ENTITY-MIB-V4

draft-chandramouli-eman-rfc4133bis-01.txt

A. Bierman, D. Romascanu, J. Quittek, and Mouli Chandramouli

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Problem Description

• Why do we need ENTITY-MIB V4?
  – Identification of Energy Devices (Energy-Aware-MIB) based on ENTITY-MIB
  – Not all devices might implement ENTITY-MIB in full
    • Constrained devices
  – Important to provide flexibility and not have non-compliant versions of ENTITY-MIB
EMAN requirements

1. Is it possible to have a smaller set of ENTITY MIB objects for possible compliance with ENTITY-MIB ?

2. UUID required as identification for Energy-Object
   – can we reuse entPhysicalUris (from ENTITY-MIB V3)
   – but as a read-only object (currently, it is read-write)
   – representation of UUID compliant with rfc 4122 ?

3. entPhysicalClass to be an IANA controlled list
ENTITY-MIB V4

• REQ - Compliance to a subset of ENTITY-MIB objects
  – Energy-Aware-MIB requires implementation of entPhysicalName, entPhysicalIndex and entPhysicalUris

• Soln – Conformance statement in ENTITY-MIB

entity4CRCompliance MODULE-COMPLIANCE
MANDATORY-GROUPS { entityPhysicalCRGroup }

entityPhysicalCRGroup OBJECT-GROUP
OBJECTS {
  -- Note that object entPhysicalIndex
  -- included since it is not-accessible
  entPhysicalName,
  entPhysicalMfgDate,
  entPhysicalUris
}
STATUS current
::= { entityGroups 8 }

Can we delete this object?
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- REQ – UUID as a read-only object
- Soln – Conformance statement in ENTITY-MIB

```
entity4CRCompliance MODULE-COMPLIANCE

OBJECT entPhysicalUris
  SYNTAX Uri (SIZE (0 | 45))
  MIN-ACCESS read-only
  DESCRIPTION
    "Write access is not required for agents that implement version 4 of the Entity MIB on devices with constrained resources. Size is constrained to 45 to allow only for RFC 4122 compliant values and 0 for cases when the object is not instantiated.""
```
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• REQ – entPhysicalClass – IANA controlled list
• Soln –

IANAPhysicalClass ::= TEXTUAL-CONVENTION
SYNTAX INTEGER {
    other(1),
    unknown(2),
    chassis(3),
    backplane(4),
    container(5), -- e.g., chassis slot or daughter-card holder
    powerSupply(6),
    fan(7),
    sensor(8),
    module(9), -- e.g., plug-in card or daughter-card
    port(10),
    stack(11), -- e.g., stack of multiple chassis entities
    cpu(12),
    energyObject(13),
    battery (14)
}
Current Open Issue

- Compact UUID syntax for entPhysicalUris
  - or should we have entPhysicalUUID - object which is read-only?

- Anyone opposed to removing entPhysicalMfgDate from the entity4CRCompliance conformance?

- Suggestions welcome
Conclusion

• First version of the draft

• Feedback, comments welcome