

YANG Instances

Authors:

Josef Dorr, Siemens AG

Martin Mittelberger, Siemens AG

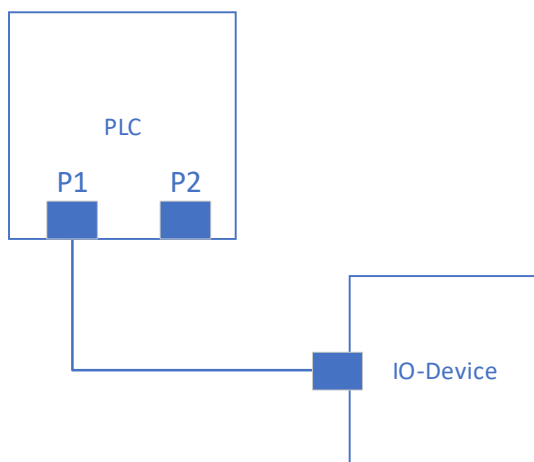
Günter Steindl, Siemens AG

1 Overview

This document describes YANG instances for the following structure of devices:

1 IO-Device is connected to 1 PLC.

There is one stream “a” from the PLC to the IO-Device and one stream “b” back.

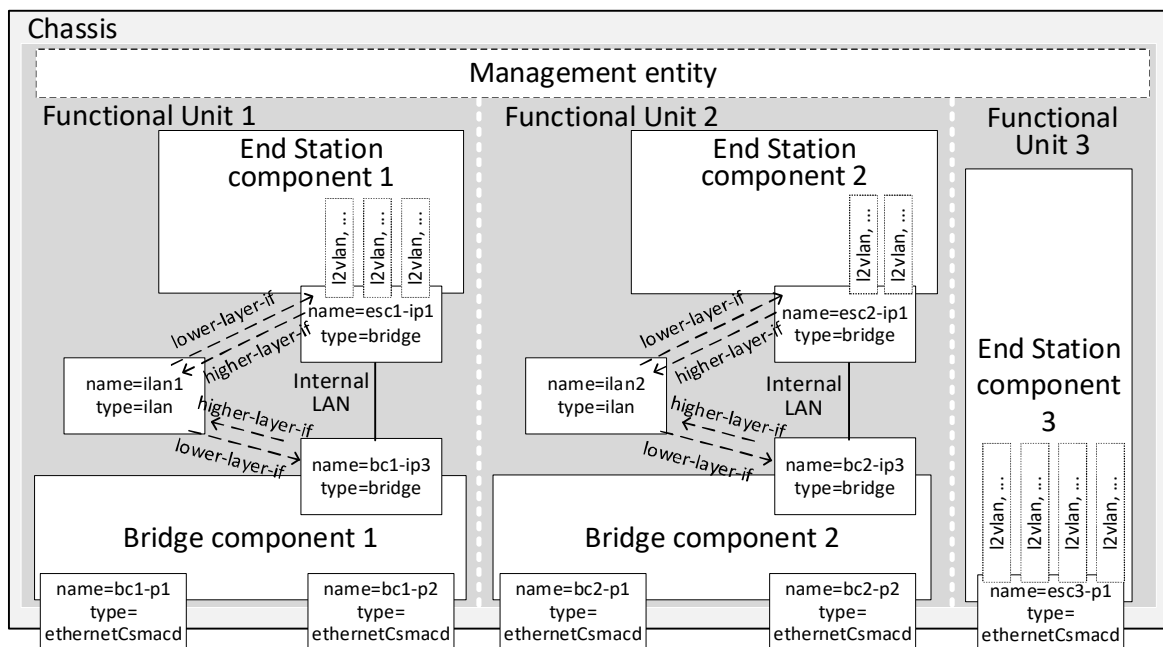


Non-stream VLAN: 100

VLAN for Stream a and b: 101

2 Internal Structure

The internal structure is modelled according the IA-station example shown in Fig. 5 in the contribution [60802-Dorr-YANG-reconciled-0522-v01.pdf](#):



2.1 Interfaces

2.1.1 bc1-p1

ifType: ethernetCsmacd
mac-address: none

2.1.2 bc1-p2

ifType: ethernetCsmacd
mac-address: none

2.1.3 bc1-ip3

ifType: bridge
mac-address: none

2.1.4 ilan1

ifType: ilan
mac-address: none

2.1.5 esc1-ip1

ifType: bridge
mac-address: aa-bb-cc-dd-ee-05

2.2 VLANs / Streams

2.2.1 VLAN 100

Default-VLAN (Non-stream)

