

60802 Contribution: YANG node selection for IA-stations

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This contribution is intended to assist the resolution of IEC/IEEE 60802 D2.1 comments related to subclause 6.4.9.2.5.10 Bridge component:

#571: "Mandatory values in End Stations: it is unclear why the bridge YANG module is needed ..."

A reworked subclause 6.4.9.2.5.10 is provided as proposed resolution of the comments.

...

6.4.9.2.5.8 Hardware management

6.4.9.2.5.9 Interface management

6.4.9.2.5.10 Bridge and end station component management

IA-stations shall support the `ieee802-dot1q-bridge` YANG module according to IEEE Std 802.1Q-2022-2018, Clause 48, as amended by IEEE Std 802.1Qcw-2023 with the following feature: ingress-filtering.

IA-stations shall support the `ieee802-dot1q-bridge` YANG module according to IEEE Std 802.1Q-2022-2018, Clause 48, as amended by IEEE Std 802.1Qcw-2023 with the following nodes. A distinction is made between nodes that shall be supported by bridge and end station components, or by bridge components only:

bridge nodes to be supported by bridge and end station components:

- [m] `/ieee802-dot1q-bridge/bridges/bridge/name`
- [o] `/ieee802-dot1q-bridge/bridges/bridge/address`
- [m] `/ieee802-dot1q-bridge/bridges/bridge/bridge-type`
- [m] `/ieee802-dot1q-bridge/bridges/bridge/ports`
- [m] `/ieee802-dot1q-bridge/bridges/bridge/components`
- [m] `/ieee802-dot1q-bridge/bridges/bridge/component/name`
- [o] `/ieee802-dot1q-bridge/bridges/bridge/component/id`
- [m] `/ieee802-dot1q-bridge/bridges/bridge/component/type`
- [o] `/ieee802-dot1q-bridge/bridges/bridge/component/traffic-class-enabled`
- [m] `/ieee802-dot1q-bridge/bridges/bridge/component/ports`
- [o] `/ieee802-dot1q-bridge/bridges/bridge/component/bridge-port`
- [m] `/ieee802-dot1q-bridge/bridges/bridge/component/capabilities`
- [m] `/ieee802-dot1q-bridge/bridges/bridge/component/filtering-database/size`

- 44 • [o] /ieee802-dot1q-bridge/bridges/bridge/component/filtering-
45 database/static-vlan-registration-entries
- 46 • [o] /ieee802-dot1q-bridge/bridges/bridge/component/filtering-
47 database/vlan-registration-entry

48 [filtering-database nodes to be supported by bridge components:](#)

- 49 • [o] /ieee802-dot1q-bridge/bridges/bridge/component/filtering-
50 database/aging-time
- 51 • [o] /ieee802-dot1q-bridge/bridges/bridge/component/filtering-
52 database/static-entries
- 53 • [o] /ieee802-dot1q-bridge/bridges/bridge/component/filtering-
54 database/dynamic-entries
- 55 • [o] /ieee802-dot1q-bridge/bridges/bridge/component/filtering-
56 database/dynamic-vlan-registration-entries
- 57 • [o] /ieee802-dot1q-bridge/bridges/bridge/component/filtering-
58 database/mac-address-registration-entries
- 59 • [o] /ieee802-dot1q-bridge/bridges/bridge/component/filtering-
60 database/filtering-entry

61 [permanent-database nodes to be supported by bridge components:](#)

- 62 • [m] /ieee802-dot1q-bridge/bridges/bridge/component/permanent-
63 database/size
- 64 • [o] /ieee802-dot1q-bridge/bridges/bridge/component/permanent-
65 database/static-entries
- 66 • [o] /ieee802-dot1q-bridge/bridges/bridge/component/permanent-
67 database/static-vlan-registration-entries
- 68 • [o] /ieee802-dot1q-bridge/bridges/bridge/component/permanent-
69 database/filtering-entry

70 [bridge-vlan nodes to be supported by bridge and end station components:](#)

