YANG

• The YANG representation of the IA-station’s local database seems to be the preferred solution

• Following this decision, the Digital Data Sheet should be a YANG model, too

Open:
Do we miss any YANG models for the 60802?
Many YANG modules for the standards stated in D1.3 are already available:

- `ieee802-ethernet-interface`
  IEEE Standard for Ethernet – YANG Data Model Definitions
  Reference: IEEE Std802.3.2-2019 Clause 5

- `ieee1588-ptp`
  YANG Data Model for the configuration and status of IEEE 1588 clocks
  Reference: IEEE P1588v2-D0-1

- `ieee802-dot1a-bridge`
  Bridges and Bridged Networks - Amendment: YANG Data Model
  Reference: IEEE P802.1Q/F2.2 Clause 48 and IEEE P802.1Qcw/D1.2 Clause 48

- `ieee802-dot1ab-lldp`
  Station and Media Access Control Connectivity Discovery Amendment: YANG Data Model
  Reference: IEEE P802.1ABcu/D1.6 Clause 12

- `ieee802-dot1a-sched`
  YANG Data Model for scheduled traffic
  Reference: IEEE P802.1Qcw/D1.2 Clause 48

- `ieee802-dot1a-preemption`
  YANG Data Model for Pre-emption
  Reference: IEEE P802.1Qcw/D1.2 Clause 48

- `ieee802-dot1ab-lldp-basic-tlv`
  Basic set of IEEE 802.1 Organizationally Specific TLVs
  Reference: IEEE P802.1Qz/D2.0

- `ieee802-dot1a-psf`
  YANG Data Model for Per Stream Filtering and Policing
  Reference: IEEE P802.1Qcw/D1.2 Clause 48

- `ieee802-dot1c-b-stream-identification`
  Frame Replication and Elimination for Reliability – Amendment: Information Model, YANG Data Model and Management Information Base Module
  Reference: IEEE P802.1Cbcv/D1.3 Clause 12

- `ieee802-dot1cb-frer`
  Frame Replication and Elimination for Reliability – Amendment: Information Model, YANG Data Model and Management Information Base Module
  Reference: IEEE P802.1Cbcv/D1.3 Clause 12

- `ieee802-dot1x`
  Port-Based Network Access Control
  Reference: IEEE Std 802.1X-2020 Clause 14

At least one is missing:

- `ieee802-dot3-lldp-basic-tlv`
  Basic set of IEEE 802.3 Organizationaly Specific TLVs
  Reference: Missing

Thus, we do not have MAU type information in YANG!

-> How can we get this YANG module?

Open:

Do we have a working YANG module for MSTP with at least one instance in P802.1Qcp/ P802.1Qcw?
Recap – IA-station model
Feedback from Wednesday ad-hoc discussions
Digital Data Sheet

• Both, the IA-station model and the YANG models can be used as inputs for the definition of Digital Data Sheet.
• Same definition for offline (e.g. files) and online (e.g. 60802 YANG module) seams to be preferable

-> Idea:
Use the IA-station to define the structure and the parameters/attributes of existing YANG modules as content
Digital Data Sheet

IA-station

List of functional units
Name of functional unit

List of end station components
Name of end station
Parameter/attributes with quantities and/or value ranges
List of ports

... 
Bridge component (or list of)
Name of bridge
Parameter/attributes with quantities and/or value ranges
List of ports

... 

IA-station

Security quantities and value ranges:
• Needs to be part of Digital Data Sheet
• If possible based on the IETF / IEEE 802 defined YANG modules for security

Vendor/organization specific extensions:
• May e.g. be done using the YANG concept of “augmentation”

Integration into existing vendor/organization specific device descriptions:
• May e.g. be done by referring the file (offline)

Securing the file (offline):
• Should be out of scope for 60802
Conclusion

• This model could be a way forward to develop a Digital Data Sheet contribution, which may be discussed during D1.3 comment resolution.

• How can we get a YANG module for the MAU types?
  -> Idea:
  Port 8023-LLDP-EXT-MIB to YANG as already done for 8021-LLDP-EXT-MIB (by 802.1 WG). Could the YANGsters help with this topic?

• Offline/online description of TDME / CNC is still open
Questions?