

YANG based Config for MAC Privacy 802.1AEdk Questions

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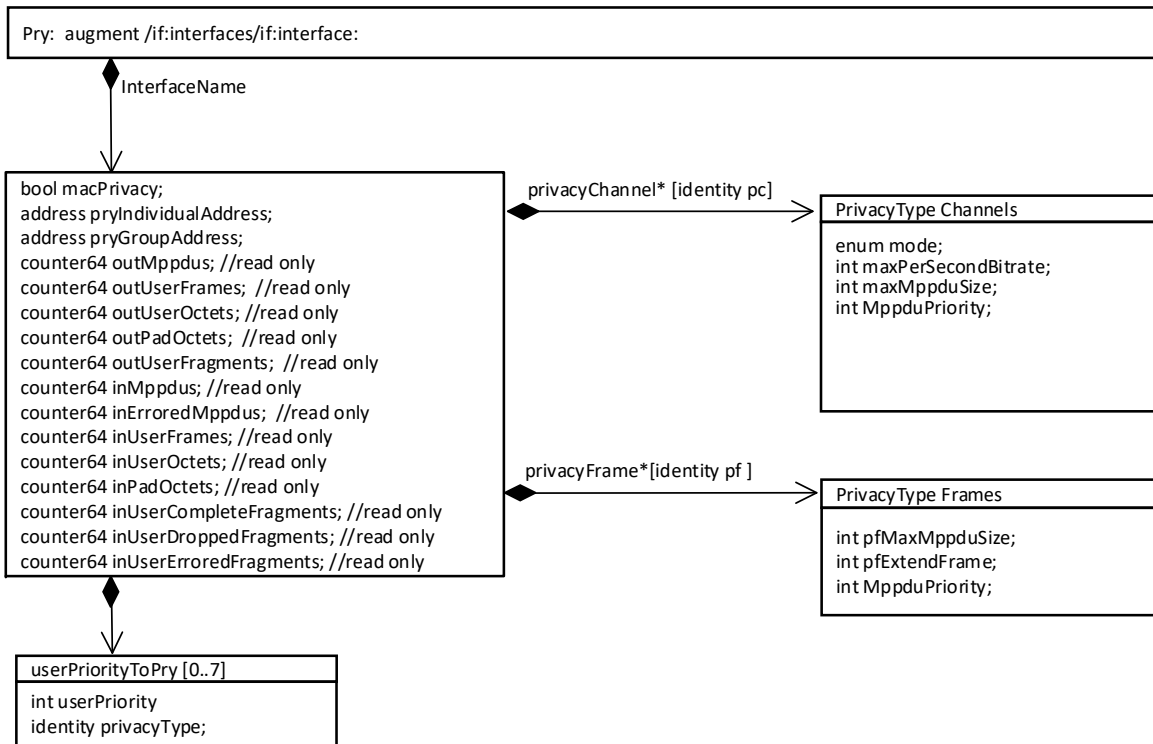
Outline

- Proto Config for MAC Privacy
- Moving configuration to standard language

Forward

- This presentation is for a discussion on detailed config.
- It may contain errors/omission and should be consider a work in progress.
- An updated version the presentation will be posted after discussion to correct it but it will remain a work in progress.

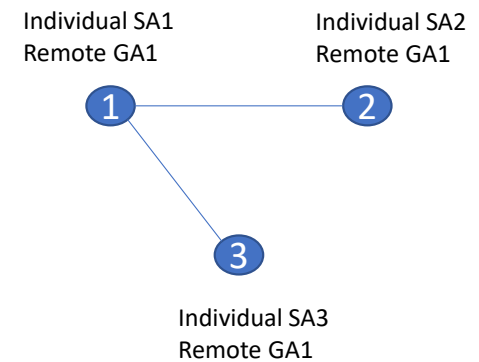
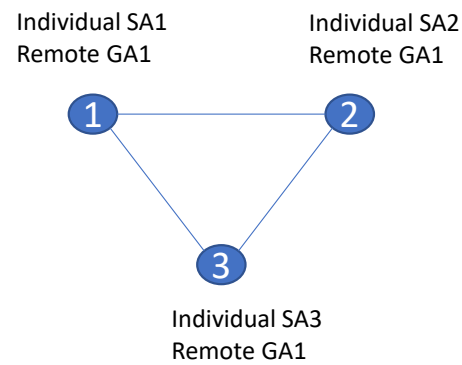
Current minimal View



Addressing

- Two options
 - Point to Point
 - Point to Multipoint
- Configuration
 - One individual address for Source and Destination
 - Can it be a chassis MAC shared with other components?
 - Propose Yes it has and EtherType so the Frames are identified by MAC DA and Ethernet type
 - How to configure a shared address?
 - One address for the destination.
 - Ether a remote individual address or
 - A shared group address?
- How is misconfiguration prevented?
 - MACsec can help when collocated provides authentication
 - When not collocated is it an issue?

