

IEEE P802.1Xck YANG Instance Document

IEEE 802 Plenary Meeting

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Version 4.0
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Introduction

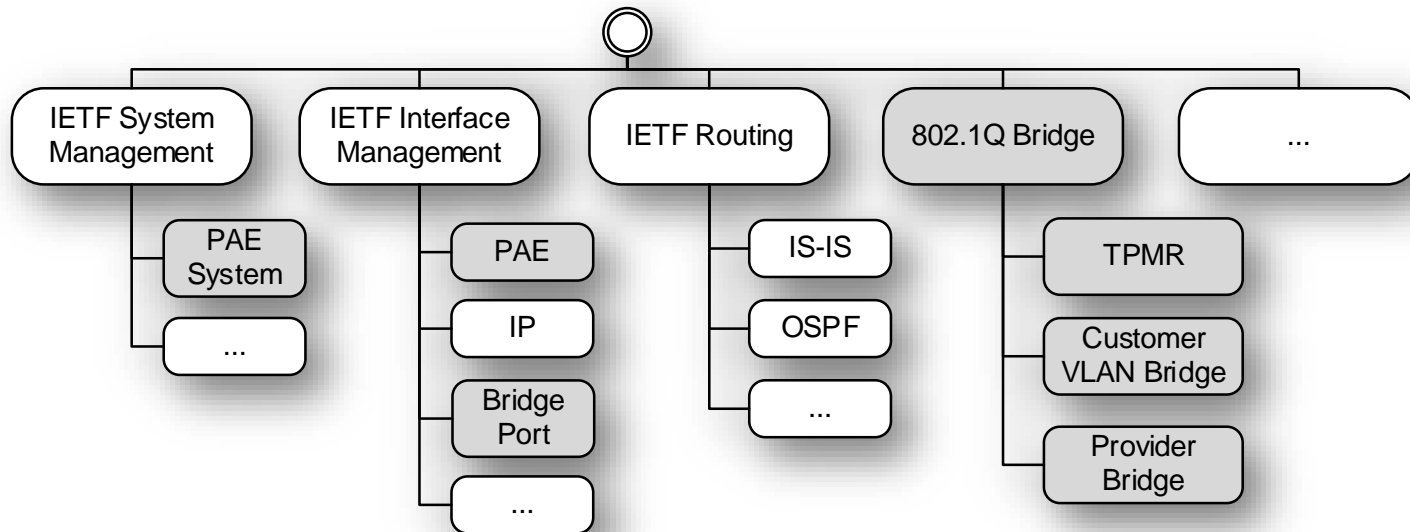


- This package provides “configuration instances” of various aspect of the P802.1Xck version D1.1 YANG modules

