

ENTITY-MIB-V4

draft-chandramouli-eman-rfc4133bis-01.txt

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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 ?

ENTITY-MIB V4

- REQ – UUID as a read-only object
- Soln – Conformance statement in ENTITY-MIB

entity4CRCompliance MODULE-COMPLIANCE

OBJECT entPhysicalUri

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."

ENTITY-MIB V4

- 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