Addressing – Only SA and DA or ?



How to indicate this?

On the Wire 2 and three
Accept on GA1 but send
With the learned address
Of DA1 as the Destination address

How is traffic mapped to the Bypass port?

- Current mapping uses ingress Port/VLAN to component.
- We should be able to finer grain classifiers to steer traffic to the bypass port.

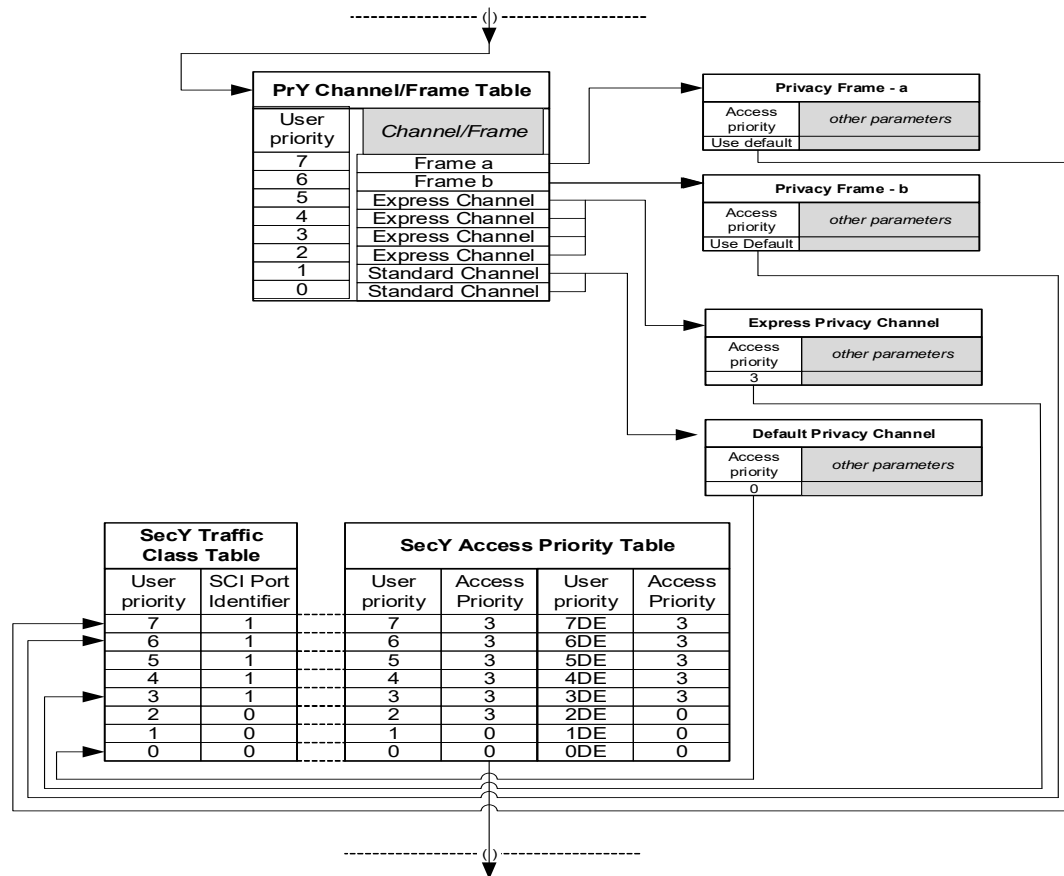
Privacy Chanel Config

- maxFrameSize;
 - Cannot accept frames larger than this (is overhead included)
- maxPerSecond Bitrate – useful to enforce bandwidth Applications can auto adjust below this level.
- MppduPriority
 - DE can be transparently passed through unless multiple user frames are included in the MPPDU