802.1 YANG Structure and Relationships

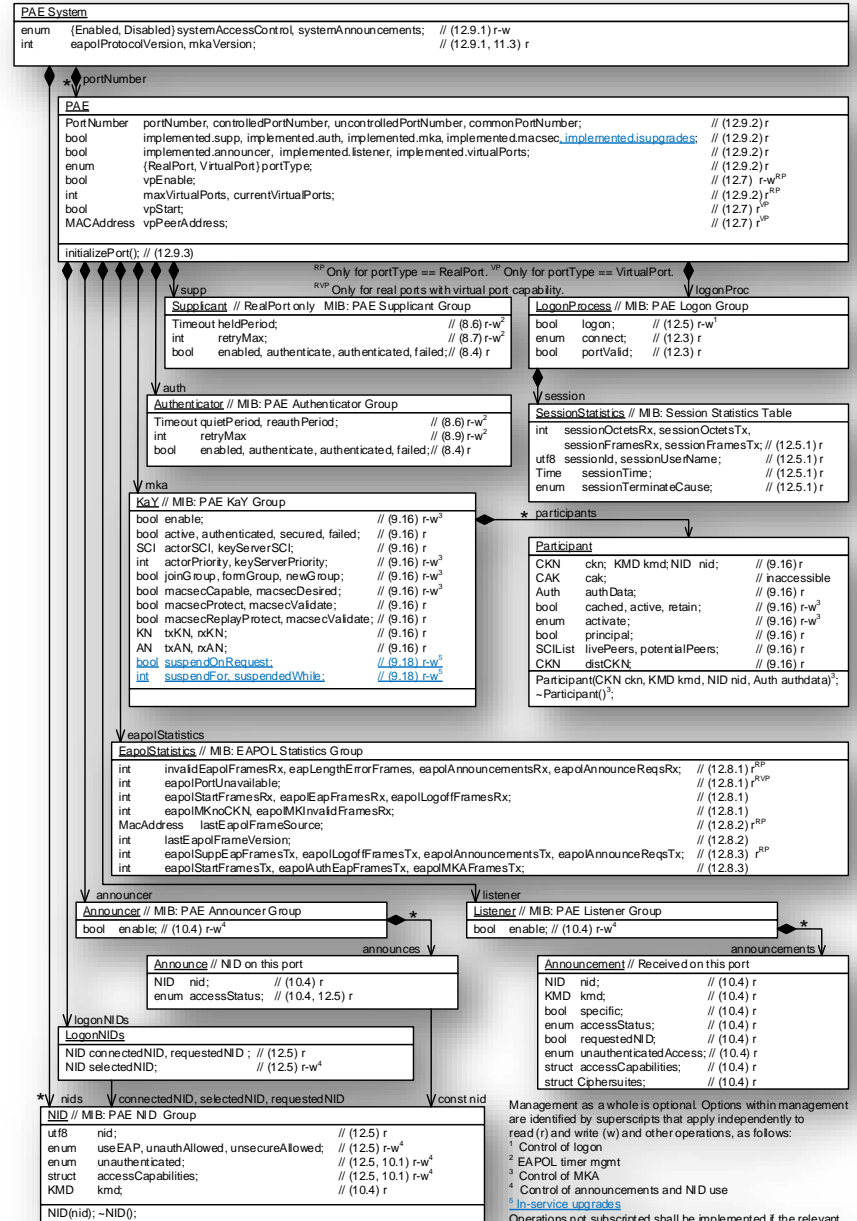


- The following hi-level YANG structure and relationships were defined



PAE Management Information Model

- The PAE management process controls and monitors the operation of each PAE's component protocol entities and processes, providing access to operational controls, statistics and diagnostic capabilities
- The management information that provides control over and reporting of these capabilities is summarized in the model to the right



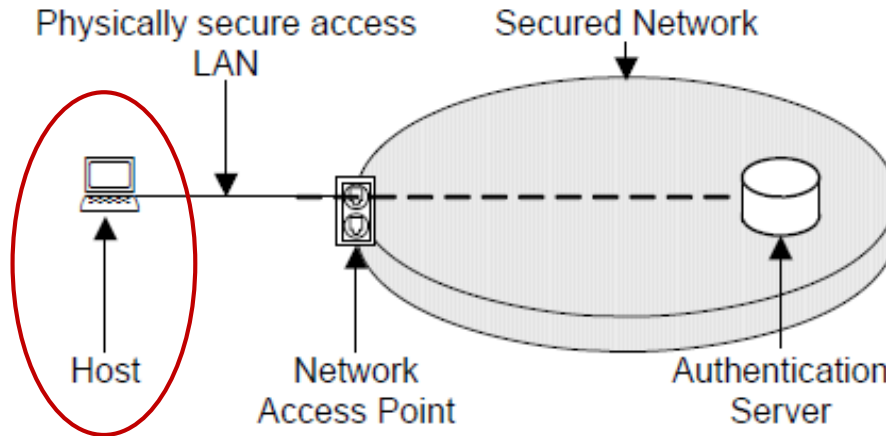
Management as a whole is optional. Options within management are identified by superscripts that apply independently to read (r) and write (w) and other operations, as follows:

- ¹ Control of logon
- ² EAPoL timer mgmt
- ³ Control of MKA
- ⁴ Control of announcements and NID use

^{RP} In-service upgrades
 Operations not subscripted shall be implemented if the relevant capability is identified as implemented by the PAE.

