



Maintenance Request 363

Maximum SDU Size Filter

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Current text in 802.1Q

- IEEE Std 802.1Q-2022 defines a Maximum SDU size filter as part of the Per-Stream Filtering and Policing feature set.
- Currently IEEE Std 802.1Q 8.6.5.3.1 reads:
 - “If the SDU size of a frame exceeds the value of the associated stream filter’s Maximum SDU size parameter, the frame is discarded and that stream filter’s NotPassingSDUCount is incremented.”
- There is no additional information given on what SDU is referring to.
- The lack of precise language on what SDU size refers to has led to some discussions in other organizations.

SDU is MSDU

- Is it enough to state that SDU is MSDU?

“If the SDU size of a frame exceeds the value of the associated stream filter's Maximum SDU size parameter, the frame is discarded and that stream filter's NotPassingSDUCount is incremented. The Media Access Control Service Data Unit (MSDU) size is used for Maximum SDU size filtering.”

- No, the MSDU size changes as the frame is flowing through the bridge. MSDU at the ISS is different than the MSDU at the EISS. There are other tags that are removed after the frame passes the MAC service interface e.g., MACsec, R-tag, ...

- Where is the measurement plane for the maximum SDU size filter placed?

There seem to be two feasible approaches:

- At the MAC service interface level
 - Wherever the SDU size filter is located
- Simplest approach seems to be at the point the SDU size filter is located

Proposed new text

- Change the following text:

“If the SDU size of a frame exceeds the value of the associated stream filter’s Maximum SDU size parameter, the frame is discarded and that stream filter’s NotPassingSDUCount is incremented.”

- To:

“If the SDU size of a frame exceeds the value of the associated stream filter's Maximum SDU size parameter, the frame is discarded and that stream filter's NotPassingSDUCount is incremented. **The Media Access Control Service Data Unit (MSDU) size at the point the Maximum SDU size filter is placed in the station is used as SDU size for Maximum SDU size filtering.**”

- Add the following note:

“Note—The size of the MSDU can change as the frame is flowing through the bridge. For example, in a C-VLAN bridge, the C-VLAN tag is not part of the MSDU that is evaluated by the Maximum SDU size filter placed inside the C-VLAN bridge component.”