Privacy Frame Config

- MaxMppduSize;
 - Cannot accept frames larger than this (is overhead included)
- MinMppduSize;
 - Standard states minimum only
- ExtendFrame;
 - Standard recommends only
- MppduPriority
 - DE can be transparently passed through unless multiple user frames are included in the MPPDU

Priority Mapping



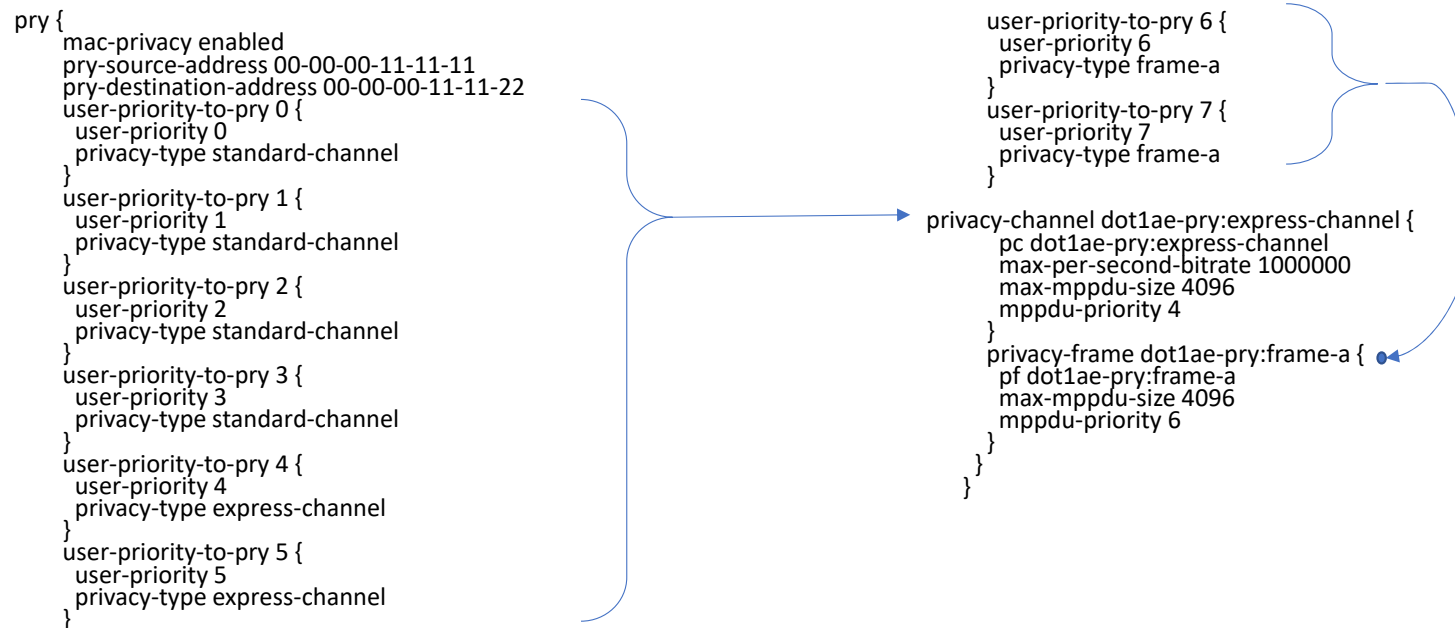
Statistics

+--ro out-mppdus?	yang:counter64
+--ro out-user-frames?	yang:counter64
+--ro out-user-octets?	yang:counter64
+--ro out-pad-octets?	yang:counter64
+--ro out-user-fragments?	yang:counter64
+--ro in-mppdus?	yang:counter64
+--ro in-errored-mppdus?	yang:counter64
+--ro in-user-frames?	yang:counter64
+--ro in-errored-user-frames?	yang:counter64
+--ro in-user-octets?	yang:counter64
+--ro in-pad-octets?	yang:counter64
+--ro in-user-fragments?	yang:counter64
+--ro in-user-dropped-fragments?	yang:counter64
+--ro in-user-errored-fragments?	yang:counter64

Other?

- Is there any other config?