- 71 • [m] /ieee802-dot1q-bridge/bridges/bridge/component/bridge-
72 vlan/version
- 73 • [m] /ieee802-dot1q-bridge/bridges/bridge/component/bridge-vlan/max-
74 vids
- 75 • [o] /ieee802-dot1q-bridge/bridges/bridge/component/bridge-
76 vlan/override-default-pvid
- 77 • [o] /ieee802-dot1q-bridge/bridges/bridge/component/bridge-vlan/vlan

78 [bridge-vlan nodes to be supported by bridge components:](#)

- 79 • [m] /ieee802-dot1q-bridge/bridges/bridge/component/bridge-vlan/max-
80 msti
- 81 • [o] /ieee802-dot1q-bridge/bridges/bridge/component/bridge-vlan/vid-
82 to-fid-allocation
- 83 • [o] /ieee802-dot1q-bridge/bridges/bridge/component/bridge-vlan/fid-
84 to-vid-allocation
- 85 • [o] /ieee802-dot1q-bridge/bridges/bridge/component/bridge-vlan/vid-
86 to-fid

87 [bridge-mst nodes to be supported by bridge components:](#)

- 88 • [o] /ieee802-dot1q-bridge/bridges/bridge/component/bridge-mst

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- 90 [bridge-port nodes to be supported by bridge and end station components:](#)
- 91 • [m] /ietf-interfaces/interfaces/interface/bridge-port/bridge-name
 - 92 • [m] /ietf-interfaces/interfaces/interface/bridge-port/component-name
 - 93 • [m] /ietf-interfaces/interfaces/interface/bridge-port/port-type
 - 94 • [o] /ietf-interfaces/interfaces/interface/bridge-port/pvid
 - 95 • [o] /ietf-interfaces/interfaces/interface/bridge-port/default-
 - 96 priority
 - 97 • [m] /ietf-interfaces/interfaces/interface/bridge-port/traffic-class
 - 98 • [o] /ietf-interfaces/interfaces/interface/bridge-port/statistics

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101 Additional proposal for a rogue comment:

102 Various nodes which are mandatory for bridge-ports are missing in the Bridge-YANG node
103 selection (subclause 6.4.9.2.5.10)

104 Suggested remedy: add the bridge-port nodes

105 capabilities, type-capabilities, transmission-selection-algorithm-table,
106 priority-regeneration, acceptable-frame, enable-ingress-filtering, enable-
107 vid-translation-table, vid-translations, enable-egress-vid-translation-
108 table, egress-vid-translations

109 as described in this contribution.

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112 [bridge-port nodes to be supported by bridge and end station component ports:](#)

- 113 • [m] /ietf-interfaces/interfaces/interface/bridge-port/capabilities
- 114 • [m] /ietf-interfaces/interfaces/interface/bridge-port/type-
- 115 capabilities
- 116 • [o] /ietf-interfaces/interfaces/interface/bridge-port/transmission-
- 117 selection-algorithm-table

118 [bridge-port nodes to be supported by bridge component ports:](#)

- 119 • [o] /ietf-interfaces/interfaces/interface/bridge-port/priority-
- 120 regeneration
- 121 • [o] /ietf-interfaces/interfaces/interface/bridge-port/acceptable-
- 122 frame
- 123 • [o] /ietf-interfaces/interfaces/interface/bridge-port/enable-
- 124 ingress-filtering
- 125 • [o] /ietf-interfaces/interfaces/interface/bridge-port/enable-vid-
- 126 translation-table
- 127 • [o] /ietf-interfaces/interfaces/interface/bridge-port/vid-
- 128 translations
- 129 • [o] /ietf-interfaces/interfaces/interface/bridge-port/enable-egress-
- 130 vid-translation-table
- 131 • [o] /ietf-interfaces/interfaces/interface/bridge-port/egress-vid-
- 132 translations

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134 6.4.9.2.5.11 IEC/IEEE 60802 YANG module ...

135 6.4.9.2.5.12 NETCONF server

136 6.4.9.2.5.13 Subscribed Notifications

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138
139 This contribution is intended to assist the resolution of IEC/IEEE 60802 D2.1 comments
140 related to subclause 6.4.9.2.5.14 Per Stream Filtering and Policing

141 #130: "... clarify how flow meters can be assigned to ports."

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143 A reworked subclause 6.4.9.2.5.14 is provided as proposed resolution of the comment.