2.2.2 VLAN 101

Stream a from PLC to ET200.
Stream-DA: 00-11-22-33-44-01

Stream b from ET200 to PLC.
Stream-DA: 00-11-22-33-44-02

3.1 Interfaces

```
interfaces/interface
name: bcl-p1
description: Bridge component 1, port 1
type: ethernetCsmacd
oper-status: up
phys-address: -
higher-layer-if: -
lower-layer-if: -
speed: 1000000
statistics: ...
```

bridge-port

```
bridge-name: bcl
port-type: c-vlan-bridge-port
pvid: 100
default-priority: 0
priority-regeneration:
  priority0: 0
  ...
  priority7->7
traffic-class-v2/traffic-class-table:
  traffic-class: 0
  priority: index:0->priority:0
  ...
  priority: index:7->priority:7
transmission-selection-algorithm-map:
  traffic-class: 0
transmission-selection-algorithm:
  strict-priority
acceptable-frame: admit-only-VLAN-
tagged-frames
enable-ingress-filtering: true
enable-restricted-vlan-registration:
false
enable-vid-translation-table: true
enable-egress-vid-translation-table:
true
admin-point-to-point: force-true
```

```
interfaces/interfacename: bcl-p2
description: Bridge component 1, port 2
type: ethernetCsmacd
oper-status: up
phys-address: -
higher-layer-if: -
lower-layer-if: -
speed: 1000000
statistics: ...
```

bridge-port

```
bridge-name: bcl
port-type: c-vlan-bridge-port
pvid: 100
default-priority: 0
priority-regeneration:
  priority0: 0
  ...
  priority7->0
traffic-class-v2/traffic-class-table:
  traffic-class: 0
  priority: index:0->priority:0
  ...
  priority: index:7->priority:7
transmission-selection-algorithm-map:
  traffic-class: 0
transmission-selection-algorithm:
  strict-priority
acceptable-frame: admit-all-frames
enable-ingress-filtering: true
enable-restricted-vlan-registration:
false
enable-vid-translation-table: true
enable-egress-vid-translation-table:
true
admin-point-to-point: force-true
```

```
interfaces/interface
name: bcl-ip3
description: Bridge component 1,
  internal port 3
type: bridge
oper-status: up
phys-address: -
higher-layer-if: ilan1
lower-layer-if: -
speed: 100G
statistics: ...
```

bridge-port

```
bridge-name: bcl
port-type: c-vlan-bridge-port
pvid: 100
default-priority: 0
priority-regeneration:
  priority0: 0
  ...
  priority7->0
traffic-class-v2/traffic-class-table:
  traffic-class: 0
  priority: index:0->priority:0
  ...
  priority: index:7->priority:7
```

interfaces/interface

```
name: ilan1
description: Internal LAN 1
type: ilan
oper-status: up
phys-address: -
higher-layer-if: -
lower-layer-if: bc1-ip3
lower-layer-if: escl-ip1
speed: 100G
statistics: ...
```

interfaces/interface

```
name: esc-ip1
description: <Unique TAG identifying the
configuring CNC>
type: bridge
oper-status: up
phys-address: aa-bb-cc-dd-ee-ff-05
higher-layer-if: ilan1
lower-layer-if: 60802-beh-pcp1-vid100
lower-layer-if: 60802-iso-pcp7-vid101
speed: 100G
statistics: ...
```

bridge-port

```
bridge-name: escl
port-type: c-vlan-bridge-port
pvid: 100
default-priority: 0
priority-regeneration:
  priority0: 0
  ...
  priority7->0
traffic-class-v2/traffic-class-table:
  traffic-class: 0
  priority: index:0->priority:0
  ...
  priority: index:7->priority:7
```

interfaces/interface

```
name: 60802-beh-pcp1-vid100
description: Interface for VID 100
type: l2vlan
oper-status: up
phys-address: -
higher-layer-if: -
lower-layer-if: esc-ip1
speed: 100G
statistics: ...
```

interfaces/interface

```
name: 60802-iso-pcp7-vid101
description: Interface for VID 101
type: l2vlan
oper-status: up
phys-address: -
higher-layer-if: -
lower-layer-if: esc-ip1
speed: 100G
statistics: ...
```

