802.1Qat – MSRPDU Addressing within the CSN

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Talker Advertise – The Ball Park

DMN

DMN-Selected Egress Node

End Station Egress Node

Bridge Egress Node

CSN

Ingress Node
Talker Advertise - The DMN Scheme

1. Ingress MSRPDU are transparently transported by the CSN to the DMN
2. DMN queries the BW of the different links of the CSN
3. DMN forwards Talker Adv/Failed to each egress node based its link’s BW resource
Talker Advertise

- DMN Selected Node is the **only** node registered to the *Individual LAN Scope group address*, Nearest Bridge group address [01-80-C2-00-00-0E]
Talker Advertise – The Issue (1)

- DMN Selected Node only is registered to the NB group address
- So DMN originated MSRPDU are individually Unicasted to each egress nodes
DMN’s originated MSRPDU could be UC to End Station Egress node
but not to Bridge ENs which need to MC the advertisements to the bridged Listeners
Solution #1

- DMN Selected CSN Node is the only node registered to the NB group address within the CSN
- DMN’s originated MSRPDU are mapped to egress nodes with their MAC DA set to the egress node UC address
- A “bridge” egress node reinserts the NB instead of the UC address in the MSRPDU before delivering it to its non-CSN port

Note: Although, PTP msg uses the same NB group address that MSRPDU, they are handled by the CSN ingress nodes (and not transparently transported over the CSN)

- Pro: Network agnostic
- Cons: Protocol specific
Solution #2

- DMN Selected CSN Node is the only node registered to the NB group address within the CSN
- DMN’s originated MSRPDU are mapped to egress nodes with their MAC DA set to the group address

- Pro: More generic
- Cons: Increase the dependency on the CSN network *(DMN selected CSN node needs to map MAC MC mgs to CSN unicast)*
Call for Actions

- Which solution #1 / #2 should be selected?
Thank you