Output from the Prototype YANG



Data Table Entry Notes

```
create /interfaces/interface[name='oep1']/secy/generation/user-pcp-ac[access-priority='0'][(user-pcp='0')
create /interfaces/interface[name='oep1']/secy/generation/user-pcp-ac[access-priority='1'][(user-pcp='1')
create /interfaces/interface[name='oep1']/secy/generation/user-pcp-ac[access-priority='2'][(user-pcp='2')
create /interfaces/interface[name='oep1']/secy/generation/user-pcp-ac[access-priority='3'][(user-pcp='3')
create /interfaces/interface[name='oep1']/secy/generation/user-pcp-ac[access-priority='4'][(user-pcp='4')
create /interfaces/interface[name='oep1']/secy/generation/user-pcp-ac[access-priority='5'][(user-pcp='5')
create /interfaces/interface[name='oep1']/secy/generation/user-pcp-ac[access-priority='6'][(user-pcp='6')
create /interfaces/interface[name='oep1']/secy/generation/user-pcp-ac[access-priority='7'][(user-pcp='7')
create /interfaces/interface[name='oep1']/secy/generation/user-pcp-ac[access-priority='8'][(user-pcp='8')
create /interfaces/interface[name='oep1']/secy/generation/user-pcp-ac[access-priority='9'][(user-pcp='9')
create /interfaces/interface[name='oep1']/secy/generation/user-pcp-ac[access-priority='10'][(user-pcp='10')
create /interfaces/interface[name='oep1']/secy/generation/user-pcp-ac[access-priority='11'][(user-pcp='11')
create /interfaces/interface[name='oep1']/secy/generation/user-pcp-ac[access-priority='12'][(user-pcp='12')
create /interfaces/interface[name='oep1']/secy/generation/user-pcp-ac[access-priority='13'][(user-pcp='13')
create /interfaces/interface[name='oep1']/secy/generation/user-pcp-ac[access-priority='14'][(user-pcp='14')
create /interfaces/interface[name='oep1']/secy/generation/user-pcp-ac[access-priority='15'][(user-pcp='15')
create /interfaces/interface[name='oep1']/secy/generation/user-priority-tc[traffic-class='0'][(user-priority='0')
create /interfaces/interface[name='oep1']/secy/generation/user-priority-tc[traffic-class='1'][(user-priority='1')
create /interfaces/interface[name='oep1']/secy/generation/user-priority-tc[traffic-class='2'][(user-priority='2')
create /interfaces/interface[name='oep1']/secy/generation/user-priority-tc[traffic-class='3'][(user-priority='3')
create /interfaces/interface[name='oep1']/secy/generation/user-priority-tc[traffic-class='4'][(user-priority='4')
create /interfaces/interface[name='oep1']/secy/generation/user-priority-tc[traffic-class='5'][(user-priority='5')
create /interfaces/interface[name='oep1']/secy/generation/user-priority-tc[traffic-class='6'][(user-priority='6')
create /interfaces/interface[name='oep1']/secy/generation/user-priority-tc[traffic-class='7'][(user-priority='7')
```

Data Entry

```
create /interfaces/interface[name='oep1']/secy/generation/user-priority-tc[traffic-class='0'][user-priority='0'] [access-priority='15'] [access-de-priority='15']
create /interfaces/interface[name='oep1']/secy/generation/user-priority-tc[traffic-class='1'][user-priority='1'] [access-priority='15'] [access-de-priority='15']
create /interfaces/interface[name='oep1']/secy/generation/user-priority-tc[traffic-class='2'][user-priority='2'] [access-priority='15'] [access-de-priority='15']
create /interfaces/interface[name='oep1']/secy/generation/user-priority-tc[traffic-class='3'][user-priority='3'] [access-priority='15'] [access-de-priority='15']
create /interfaces/interface[name='oep1']/secy/generation/user-priority-tc[traffic-class='4'][user-priority='4'] [access-priority='15'] [access-de-priority='15']
create /interfaces/interface[name='oep1']/secy/generation/user-priority-tc[traffic-class='5'][user-priority='5'] [access-priority='15'] [access-de-priority='15']
create /interfaces/interface[name='oep1']/secy/generation/user-priority-tc[traffic-class='6'][user-priority='6'] [access-priority='15'] [access-de-priority='15']
create /interfaces/interface[name='oep1']/secy/generation/user-priority-tc[traffic-class='7'][user-priority='7'] [access-priority='15'] [access-de-priority='15']
```