Energy Aware MIB
draft-ietf-eman-energy-aware-mib-06

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Charter & Abstract

- "3. Energy-aware Networks and Devices MIB document The EMAN WG will develop a MIB module for monitoring energy-aware networks and devices. The module will address devices identification, context information, and potential relationship between reporting devices, remote devices, and monitoring probes."

Summary of Major Changes in 06

- Entity MIB Compliance
- Representation of Relationships
- Organized Mandatory / Optional
- Misc. comments and conformance
- Open Issues (persistence)

Changes in version 6

- ## New MIB design to model relationships between Energy entities
  - – addresses the open issue in version 5
  - – based on suggestions of Juergen Quittek, Juergen Schoenwaelder

- ## Compliance with ENTITY-MIB
  - – Working to comply with ENTITY-MIB v4 draft
  - – Energy-Aware MIB will compliant with ENTITY-MIB v4

- ## Incorporated review comments of Juergen Quittek

Changes in version 6
Representation of Energy relationships

- Instead of a UUID list of children, individual relationships between entities

- +- eoRelationTable
    +- eoRelationEntry

  [entPhysicalIndex, eoRelationIndex]
    |
    +-- --n   INTEGER   eoRelationIndex
    +-- r-n OCTET STRING   eoRelationID
    +-- r-n BITS   eoRelationship

- similar table for Proxy Relationship – eoProxyTable

Changes in version 6
Representation of Energy relationships

```
EnergyRelations  ::=  TEXTUAL-CONVENTION
      SYNTAX    BITS  {
            none (0),
            poweredby(1),    --  power relationship
            powering(2),
            meteredby(3),    --   meter relationship
            metering(4),
            proxyby(5),        --    proxy relationship
            proxying(6),
            aggregatedby(7),  -- aggregation relationship
            aggregating(8)
            }
```
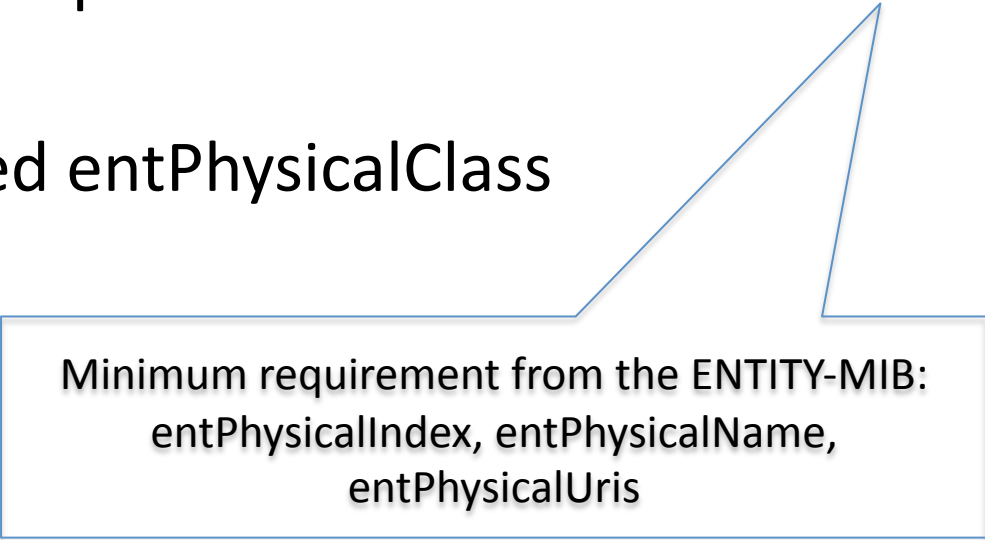
Changes in version 6
Compliance to ENTITY MIB

- ENTITY-MIB V4 based on EMAN requirements
  - draft-chandramouli-eman-rfc4133bis-01.txt

    - Read-only UUID
    - ENTITY-MIB compliance with a subset of MIB objects
    - IANA controlled entPhysicalClass

Minimum requirement from the ENTITY-MIB: entPhysicalIndex, entPhysicalName, entPhysicalUris

Changes in version 6
Other changes

- PoE indices eoethPortIndex, eoethPortGrpIndex, lldpLocPortNum from Lldp MIB   as optional
  - conformance statement allows this to be optional

- organized the MIB objects in eoTable
  - grouping of mandatory and optional MIB objects
  - Helps mib walks

Current Open Issues

- Global Persistence of eoTable ? - eoPersistence
  - some objects (optional indices) are read-only

  - persist only the objects that are read-write
    - eoDomainName, eoRoleDescription,
      eoKeywords, eoImportance

  - Identity should be persistent
  - That is persistence of objects in ENTITY-MIB ?
    - entPhysicalIndex, entPhysicalUris
    - Conformance statement in ENERGY-AWARE-MIB

Conclusion

- Good progress; feedback integrated

- New MIB design – request for feedback from MIB experts on the design

- Must still check if all the requirements are covered. Let's freeze [EMAN-REQ]…