

ietf-entity YANG Module

draft-ietf-netmod-entity-00
NETMOD WG
IETF #96 Berlin

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v0.1

entity-state subtree

```
+--ro entity-state
|
|  +--ro last-change?          yang:date-and-time
|  +--ro physical-entity* [name]
|  |
|  |  +--ro name                string
|  |  +--ro class                identityref
|  |  +--ro physical-index?     int32 {entity-mib}?
|  |  +--ro description?        string
|  |  +--ro contained-in*       -> ../../physical-entity/name
|  |  +--ro contains-child*     -> ../../physical-entity/name
|  |  +--ro parent-rel-pos?     int32
|  |  +--ro hardware-rev?       string
|  |  +--ro firmware-rev?       string
|  |  +--ro software-rev?       string
|  |  +--ro serial-num?         string
|  |  +--ro mfg-name?           string
|  |  +--ro model-name?         string
|  |  +--ro alias?              string
|  |  +--ro asset-id?           string
|  |  +--ro is-fru?             boolean
|  |  +--ro mfg-date?           yang:date-and-time
|  |  +--ro uri*                inet:uri
|  |  +--ro uuid?               yang:uuid
|  |  +--ro state {entity-state}?
|  |  |
|  |  |  +--ro state-last-changed? yang:date-and-time
|  |  |  +--ro admin-state?         entity-admin-state
|  |  |  +--ro oper-state?          entity-oper-state
|  |  |  +--ro usage-state?         entity-usage-state
|  |  |  +--ro alarm-status?        entity-alarm-status
|  |  |  +--ro standby-status?      entity-standby-status
|  |  +--ro sensor-data {entity-sensor}?
|  |  |
|  |  |  +--ro data-type?           entity-sensor-data-type
|  |  |  +--ro data-scale?          entity-sensor-data-scale
|  |  |  +--ro precision?           entity-sensor-precision
|  |  |  +--ro value?               entity-sensor-value
|  |  |  +--ro oper-status?         entity-sensor-status
|  |  |  +--ro sensor-units-display? string
|  |  |  +--ro value-timestamp?     yang:date-and-time
|  |  |  +--ro value-update-rate?   uint32
```

entity subtree + notifications

```
+--rw entity {entity-config}?
  +--rw physical-entity* [name]
    +--rw name          string
    +--rw serial-num?   string
    +--rw alias?        string
    +--rw asset-id?     string
    +--rw uri*          inet:uri
    +--rw admin-state?  entity-admin-state {entity-state}?
notifications:
+---n ent-config-change
+---n ent-state-oper-enabled {entity-state}?
| +--ro name?           -> /entity-state/physical-entity/name
| +--ro admin-state?   -> /entity-state/physical-entity/state/admin-state
| +--ro alarm-status?  -> /entity-state/physical-entity/state/alarm-status
+---n ent-state-oper-disabled {entity-state}?
+--ro name?            -> /entity-state/physical-entity/name
+--ro admin-state?     -> /entity-state/physical-entity/state/admin-state
+--ro alarm-status?    -> /entity-state/physical-entity/state/alarm-status
```

YANG Compile Issues

- `ietf-entity@2016-05-13.yang:822: error: XPath error: Function derived-from-or-self() can not be called with 3 arguments`
 - Need to change module name + identity to `prefix:identity`

Github Issues

- #10: entity-sensor in a separate module
 - Proposal: no. keep objects in ietf-entity module
- #11: RFC 6933 introduced a new compliance level for constrained resources – entity4CRCompliance
 - Do we need a corresponding feature?
- #12: notifications
 - entConfigChange is useful but maybe covered by netconf-config-change notification, or pub/sub. it is also a bad name, since it fires when the opstate changes...

Next Steps

- Update draft with YANG correction
- Close all open github issues (no edits)
- Start Working Group Last Call