3.2 Bridge

```
bridge
name: functional-unit-1
address: aa-bb-cc-dd-ee-05
bridge-type: customer-vlan-bridge
components: 2
```

```
component
name: bcl
type: c-vlan-component
traffic-class-enabled: true
```

```
filtering-data-base
aging-time: 300
filtering-entry:
  database-id: 1
  address: aa-bb-cc-dd-ee-05
  vids: 100
  entry-type: static
  port-map:
    port-ref: bcl-ip3
    control-element: forward
filtering-entry: // IO-device stream a outbound
  database-id: 2
  address: 00-11-22-33-44-01
  vids: 101
  entry-type: static
  port-map:
    port-ref: bcl-p1
    control-element: forward
filtering-entry: // IO-device stream b inbound
  database-id: 2
  address: 00-11-22-33-44-02
  vids: 101
  entry-type: static
  port-map:
    port-ref: bcl-ip3
    control-element: forward
vlan-registration-entry:
  database-id: 1
  vids: 100
  entry-type: static
  port-map:
    port-ref: bcl-p1
    registrar-admin-control: fixed-new-ignored
    vlan-transmitted: tagged
  port-map:
    port-ref: bcl-p2
    registrar-admin-control: fixed-new-ignored
    vlan-transmitted: untagged
  port-map:
    port-ref: bcl-ip3
    registrar-admin-control: fixed-new-ignored
    vlan-transmitted: tagged
vlan-registration-entry:
  database-id: 2
  vids: 101
  entry-type: static
  port-map:
    port-ref: bcl-p1
    registrar-admin-control: fixed-new-ignored
    vlan-transmitted: tagged
  port-map:
    port-ref: bcl-ip3
    registrar-admin-control: fixed-new-ignored
    vlan-transmitted: tagged
```

```
bridge-vlan
version: 2
max-vids: 128
override-default-pvid: true
max-msti: 1
vlan:
  vid: 100
  name: VID100
  egress-ports: bcl-p1
  egress-ports: bcl-p2
  egress-ports: bc-ip3
  vid: 101
  name: VID101
  egress-ports: bcl-p1
  egress-ports: bc-ip3
vid-to-fid-allocation:
  vids: 100
  fid: 1
  allocation-type: fixed
vid-to-fid-allocation:
  vids: 101
  fid: 2
  allocation-type: fixed
fid-to-vid-allocation:
  fid: 1
  allocation-type: fixed
  vid: 100
fid-to-vid-allocation:
  fid: 2
  allocation-type: fixed
  vid: 101
vid-to-fid:
  vid: 100
  fid: 1
vid-to-fid:
  vid: 101
  fid: 2
```

```
bridge-mst
mstid: 4094
fid-to-mstid:
  fid: 2
  mstid: 4094
// all other fids are assigned to mstid 0
```

```
component
name: escl
type: c-vlan-component
traffic-class-enabled: true
```

```
filtering-data-base
aging-time: 300
vlan-registration-entry:
  database-id: 1
  vids: 100
  entry-type: static
  port-map:
    port-ref: escl-ipl
    registrar-admin-control: fixed-new-ignored
    vlan-transmitted: tagged
  database-id: 2
  vids: 101
  entry-type: static
  port-map:
    port-ref: escl-ipl
    registrar-admin-control: fixed-new-ignored
    vlan-transmitted: tagged
  port-map:
    port-ref: escl-ipl
    registrar-admin-control: fixed-new-ignored
    vlan-transmitted: tagged
```

```
bridge-vlan
version: 2
max-vids: 128
override-default-pvid: true
max-msti: 1
vlan:
  vid: 100
  name: VID100
  egress-ports: escl-ipl
  vid: 101
  name: VID101
  egress-ports: escl-ipl
vid-to-fid-allocation:
  vids: 100
  fid: 1
  allocation-type: fixed
vid-to-fid-allocation:
  vids: 101
  fid: 2
  allocation-type: fixed
fid-to-vid-allocation:
  fid: 1
  allocation-type: fixed
  vid: 100
fid-to-vid-allocation:
  fid: 2
  allocation-type: fixed
  vid: 101
vid-to-fid:
  vid: 100
  fid: 1
vid-to-fid:
  vid: 101
  fid: 2
```

```
bridge-mst
mstid: 4094
fid-to-mstid:
  fid: 2
  mstid: 4094
```

4 Instance file of running PLC1

The blue lines are readonly elements.

Only the black data has to be set by configuration.