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146 6.4.9.2.5.14 Per Stream Filtering and Policing

147 IA-stations which incorporate a bridge component shall support the [ieee802-dot1q-stream-](#)
148 [filters-gates](#) YANG module according to IEEE Std 802.1Qcz-2023 as amended by IEEE Std
149 [802.1Qcw-2023](#) with the following nodes:

- 150 • [\[o\] /ieee802-dot1q-bridge/bridges/bridge/component/stream-](#)
151 [filters/stream-filter-instance-table/stream-filter-instance-id](#)
- 152 • [\[o\] /ieee802-dot1q-bridge/bridges/bridge/component/stream-](#)
153 [filters/stream-filter-instance-table/stream-handle](#)
- 154 • [\[o\] /ieee802-dot1q-bridge/bridges/bridge/component/stream-](#)
155 [filters/stream-filter-instance-table/flow-meter-ref](#)
- 156 • [\[o\] /ieee802-dot1q-bridge/bridges/bridge/component/stream-](#)
157 [filters/stream-filter-instance-table/flow-meter-enable](#)
- 158 • [\[m\] /ieee802-dot1q-bridge/bridges/bridge/component/stream-](#)
159 [filters/max-stream-filter-instances](#)

160 IA-stations which incorporate a bridge component shall support the [ieee802-dot1cb-stream-](#)
161 [identification](#) YANG module according to IEEE Std 802.1CBcv-2021 as amended by IEEE Std
162 [802.1CBdb-2021](#) with the following nodes:

- 163 • [\[o\] /ieee802-dot1cb-stream-identification/stream-identity/index](#)
- 164 • [\[o\] /ieee802-dot1cb-stream-identification/stream-identity/handle](#)
- 165 • [\[o\] /ieee802 dot1cb stream identification/stream identity/out-](#)
166 [facing/input-port](#)
- 167 • [\[o\] /ieee802 dot1cb stream identification/stream-identity/](#)
168 [parameters/mask-and-match-stream-identification/destination-mac-mask](#)
- 169 • [\[o\] /ieee802 dot1cb stream identification/stream-identity/](#)
170 [parameters/mask-and-match-stream-identification/destination-mac-](#)
171 [match](#)

172 NOTE For example, an implementation could contain [per out-facing/input-port one mask and match stream](#)
173 [identification for broadcast traffic, one mask and match stream identification for multicast traffic and one mask and](#)
174 [match stream identification for unicast traffic.](#)

175 IA-stations which incorporate a bridge component shall support the [ieee802-dot1q-psfp-bridge](#)
176 YANG module according to [IEEE Std 802.1Qcw-2023](#) with the following nodes:

- 177 • [\[o\] /ieee802-dot1q-psfp-bridge/bridges/bridge/component/flow-](#)
178 [meters/flow-meter-instance-table/flow-meter-instance-id](#)
- 179 • [\[o\] /ieee802-dot1q-psfp-bridge/bridges/bridge/component](#) /flow-
180 [meters/flow-meter-instance-table/committed-information-rate](#)

- 181 • [o] [/ieee802-dot1q-psfp-bridge/bridges/bridge/component](#)/flow-
182 meters/flow-meter-instance-table/committed-burst-size
- 183 • [o] [/ieee802-dot1q-psfp-bridge/bridges/bridge/component](#)/flow-
184 meters/flow-meter-instance-table/excess-information-rate
- 185 • [o] [/ieee802-dot1q-psfp-bridge/bridges/bridge/component](#)/flow-
186 meters/flow-meter-instance-table/excess-burst-size
- 187 • [o] [/ieee802-dot1q-psfp-bridge/bridges/bridge/component](#)/flow-
188 meters/flow-meter-instance-table/coupling-flag
- 189 • [o] [/ieee802-dot1q-psfp-bridge/bridges/bridge/component](#)/flow-
190 meters/flow-meter-instance-table/color-mode
- 191 • [o] [/ieee802-dot1q-psfp-bridge/bridges/bridge/component](#)/flow-
192 meters/flow-meter-instance-table/drop-on-yellow
- 193 • [m] [/ieee802-dot1q-psfp-bridge/bridges/bridge/component/flow-](#)
194 [meters/max-flow-meter-instances](#)
- 195
- 196