

IEEE P802.1Qcp and P802.1Xck Update

IEEE 802 Plenary Meeting

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1. YANG model CATALOG (<https://www.yangcatalog.org/>) now available (courtesy IETF)

“... A YANG model catalog and registry that allows users to find models relevant to their use cases from the large and growing number of YANG modules being published ...”

- Additionally, intention of CATALOG is to show dependencies among modules and keeps metadata (e.g., model maturity level) for each module
- IEEE 802.1 YANG modules (i.e., associated with 802.1Qcp and 802.1Xck) are now included in CATALOG
- Nice YANG tree representation provided by the catalog
 - Reference https://www.yangcatalog.org/yang-search/yang_tree.php?module=ieee802-dot1q-bridge

2. IETF Network Management Datastore Architecture (NMDA) WG has produced [draft-ietf-netmod-revised-datastores-03](#) which proposes guidelines for structuring YANG models

- For example, the new recommendation is that operational state information should not be modeled as a separate/independent (from the configuration) “branch” of the YANG model
- Our current 802.1Qcp and 802.Xck YANG models are structured such that the configuration information and operational information are contained within a separate “branches” of the model

3. All YANG modules associated with 802.1Qcp and 802.1Xck validate correctly

- Reference

<http://www.claise.be/IEEEStandardYANGPageCompilation.html>

4. Editor needs to update 802.1Qcp clause numbers to align with the clause numbers of other 802.1Q amendments

- PICS proforma clause A.43 needs to be updated to A.48
- Bibliography Annex Q needs to be updated to Annex V

5. IETF has a proposal to define `ethertype_type` in a more extensible and distributed manner

- For example, by utilizing YANG identities. However, doing so would result in loss of any prescribed format. For example

```
identity ip-ether-type {
  base rac-ether-type;
  description
    "IP ether-type of 0x0800";
  reference
    "Add the relevant RAC reference here"
}
```

- Current definition (as found in `ieee802-dot1-type`) is as follows:

```
typedef ethertype-type {
  type string {
    pattern '[0-9a-fA-F]{2}-[0-9a-fA-F]{2}';
  }
  description
    "The EtherType value represented in the canonical order defined
    by IEEE 802. The canonical representation uses uppercase
    characters.";
  reference
    "IEEE 802-2014 Clause 9.2";
}
```

Update



- However, EtherType values are administered by the IEEE Registration Authority Committee (RAC)
- As a consequence, the EtherTypes are centrally governed, and thus each EtherType could be defined as a well formatted string pattern (inline with IEEE 802 specification) as defined within one of our `ieee802` type modules