

IEC 61850 User Feedback Task Force - Support #485

Some switches discard the IEEE 802.1Q tag known as VLAN 0 on packets sent/received on the trunk ports. Others discard the packet

02/03/2021 02:07 PM - Herbert Falk

Status: Closed	Start date:
Priority: Normal	Due date:
Assignee:	% Done: 0%
Category:	Estimated time: 0.00 hour
Target version:	
ID: 41	To discuss in WG10:
Source: IOP_2013	Short Proposal: 802.1Q specifies "A VLAN-aware Bridge ... shall support the use of all VID values in the range 0 through a maximum N ..." 801.1Q does not seem to allow switches to drop all packets with VID=0. Standard could note (somewhere) that switches that drop VID=0 packets may not be suitable for use with 61850 systems unless the use of VID=0 is avoided.
TF Unique ID: 41 # IOP_2013	Standard(s):
WG10 Proposal: Everything is clear in the 90-4	Needs More Information:
Estimated Completion:	Assigned TF:
Discuss in Upcoming Meeting:	

Description <p>Some switches discard the IEEE 802.1Q tag known as VLAN 0 on packets sent/received on the trunk ports. Others discard the packet entirely.</p> <p>The IEEE 802.1Q specification does not give guidance to switch manufacturers in regards to what to do with VLAN 0. However, IEC 61850-8-1 mandates the use of VLAN 0 as the default value to use since it represents a priority only tag and should not require the configuration of VLANs. The impact to users is that GOOSE and SV traffic will either lose their priority or be dropped entirely. It will make diagnosing network delivery problems difficult at best since there is no documentation provided regarding this behavior. Switches claiming conformance/support for IEC 61850 should neither strip VLAN 0 nor discard those packets.</p> <p>Add switch action pertaining to VLAN 0 to switch PICS statement. Address the use of VLAN 0 within WG10.</p>
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History

#1 - 06/21/2022 09:00 AM - Carlos Rodriguez del Castillo

- Status changed from New to Closed