Change indexation of pethPsePortTable to group and ports indices instead of InterfaceIndex – per Clause 30
- Add to pethPsePortStatus one more item both(4)
- Add pethMainPseTable with pethMainPseGroupIndex
- Delete to objects pethMainPseMaxVoltage & pethMainPseMinVoltage j.
- Change SYNTAX of pethMainPseUsagePower and of pethMainPseUsageCurrent from INTEGER to Gauge32
- Add pethMainPseBackupActivated & pethMainPseBackupPresent
- Add Traps Control Objects
- Add Notifications Section (5 notifications )
- Change in DESCRIPTION of pethMainPseUsagePower from mW to Watt
- Delete of pethMainPseUsageCurrent

# pethPsePortTable

- ◆ pethPsePortGroupIndex INTEGER
- ◆ pethPsePortIndex INTEGER
- ◆ pethPsePortPowerEnable INTEGER – auto(1), off(2)
- ◆ pethPsePortPowerIdPairsControl TruthValue
- ◆ pethPsePortPowerIdPairs INTEGER – signal(1), spare(2), both(3)
- ◆ pethPsePortPowerDetectionStatus INTEGER – auto(1), off(2), both(3)
- ◆ pethPsePortDetectionOperStatus INTEGER – deliveringPower(1), off(2), searching(3), fault(4)
- ◆ pethPsePortPowerPriority INTEGER – critical(1), high(2), low(3)
- ◆ pethPsePortDenyError INTEGER – other(1), lowPriority(2)
- ◆ pethPsePortStatus INTEGER – ok(1), underCurrent(2), overCurrent(3), both(4)
- ◆ pethPsePortStatusClear INTEGER – clear(1), off(2)
- ◆ pethPsePortType INTEGER – other(1), telephone(2), webcam(3), wireless(4)
- ◆ pethPsePortPowerClassifications INTEGER – class0(1) .. Class5(6)

# pethPdPortTable

- ◆ pethPdPortIndex INTEGER
- ◆ pethPdPortPowerPairs INTEGER –  
signal(1), spare(2), both(3)
- ◆ pethPdPortDetectionOperStatus INTEGER  
– off(1), receivingPower(2)
- ◆ pethPdPortType INTEGER - other(1),  
telephone(2), webcam(3), wireless(4)

# pethMainPseTable

- ◆ pethMainPseGroupIndex INTEGER
- ◆ pethMainPsePower Integer32 – Watts
- ◆ pethMainPseOperStatus INTEGER – on(1), off(2), faulty(3)
- ◆ pethMainPseConsumptionPower Gauge32 – watts
- ◆ pethMainPseBackupPresent INTEGER – present(1), notPresent(2), faulty(3)
- ◆ pethMainPseBackupActivated INTEGER – activated(1), notActivated(2)
- ◆ pethMainPseUsageThreshold INTEGER - percents

# pethTrapsControlTable

- ◆ pethTrapsControlGroupIndex INTEGER
- ◆ pethTrapsControlEnable INTEGER –  
enable(1), disable(2)



# Notifications

- ◆ pethPsePortOnOffTrap OBJECTS {
  - pethPsePortGroupIndex
  - pethPsePortIndex
  - pethPsePortDetectionOperStatus }
- ◆ pethPsePortDenyTrap OBJECTS {
  - pethPsePortGroupIndex
  - pethPsePortIndex
  - pethPsePortDenyError }
- ◆ pethPsePortStatusTrap OBJECTS {
  - pethPsePortGroupIndex
  - pethPsePortIndex
  - pethPsePortStatus }
- ◆ pethMainPseBackUpActivatedTrap OBJECTS {
  - pethPsePortGroupIndex
  - pethMainPseBackupActivated }
- ◆ pethMainPowerUsageTrap OBJECTS {
  - pethPsePortGroupIndex }

# Compliance

- ◆ A Power Ethernet capable switch will implement the pethPsePortTable, pethMainPseTable and all notifications
- ◆ A mid-span device will implement pethPsePortTable and port-related notifications
- ◆ A powered device will implement the pethPdPortTable