Energy Aware MIB
draft-ietf-eman-energy-aware-mib-03

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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.”
Open Issues in Version 2

1. The terminology must be consistent for all EMAN drafts, and this one included.
   DONE based on the last version of the terminology draft

2. Agreement: we need an UUID for every Energy Object, but how to model it? From the last meeting:
   “- If we want to make it right: new OID in the ENTITY-MIB v4 with a limited compliance statement to the ENTITY-MIB, i.e. just a few OIDs?
   - If we want to make it quick: a new OID in the EMAN-MIB”
   SOLVED: see next slides

3. A EO Child can have different EO parents in the monitoring, control, and power distribution. And a Child can have multiple parents in each of the topologies. In other words, the different relationships as defined in the EMAN framework must be inserted in this draft
   SOLVED: see next slides
Open Issue 2: UUID in the previous draft version

Specific Textual Convention in the MIB module, with a reference to RFC 4122

Note: entPhysicalName from the ENTITY-MIB

Note: entPhysicalIndex from the ENTITY-MIB

(*) May also be implemented by the Parent
(**) Link with the ENTITY MIB [RFC4133]
(****) Link with the Power over Ethernet MIB [RFC3621]
(*****) Link with LLDP MIBs [LLDP-MIB] [LLDP-MED-MIB]
New UUID proposal: AUGMENT table from the ENTITY-MIB version 3

EO Context Information
- eoRoleDescription
- eoKeywords
- eoImportance
- eoPowerCategory

EO Identification
- entPhysicalIndex (*)
- entPhysicalName (*)
- entPhysicalUris (*) (EO UUID)
- eoDomainName
- eoMgmtMacAddress
- eoMgmtAddress
- eoMgmtAddressType
- eoMgmtDNSName

Links to other Identifiers
- eoEthPortIndex (**) (Compliance from the ENTITY-MIB [RFC4133])
- eoEthPortGrpIndex (**) (Link with the Power over Ethernet MIB [RFC3621])
- eoLldpPortNumber (***) (Link with LLDP MIBs [LLDP-MIB] [LLDP-MED-MIB])
- eoAlternateKey

Minimum compliance to the ENTITY-MIB: entPhysIndex, entPhysicalName, entPhysicalUris

We don’t need the pmIndex any longer: use directly the entPhysicalIndex from the ENTITY-MIB

UUID the ENTITY-MIB v3 (Thanks to Jürgen Schönwälder)
Open Issue 3: Multiple Parents in different topologies

- Two power supplies: eoPoweredBy = list of (UUID1, UUID2)
- Note: relationships are “optional”
Current Open Issues

• TentPhysicalUris is read-write. Is this ok for a UUID from an operational point of view
• Do we need eoMeteringChildrenList, eoPoweringChildrenList, eoDependentChildrenList, eoAggregatingChildrenList, eoProxyingChildrenList?
Conclusion

• Want to get consensus on the design
• Based on this design, this MIB module is slightly ahead of [EMAN-FMWK]

• Note: must still check if all the requirements are covered
Thank You

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