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- this is an example of a instance-data-set for an 608020 IA-Station -->
<instance-data-set xmlns="urn:ietf:params:xml:ns:yang:ietf-yang-instance-data">
  <name>60802-PLC_Example</name>
  <content-schema>
    <inline-yang-library>
      <module-set xmlns="urn:ietf:params:xml:ns:yang:ietf-yang-library">
        <name>CPU_Example</name>
        <module>
          <name>ietf-system</name>
          <namespace>urn:ietf:params:xml:ns:yang:ietf-system</namespace>
        </module>
        <module>
          <name>ietf-hardware</name>
          <namespace>urn:ietf:params:xml:ns:yang:ietf-hardware</namespace>
        </module>
        <module>
          <name>ietf-interface</name>
          <namespace>urn:ietf:params:xml:ns:yang:ietf-interface</namespace>
        </module>
        <module>
          <name>ietf-dot1q-bridge</name>
          <namespace>urn:ietf:params:xml:ns:yang:ietf-dot1q-bridge</namespace>
        </module>
        <module>
          <name>ietf-yang-library</name>
          <namespace>urn:ietf:params:xml:ns:yang:ietf-yang-library</namespace>
        </module>
      </module-set>
    </inline-yang-library>
  </content-schema>
  <description>This is an example of a PLC as an IA station</description>
  <contact>martin.mittelberger@siemens.com</contact>
  <revision>
    <date>2022-05-12</date>
    <description>Draft version</description>
  </revision>

<!-- ***** -->
<!-- ***** Content-Data is starting here ***** -->
<!-- ***** -->

  <content-data>
    <ietf-system xmlns="urn:ietf:params:xml:ns:yang:ietf-system">
      <system>
        <contact>Any contact name</contact>
        <domain-name>Any domain name</domain-name>
        <location>Any system location</location>
      </system>
    </ietf-system>
    <ietf-hardware xmlns="urn:ietf:params:xml:ns:yang:ietf-hardware">
      <hardware>
        <component> <!-- list -->
          <name>Any PLC</name>
          <mfg-name>Any company</mfg-name>
          <model-name>Any model name</model-name>
        </component>
      </hardware>
    </ietf-hardware>
    <ietf-interface xmlns="urn:ietf:params:xml:ns:yang:ietf-interface">
      <interfaces>
        <interface>
          <name>bc1-pl</name>
          <description>Bridge component 1, port 1</description>
          <type>ethernetCsmacd</type>
        </interface>
      </interfaces>
    </ietf-interface>
  </content-data>
</instance-data-set>
```



```
<oper-status>up</oper-status>
<phys-address></phys-address>
<higher-layer-if></higher-layer-if>
<lower-layer-if></lower-layer-if>
<speed>100000000</speed>
<statistics>
  <discontinuity-time>2022-04-20T08:33:21+01:00</discontinuity-time>
  <in-octets>100</in-octets>
  <in-discards>0</in-discards>
  <in-errors>0</in-errors>
  <out-octets>100</out-octets>
  <out-discards>0</out-discards>
  <out-errors>0</out-errors>
</statistics>
<bridge-port xmlns="urn:ietf:params:xml:ns:yang:ieee802-dot1q-bridge">
  <bridge-name>bcl</bridge-name>
  <component-name>Bridge component 1</component-name>
  <port-type>c-vlan-bridge-port</port-type>
  <pvid>100</pvid>
  <default-priority>0</default-priority>
  <priority-regeneration>
    <priority0>0</priority0>
    <priority1>1</priority1>
    <priority2>2</priority2>
    <priority3>3</priority3>
    <priority4>4</priority4>
    <priority5>5</priority5>
    <priority6>6</priority6>
    <priority7>7</priority7>
  </priority-regeneration>
  <traffic-class-v2>
    <traffic-class-table>
      <traffic-class>0</traffic-class>
      <priority>
        <index>0</index>
        <priority>0</priority>
      </priority>
      <priority>
        <index>1</index>
        <priority>1</priority>
      </priority>
      <priority>
        <index>2</index>
        <priority>2</priority>
      </priority>
      <priority>
        <index>3</index>
        <priority>3</priority>
      </priority>
      <priority>
        <index>4</index>
        <priority>4</priority>
      </priority>
      <priority>
        <index>5</index>
        <priority>5</priority>
      </priority>
      <priority>
        <index>6</index>
        <priority>6</priority>
      </priority>
      <priority>
        <index>7</index>
        <priority>7</priority>
      </priority>
    </traffic-class-table>
  </traffic-class-v2>
  <transmission-selection-algorithm-table>
    <transmission-selection-algorithm-map>
      <traffic-class>0</traffic-class>
      <transmission-selection-algorithm>strict-priority</transmission-
selection-algorithm>
    </transmission-selection-algorithm-map>
  </transmission-selection-algorithm-table>
  <acceptable-frame>admit-only-VLAN-tagged-frames</acceptable-frame>
  <enable-ingress-filtering>true</enable-ingress-filtering>
</bridge-port>
```