Example Host Accessing Network Access Point

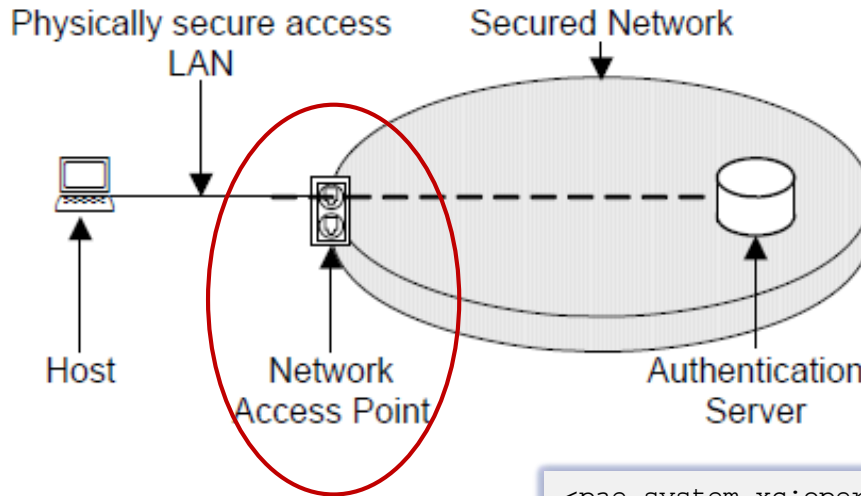
— Physically secure point-to-point LAN



```
<interfaces xc:operation="create">
  <interface>
    <name>if1</name>
    <type>ethernetCsmacd</type>
    <pae>
      <pae-system>aPAESystem</pae-system>
      <port-type>real-port</port-type>
      <logon-process>
        <logon>true</logon>
      </logon-process>
    </pae>
  </interface>
</interfaces>
```

```
<pae-system xc:operation="create">
  <name>aPAESystem</name>
  <system-access-control>enabled</system-access-control>
  <system-announcements>disabled</system-announcements>
</pae-system>
```

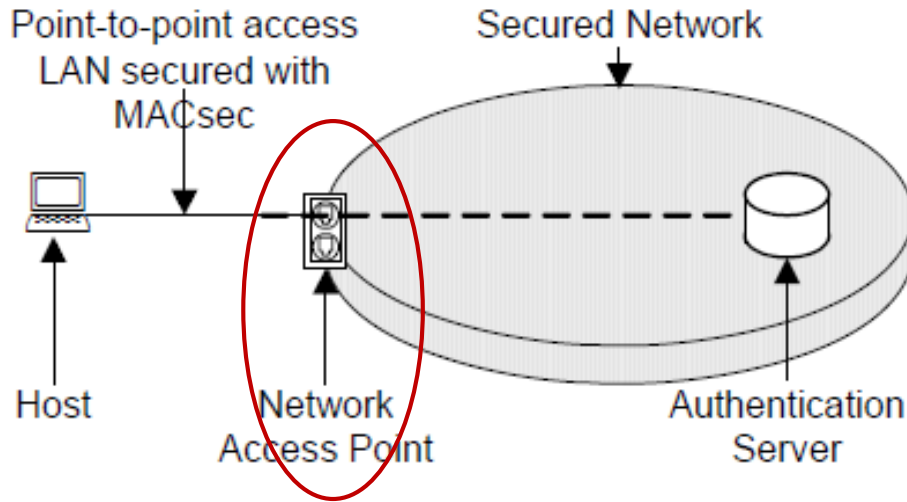
Example Network Access Point supporting Host — Physically secure point-to-point LAN



```
<interfaces xc:operation="create">
  <interface>
    <name>if1</name>
    <type>ethernetCsmacd</type>
    <pae>
      <pae-system>aPAESystem</pae-system>
      <port-type>real-port</port-type>
      <logon-process>
        <logon>>true</logon>
      </logon-process>
    </pae>
  </interface>
</interfaces>
```

```
<pae-system xc:operation="create">
  <name>aPAESystem</name>
  <system-access-control>enabled</system-access-control>
  <system-announcements>disabled</system-announcements>
</pae-system>
```

