IEC/IEEE 60802 internal LAN connection model

Interface naming



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Current state in IEC/IEEE 60802 D1.4

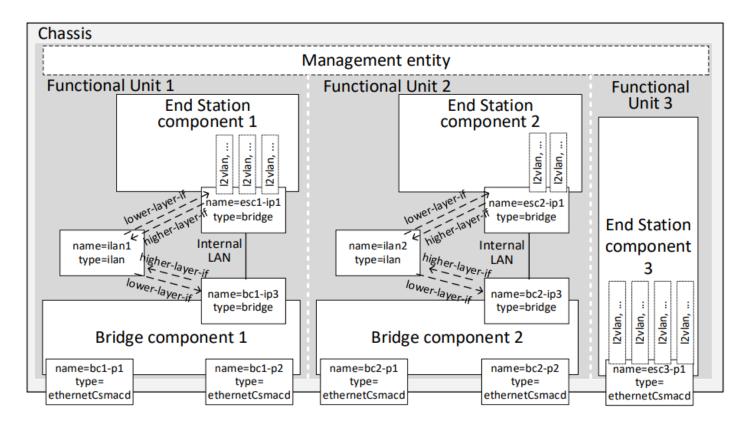


Figure 21 - IA-station example with IETF interfaces

- IETF Interfaces of type I2vlan are used to allow late binding of IA-station applications to the configured VLANs and priorities.
- The naming of these interfaces follows a convention defined in IEC/IEEE 60802 to allow the required translations for VLAN-ID and PCP values
- The interface naming scheme is as follows: 60802-<TrafficType>-pcp<PCPvalue>-vid<VIDvalue>[-R]



End Station Component with 2 physical interfaces

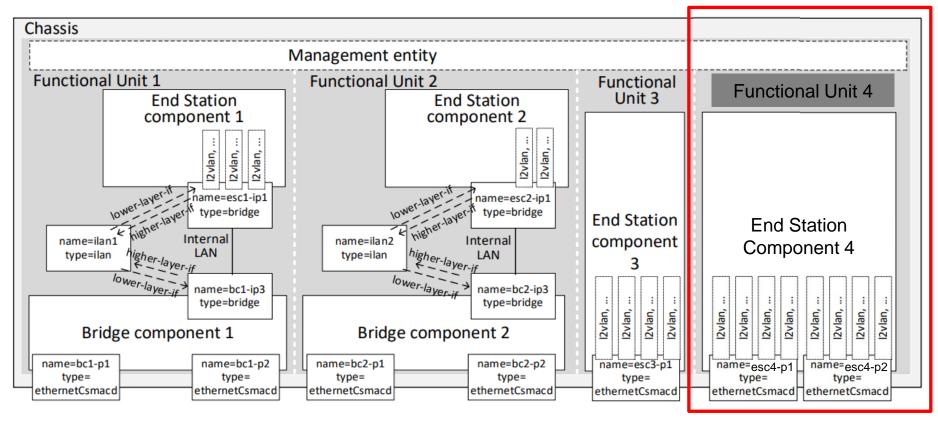
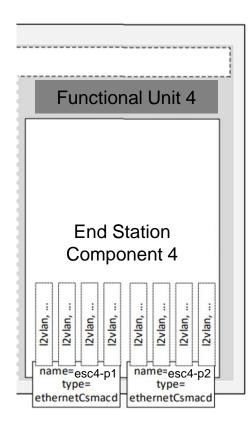


Figure 21 - IA-station example with IETF interfaces

- But: End Station Components can have multiple ports, without a Bridge component (new functional unit 4)
- The naming of IETF Interface for the physical interface is unique, but what about the I2vlan interfaces?



Problem: duplicate I2vlan interfaces



Scenario:

- Each port is connected to a different physical network
- Application reads a sensor in one network and writes an actor in the other network.
- Both is asynchronous cyclic traffic, and both use VLAN 100.
- Network Management / CNC configures two l2vlan interfaces according to the IEC/IEEE 60802 naming scheme: 60802-asynchronous-cyclic-pcp4-vid100
- Each of the two l2vlan interfaces is either assigned to esc4-p1 or esc4-p2

Problem:

- How to differentiate between the different physical ports from the application or network management?
- Proposal: Add the physical interface name to the naming scheme for the virtual interfaces
 60802-asynchronous-cyclic-interface-pcp4-vid100



Thank you!

Any questions?