```
registration> <enable-restricted-vlan-registration>>false</enable-restricted-vlan-
<enable-vid-translation-table>>true</enable-vid-translation-table>
table> <enable-egress-vid-translation-table>>true</enable-egress-vid-translation-

<admin-point-to-point>force-true</admin-point-to-point>
<statistics>
  <counter></counter>
  <vid-translations> <!-- list -->
    <local-vid></local-vid>
    <relay-vid></relay-vid>
  </vid-translations>
  <egress-vid-translations> <!-- list -->
    <relay-vid></relay-vid>
    <local-vid></local-vid>
  </vid-translations>
</statistics>
</bridge-port>
</interface>
<interface>
  <name>bc1-p2</name>
  <description>Bridge component 1, port 2</description>
  <type>ethernetCsmacd</type>
  <oper-status>up</oper-status>
  <phys-address></phys-address>
  <higher-layer-if></higher-layer-if>
  <lower-layer-if></lower-layer-if>
  <speed>1000000000</speed>
  <statistics>
    <discontinuity-time>2022-04-20T08:33:21+01:00</discontinuity-time>
    <in-octets>100</in-octets>
    <in-discards>0</in-discards>
    <in-errors>0</in-errors>
    <out-octets>100</out-octets>
    <out-discards>0</out-discards>
    <out-errors>0</out-errors>
  </statistics>
  <bridge-port xmlns="urn:ietf:params:xml:ns:yang:ieee802-dot1q-bridge">
    <bridge-name>bc1</bridge-name>
    <component-name>Bridge component 1</component-name>
    <port-type>c-vlan-bridge-port</port-type>
    <pvid>100</pvid>
    <default-priority>0</default-priority>
    <priority-regeneration>
      <priority0>0</priority0>
      <priority1>1</priority1>
      <priority2>2</priority2>
      <priority3>3</priority3>
      <priority4>4</priority4>
      <priority5>5</priority5>
      <priority6>6</priority6>
      <priority7>7</priority7>
    </priority-regeneration>
    <traffic-class-v2>
      <traffic-class-table>
        <traffic-class>0</traffic-class>
        <priority>
          <index>0</index>
          <priority>0</priority>
        </priority>
        <priority>
          <index>1</index>
          <priority>1</priority>
        </priority>
        <priority>
          <index>2</index>
          <priority>2</priority>
        </priority>
        <priority>
          <index>3</index>
          <priority>3</priority>
        </priority>
        <priority>
          <index>4</index>
          <priority>4</priority>
        </priority>
        <priority>
          <index>5</index>
          <priority>5</priority>
        </priority>
        <priority>
          <index>6</index>
          <priority>6</priority>
        </priority>
        <priority>
          <index>7</index>
          <priority>7</priority>
        </priority>
      </traffic-class-table>
    </traffic-class-v2>
  </bridge-port>
</interface>
```

```
        <index>5</index>
        <priority>5</priority>
    </priority>
    <priority>
        <index>6</index>
        <priority>6</priority>
    </priority>
    <priority>
        <index>7</index>
        <priority>7</priority>
    </priority>
</traffic-class-table>
</traffic-class-v2>
<transmission-selection-algorithm-table>
    <transmission-selection-algorithm-map>
        <traffic-class>0</traffic-class>
        <transmission-selection-algorithm>strict-priority</transmission-
selection-algorithm>
    </transmission-selection-algorithm-map>
</transmission-selection-algorithm-table>
<acceptable-frame>admit-all-frames</acceptable-frame>
<enable-ingress-filtering>true</enable-ingress-filtering>
<enable-restricted-vlan-registration>false</enable-restricted-vlan-
registration>
<enable-vid-translation-table>true</enable-vid-translation-table>
<enable-egress-vid-translation-table>true</enable-egress-vid-translation-
table>
<admin-point-to-point>force-true</admin-point-to-point>
<statistics>
    <counter></counter>
    <vid-translations> <!-- list -->
        <local-vid></local-vid>
        <relay-vid></relay-vid>
    </vid-translations>
    <egress-vid-translations> <!-- list -->
        <relay-vid></relay-vid>
        <local-vid></local-vid>
    </vid-translations>
</statistics>
</bridge-port>
</interface>
<interface>
    <name>bc1-ip3</name>
    <description>Bridge component 1, internal port 3 </description>
    <type>bridge</type>
    <oper-status>up</oper-status>
    <phys-address></phys-address>
    <higher-layer-if>ilan1</higher-layer-if>
    <lower-layer-if></lower-layer-if>
    <speed>100G</speed>
    <statistics>
        <discontinuity-time>2022-04-20T08:33:21+01:00</discontinuity-time>
        <in-octets>100</in-octets>
        <in-discards>0</in-discards>
        <in-errors>0</in-errors>
        <out-octets>100</out-octets>
        <out-discards>0</out-discards>
        <out-errors>0</out-errors>
    </statistics>
    <bridge-port xmlns="urn:ietf:params:xml:ns:yang:ieee802-dot1q-bridge">
        <bridge-name>bc1</bridge-name>
        <component-name>bc1</component-name>
        <port-type>c-vlan-bridge-port</port-type>
        <pvid>100</pvid>
        <default-priority>0</default-priority>
        <traffic-class-v2>
            <traffic-class-table>
                <number-of-traffic-classes>8</number-of-traffic-classes>
                <priority0>1</priority0>
                <priority1>0</priority1>
                <priority2>2</priority2>
                <priority3>3</priority3>
                <priority4>4</priority4>
                <priority5>5</priority5>
                <priority6>6</priority6>
                <priority7>7</priority7>
            </traffic-class-table>
```

