

DRAFT YANG FOR CFM P802.1Qcx

Scott Mansfield

scott.mansfield@ericsson.com

IEEE 802 Plenary, July, 2017, Berlin

INTRODUCTION



- › Update to Ericsson's draft of CFM YANG
- › Modifications to the structure of the Maintenance Domain hierarchy
- › Separate the Read/Write Configuration from the Read Only Operation trees
- › Review of other modifications
- › Future work

HIERARCHY CHANGE



- › From:
 - +--rw cfm
 - +--rw default-md
 - | +--rw entry* [component-name primary-vid]
 - +--rw cfm-vlan* [component-name vid]
 - +--rw md* [format md-name]
 - +--rw format cfm:maint-domain-name-type
 - +--rw md-name cfm:maint-domain-name
 - +--rw ma* [format ma-name]
 - +--rw format cfm:maint-assoc-name-type
 - +--rw ma-name cfm:maint-assoc-name
 - +--rw ma-comp* [component-name]
 - +--rw component-name -> /dot1q:bridges/bridge/component/name
 - +--rw mep* [mep-identifier]
 - | +--rw mep-identifier cfm:mep-id
 - +--rw mep-list* [mep-list-identifier]
 - +--rw mep-list-identifier cfm:mep-id
- › +md
- › +ma
- › +mep
- › To:
 - +md
 - +ma
 - +mep

RW/RO TREE SEPARATION



- › Augment the “cfm-state” from /dot1q:bridges/dot1q:bridge-state, and use the same hierarchy to create the RO tree

```
augment /dot1q:bridges-state/dot1q:bridge:
  +--ro cfm-state
    +--ro default-md
      | +--ro entry* [component-name primary-vid]
      |   +--ro status?      boolean
    +--ro md* [format md-name]
      | +--ro ma* [format ma-name]
      |   +--ro ma-comp* [component-name]
      |     +--ro comp-number-of-vids? uint32
      |     +--ro mep* [mep-identifier]
      |       +--ro fng-state?      cfm:fng-state
      |       +--ro cci-enabled?    boolean
      |       +--ro mep-db* [rmep-identifier]
      |         +--ro rmep-state?    cfm:remote-mep-state
    +--ro config-error-list* [vid if-index]
    +--ro stack* [if-index vlanid-or-none md-level direction]
```

OTHER CHANGES



- › MD key update
 - Update the md key from md-index to {format, md-name}, as md-index is specific to MIB.
- › MA key update
 - Update the md key from ma-index to {format, ma-name}, as ma-index is specific to MIB.
- › Component ID handling
 - More research needed
 - Current Draft
 - › Removes the definition of CfmPbbComponentIdentifier.
 - › Replaces the component-ID by component name and refers it to the Bridge.
 - component-name -> /dot1q:bridges/bridge/component/name
- › Reference section update according to IEEE 802.1q 2014.
- › Add the leaf-list active-rmep under mep
 - covers the gap from 802.1ag 2007 ->IEEE 802.1q 2014.
 - dot1agCfmMepDbRMepIsActive is newly introduced
- › Removed parent identifier-string from child node according to RFC 6087bis (5.3. Identifiers)
- › Removed intermediate node to reduce the complexity of hierarchy

FUTURE WORK



- › Continue refinement based on further research and comments
- › Continue to monitor other IEEE YANG efforts
- › Support
 - Loopback
 - Link Trace

MODELS



> YANG



ieee802-dot1ag-cfm.yang

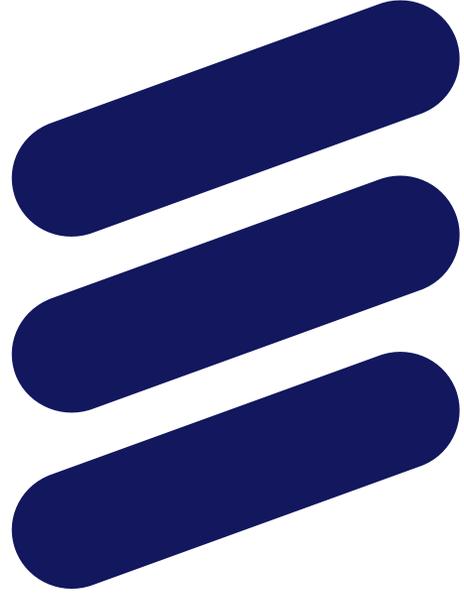
> TREE



ieee802-dot1ag-cfm.tree

NOTE: In Powerpoint double-click on the icon above

In PDF the files are attachments (View->Show/Hide->Navigation Panes->Attachments)



ERICSSON