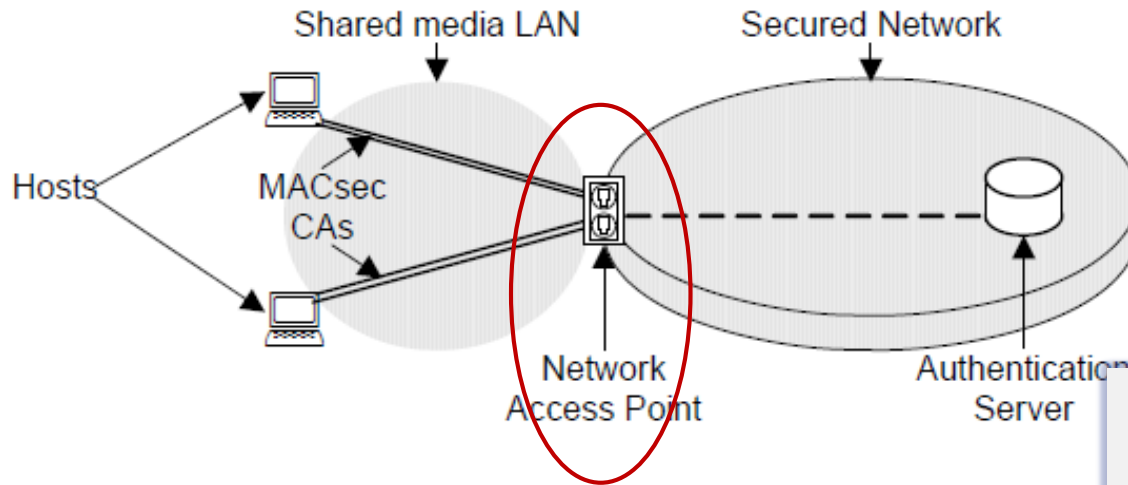
Example Network Access Point supporting Host — MACsec and point-to-point LAN



```
<pae-system xc:operation="create">
  <name>aPAESystem</name>
  <system-access-control>enabled</system-access-control>
  <system-announcements>disabled</system-announcements>
</pae-system>
```

```
<interfaces xc:operation="create">
  <interface>
    <name>if1</name>
    <type>ethernetCsmacd</type>
    <pae>
      <pae-system>aPAESystem</pae-system>
      <port-type>real-port</port-type>
      <kay>
        <enable>true</enable>
        <macsec>
          <capable>true</capable>
        </macsec>
      </kay>
      <listener>
        <enable>true</enable>
      </listener>
      <logon-process>
        <logon>true</logon>
      </logon-process>
    </pae>
  </interface>
</interfaces>
```

Example Network Access Point supporting Host — MACsec and multi-access LAN



```
<pae-system xc:operation="create">
  <name>aPAESystem</name>
  <system-access-control>enabled</system-access-control>
  <system-announcements>disabled</system-announcements>
</pae-system>
```

```
<interfaces xc:operation="create">
  <interface>
    <name>if1</name>
    <type>ethernetCsmacd</type>
    <pae>
      <pae-system>aPAESystem</pae-system>
      <port-type>virtual-port</port-type>
      <vp-enable>true</vp-enable>
      <kay>
        <enable>true</enable>
        <macsec>
          <capable>true</capable>
        </macsec>
      </kay>
      <listener>
        <enable>true</enable>
      </listener>
      <logon-process>
        <logon>true</logon>
      </logon-process>
    </pae>
  </interface>
</interfaces>
```