```
        </traffic-class-v2>
    </bridge-port>
</interface>
<interface>
  <name>ilan1</name>
  <description>Internal LAN 1</description>
  <type>ilan</type>
  <oper-status>up</oper-status>
  <phys-address></phys-address>
  <higher-layer-if></higher-layer-if>
  <lower-layer-if>bc1-ip3</lower-layer-if>
  <lower-layer-if>esc1-ip1</lower-layer-if>
  <speed>100G</speed>
  <statistics>
    <discontinuity-time>2022-04-20T08:33:21+01:00</discontinuity-time>
    <in-octets>100</in-octets>
    <in-discards>0</in-discards>
    <in-errors>0</in-errors>
    <out-octets>100</out-octets>
    <out-discards>0</out-discards>
    <out-errors>0</out-errors>
  </statistics>
</interface>
<interface>
  <name>esc1-ip1</name>
  <description><Unique TAG identifying the configuring CNC></description>
  <type>bridge</type>
  <oper-status>up</oper-status>
  <phys-address>aa-bb-cc-dd-ee-05</phys-address>
  <higher-layer-if>ilan1</higher-layer-if>
  <lower-layer-if>60802-beh-pcpl-vid100</lower-layer-if>
  <lower-layer-if>60802-iso-pcp7-vid101</lower-layer-if>
  <speed>100G</speed>
  <statistics>
    <discontinuity-time>2022-04-20T08:33:21+01:00</discontinuity-time>
    <in-octets>100</in-octets>
    <in-discards>0</in-discards>
    <in-errors>0</in-errors>
    <out-octets>100</out-octets>
    <out-discards>0</out-discards>
    <out-errors>0</out-errors>
  </statistics>
</interface>
</interfaces>
</ietf-interface>
<ieee802-dot1q-bridge xmlns="urn:ietf:params:xml:ns:yang:ieee802-dot1q-bridge">
  <bridges>
    <bridge> <!-- list -->
      <name>functional-unit-1</name>
      <address>aa-bb-cc-dd-ee-05</address>
      <bridge-type>customer-vlan-bridge</bridge-type>
      <ports>4</ports>
      <components>2</components>
      <component> <!-- list -->
        <name>bc1</name>
        <type>c-vlan-component</type>
        <traffic-class-enabled>true</traffic-class-enabled>
        <ports>3</ports>
        <bridge-port>bc1-p1</bridge-port>
        <bridge-port>bc1-p2</bridge-port>
        <bridge-port>bc1-ip3</bridge-port>
        <capabilities>
          <extended-filtering>false</extended-filtering>
          <traffic-classes>true</traffic-classes>
          <static-entry-individual-port>false</static-entry-individual-port>
          <ivl-capable>true</ivl-capable>
          <svl-capable>true</svl-capable>
          <hybrid-capable>true</hybrid-capable>
          <configurable-pvid-tagging>??</configurable-pvid-tagging>
          <local-vlan-capable>false</local-vlan-capable>
        </capabilities>
        <filtering-data-base>
          <aging-time>300</aging-time>
          <size>??</size>
          <static-entries>4</static-entries>
          <dynamic-entries>0</dynamic-entries>
          <static-vlan-registration-entries>2</static-vlan-registration-entries>
        </filtering-data-base>
      </component>
    </bridge>
  </bridges>
</ieee802-dot1q-bridge>
```

