

1 **60802 Contribution: YANG node selection for IA-stations**

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4 Author:

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6 Josef Dorr (Siemens AG)

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

13 #571: "Mandatory values in End Stations: it is unclear why the bridge YANG module is
14 needed ..."

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

17 ...

18 6.4.9.2.5.8 Hardware management

19 6.4.9.2.5.9 Interface management

20 **6.4.9.2.5.10 Bridge and end station component management**

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

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

28 **6.4.9.2.5.10.1 Bridge nodes to be supported by bridge and end station components**

- 29 • [m] /ieee802-dot1q-bridge/bridges/bridge/name
- 30 • [o] /ieee802-dot1q-bridge/bridges/bridge/address
- 31 • [m] /ieee802-dot1q-bridge/bridges/bridge/bridge-type
- 32 • [m] /ieee802-dot1q-bridge/bridges/bridge/ports
- 33 • [m] /ieee802-dot1q-bridge/bridges/bridge/components
- 34 • [m] /ieee802-dot1q-bridge/bridges/bridge/component/name
- 35 • [o] /ieee802-dot1q-bridge/bridges/bridge/component/id
- 36 • [m] /ieee802-dot1q-bridge/bridges/bridge/component/type
- 37 • [o] /ieee802-dot1q-bridge/bridges/bridge/component/traffic-class-
38 enabled
- 39 • [m] /ieee802-dot1q-bridge/bridges/bridge/component/ports
- 40 • [o] /ieee802-dot1q-bridge/bridges/bridge/component/bridge-port
- 41 • [m] /ieee802-dot1q-bridge/bridges/bridge/component/capabilities
- 42 • [m] /ieee802-dot1q-bridge/bridges/bridge/component/filtering-
43 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

6.4.9.2.5.10.2 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

6.4.9.2.5.10.3 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

6.4.9.2.5.10.4 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

6.4.9.2.5.10.5 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

6.4.9.2.5.10.6 Bridge-mst nodes to be supported by bridge components

- 88 • [o] /ieee802-dot1q-bridge/bridges/bridge/component/bridge-mst
89

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

92 Suggested remedy: add the bridge-port nodes

93 capabilities, type-capabilities, transmission-selection-algorithm-table,
94 priority-regeneration, acceptable-frame, enable-ingress-filtering, enable-
95 vid-translation-table, vid-translations, enable-egress-vid-translation-
96 table, egress-vid-translations

97 as described in this contribution.

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100 **6.4.9.2.5.10.7 Bridge-port nodes to be supported by bridge and end station components**

- 101 • [m] /ietf-interfaces/interfaces/interface/bridge-port/bridge-name
102 • [m] /ietf-interfaces/interfaces/interface/bridge-port/component-name
103 • [m] /ietf-interfaces/interfaces/interface/bridge-port/port-type
104 • [o] /ietf-interfaces/interfaces/interface/bridge-port/pvid
105 • [o] /ietf-interfaces/interfaces/interface/bridge-port/default-
106 priority
107 • [m] /ietf-interfaces/interfaces/interface/bridge-port/traffic-class
108 • [o] /ietf-interfaces/interfaces/interface/bridge-port/statistics
109 • [m] /ietf-interfaces/interfaces/interface/bridge-port/capabilities
110 • [m] /ietf-interfaces/interfaces/interface/bridge-port/type-
111 capabilties
112 • [o] /ietf-interfaces/interfaces/interface/bridge-port/transmission-
113 selection-algorithm-table

114 **6.4.9.2.5.10.8 Bridge-port nodes to be supported by bridge component ports**

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

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130 6.4.9.2.5.11 IEC/IEEE 60802 YANG module ...

131 6.4.9.2.5.12 NETCONF server

132 6.4.9.2.5.13 Subscribed Notifications

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

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

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

6.4.9.2.5.14 ~~Per Stream Filtering and Policing~~Flow meter management

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

- [o] /ieee802-dot1q-bridge/bridges/bridge/component/stream-filters/stream-filter-instance-table/stream-filter-instance-id
- [o] /ieee802-dot1q-bridge/bridges/bridge/component/stream-filters/stream-filter-instance-table/stream-handle
- [o] /ieee802-dot1q-bridge/bridges/bridge/component/stream-filters/stream-filter-instance-table/flow-meter-ref
- [o] /ieee802-dot1q-bridge/bridges/bridge/component/stream-filters/stream-filter-instance-table/flow-meter-enable
- [m] /ieee802-dot1q-bridge/bridges/bridge/component/stream-filters/max-stream-filter-instances

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

- [o] /ieee802-dot1cb-stream-identification/stream-identity/index
- [o] /ieee802-dot1cb-stream-identification/stream-identity/handle
- [o] /ieee802-dot1cb-stream-identification/stream-identity/out-facing/input-port
- [o] /ieee802-dot1cb-stream-identification/stream-identity/parameters/mask-and-match-stream-identification/destination-mac-mask
- [o] /ieee802-dot1cb-stream-identification/stream-identity/parameters/mask-and-match-stream-identification/destination-mac-match

NOTE For example, an implementation could contain per out-facing/input-port one mask and match stream identification for broadcast traffic, one mask and match stream identification for multicast traffic and one mask and match stream identification for unicast traffic.

IA-stations which incorporate a bridge component shall support the ieee802-dot1q-psfp-bridge YANG module according to IEEE Std 802.1Qcw-2023 with the following nodes:

- [o] /ieee802-dot1q-psfp-bridge/bridges/bridge/component/flow-meters/flow-meter-instance-table/flow-meter-instance-id
- [o] /ieee802-dot1q-psfp-bridge/bridges/bridge/component/flow-meters/flow-meter-instance-table/committed-information-rate
- [o] /ieee802-dot1q-psfp-bridge/bridges/bridge/component/flow-meters/flow-meter-instance-table/committed-burst-size
- [o] /ieee802-dot1q-psfp-bridge/bridges/bridge/component/flow-meters/flow-meter-instance-table/excess-information-rate

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