```
</dynamic-vlan-registraion-entries>0</dynamic-vlan-registraion-entries>
<mac-address-registration-entries>0</mac-address-registration-entries>
<filtering-entry>
  <database-id>1</database-id>
  <address>aa-bb-cc-dd-ee-05</address> <!-- IO-Device -->
  <vids>100</vids>
  <entry-type>static</entry-type>
  <port-map>
    <port-ref>bc1-ip3</port-ref>
    <control-element>forward</control-element>
  </port-map>
  <status>mgmt</status>
</filtering-entry>
<filtering-entry>
  <database-id>2</database-id>
  <address>00-11-22-33-44-01</address> <!-- IO-Device Stream a
outbound -->
  <vids>101</vids>
  <entry-type>static</entry-type>
  <port-map>
    <port-ref>bc1-p1</port-ref>
    <control-element>forward</control-element>
  </port-map>
  <status>mgmt</status>
</filtering-entry>
<filtering-entry>
  <database-id>2</database-id>
  <address>00-11-22-33-44-02</address> <!-- ET200 Stream b inbound -->
  <vids>101</vids>
  <entry-type>static</entry-type>
  <port-map>
    <port-ref>bc1-ip3</port-ref>
    <control-element>forward</control-element>
  </port-map>
  <status>mgmt</status>
</filtering-entry>
<vlan-registration-entry>
  <database-id>1</database-id>
  <vids>100</vids>
  <entry-type>static</entry-type>
  <port-map>
    <port-ref>bc1-p1</port-ref>
    <registrar-admin-control>fixed-new-ignored</registrar-admin-
control>
    <vlan-transmitted>tagged</vlan-transmitted>
  </port-map>
  <port-map>
    <port-ref>bc1-p2</port-ref>
    <registrar-admin-control>fixed-new-ignored</registrar-admin-
control>
    <vlan-transmitted>untagged</vlan-transmitted>
  </port-map>
  <port-map>
    <port-ref>bc1-ip3</port-ref>
    <registrar-admin-control>fixed-new-ignored</registrar-admin-
control>
    <vlan-transmitted>tagged</vlan-transmitted>
  </port-map>
</vlan-registration-entry>
<vlan-registration-entry>
  <database-id>2</database-id>
  <vids>101</vids>
  <entry-type>static</entry-type>
  <port-map>
    <port-ref>bc1-p1</port-ref>
    <registrar-admin-control>fixed-new-ignored</registrar-admin-
control>
    <vlan-transmitted>tagged</vlan-transmitted>
  </port-map>
  <port-map>
    <port-ref>bc1-ip3</port-ref>
    <registrar-admin-control>fixed-new-ignored</registrar-admin-
control>
    <vlan-transmitted>tagged</vlan-transmitted>
  </port-map>
</vlan-registration-entry>
</filtering-data-base>
```

```
<permanent-data-base> <!-- out of scope of 60802 -->
  <size></size>
  <static-entries></static-entries>
  <static-vlan-registration-entries></static-vlan-registration-entries>
  <filtering-entry> <!-- list -->
  </filtering-entry>
</permanent-data-base>
<bridge-vlan>
  <version>2</version> <!-- MST supported -->
  <max-vids>128</max-vids>
  <override-default-pvid>true</override-default-pvid>
  <max-msti>1</max-msti>
  <vlan> <!-- list -->
    <vid>100</vid>
    <name>VID100</name>
    <egress-ports>bcl-p1</egress-ports>
    <egress-ports>bcl-p2</egress-ports>
    <egress-ports>bcl-ip3</egress-ports>
  </vlan>
  <vlan> <!-- list -->
    <vid>101</vid>
    <name>VID101</name>
    <egress-ports>bcl-p1</egress-ports>
    <egress-ports>bcl-ip3</egress-ports>
  </vlan>
  <vid-to-fid-allocation>
    <vids>100</vids>
    <fid>1</fid>
    <allocation-type>fixed</allocation-type>
  </vid-to-fid-allocation>
  <vid-to-fid-allocation>
    <vids>101</vids>
    <fid>2</fid>
    <allocation-type>fixed</allocation-type>
  </vid-to-fid-allocation>
  <fid-to-vid-allocation>
    <fid>1</fid>
    <allocation-type>fixed</allocation-type>
    <vid>100</vid>
  </fid-to-vid-allocation>
  <fid-to-vid-allocation>
    <fid>2</fid>
    <allocation-type>fixed</allocation-type>
    <vid>101</vid>
  </fid-to-vid-allocation>
  <vid-to-fid>
    <vid>100</vid>
    <fid>1</fid>
  </vid-to-fid>
  <vid-to-fid>
    <vid>101</vid>
    <fid>2</fid>
  </vid-to-fid>
</bridge-vlan>
<bridge-mst>
  <mstid>4094</mstid>
  <fid-to-mstid>
    <fid>2</fid>
    <mstid>4094</mstid>
  </fid-to-mstid>
</bridge-mst>
</component>
<component> <!-- list -->
  <name>escl</name>
  <type>c-vlan-component</type>
  <traffic-class-enabled>true</traffic-class-enabled>
  <ports>1</ports>
  <bridge-port>escl-ip1</bridge-port>
  <capabilities>
    <extended-filtering>>false</extended-filtering>
    <traffic-classes>true</traffic-classes>
    <static-entry-individual-port>>false</static-entry-individual-port>
    <ivl-capable>true</ivl-capable>
    <svl-capable>true</svl-capable>
    <hybrid-capable>true</hybrid-capable>
    <configurable-pvid-tagging>??</configurable-pvid-tagging>
    <local-vlan-capable>>false</local-vlan-capable>
  </capabilities>
</component>
```

```
</capabilities>
<filtering-data-base>
  <aging-time>300</aging-time>
  <size>??</size>
  <static-entries>2</static-entries>
  <dynamic-entries>0</dynamic-entries>
  <static-vlan-registration-entries>2</static-vlan-registration-entries>
  <dynamic-vlan-registraion-entries>0</dynamic-vlan-registraion-entries>
  <mac-address-registration-entries>0</mac-address-registration-entries>
  <vlan-registration-entry>
    <database-id>1</database-id>
    <vids>100</vids>
    <entry-type>static</entry-type>
    <port-map>
      <port-ref>esc1-ip1</port-ref>
      <registrar-admin-control>fixed-new-ignored</registrar-admin-
control>
        <vlan-transmitted>tagged</vlan-transmitted>
      </port-map>
    </vlan-registration-entry>
  <vlan-registration-entry>
    <database-id>2</database-id>
    <vids>101</vids>
    <entry-type>static</entry-type>
    <port-map>
      <port-ref>esc1-ip1</port-ref>
      <registrar-admin-control>fixed-new-ignored</registrar-admin-
control>
        <vlan-transmitted>tagged</vlan-transmitted>
      </port-map>
    </vlan-registration-entry>
</filtering-data-base>
<permanent-data-base> <!-- out of scope of 60802 -->
  <size></size>
  <static-entries></static-entries>
  <static-vlan-registration-entries></static-vlan-registration-entries>
  <filtering-entry> <!-- list -->
  </filtering-entry>
</permanent-data-base>
<bridge-vlan>
  <version>2</version> <!-- MST supported -->
  <max-vids>128</max-vids>
  <override-default-pvid>true</override-default-pvid>
  <max-msti>1</max-msti>
  <vlan> <!-- list -->
    <vid>100</vid>
    <name>VID100</name>
    <egress-ports>esc-ip1</egress-ports>
  </vlan>
  <vlan> <!-- list -->
    <vid>101</vid>
    <name>VID101</name>
    <egress-ports>esc1-ip1</egress-ports>
  </vlan>
  <vid-to-fid-allocation>
    <vids>100</vids>
    <fid>1</fid>
    <allocation-type>fixed</allocation-type>
  </vid-to-fid-allocation>
  <vid-to-fid-allocation>
    <vids>101</vids>
    <fid>2</fid>
    <allocation-type>fixed</allocation-type>
  </vid-to-fid-allocation>
  <fid-to-vid-allocation>
    <fid>1</fid>
    <allocation-type>fixed</allocation-type>
    <vid>100</vid>
  </fid-to-vid-allocation>
  <fid-to-vid-allocation>
    <fid>2</fid>
    <allocation-type>fixed</allocation-type>
    <vid>101</vid>
  </fid-to-vid-allocation>
  <vid-to-fid>
    <vid>100</vid>
    <fid>1</fid>
```

```
        </vid-to-fid>
        <vid-to-fid>
          <vid>101</vid>
          <fid>2</fid>
        </vid-to-fid>
      </bridge-vlan>
      <bridge-mst>
        <mstid>4094</mstid>
        <fid-to-mstid>
          <fid>2</fid>
          <mstid>4094</mstid>
        </fid-to-mstid>
      </bridge-mst>
    </component>
  </bridge>
</bridges>
</ieee802-dot1q-bridge>
</content-data>
</instance-data-set>
```