TSN Domains vs. TSN-IA Domains

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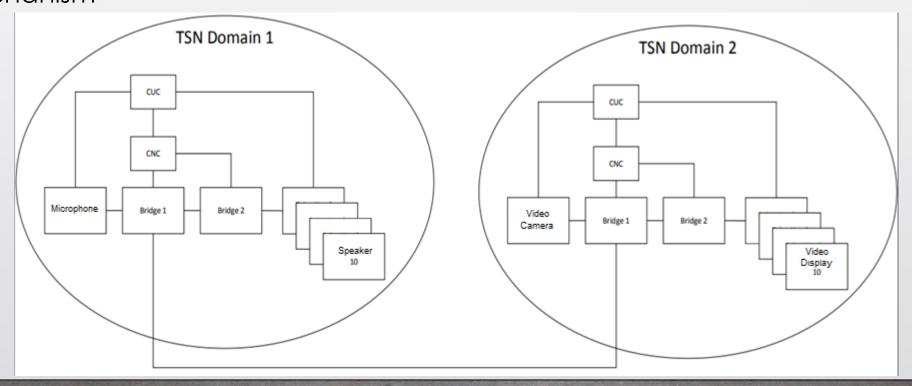
Intent

- The intent of this presentation is to focus the conversation around TSN Domain topics that are relevant to industrial.
- It also focuses on how to structure the work, taking into account proposals from Lihao Chen and the author.

What is a TSN Domain?

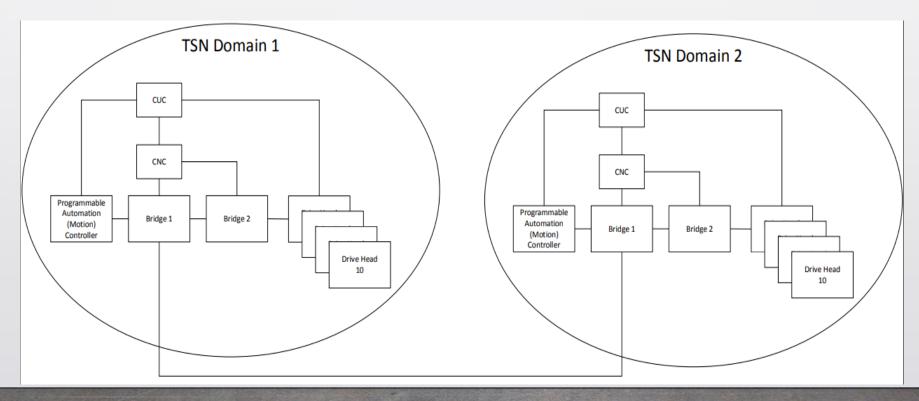
A quantity of commonly managed devices, or...

A set of managed devices that are configured by the same management mechanism



What is a TSN-IA Domain?

- A quantity of commonly managed industrial automation devices
- They look almost the same!



What is the Scope of Work?

- A definition of TSN Domain
- The method(s) or protocol definition(s) for deterministically sharing data plane communications across TSN Domains
 - The approach needs to interoperate with detnet over both MPLS and IP based networks

How the Work Could Be Structured

- Options to define TSN Domains:
 - 1. Already agreed and defined in 60802
 - 2. Could add to Definitions in Chapter 3 of 802.1Q through an existing PAR
 - 3. Could add to Definitions in Chapter 3 of 802.1Q through a new tightly scoped PAR

How the Work Could Be Structured

- Options to define LLDP TSN Domain Identifier:
 - 1. Create a new tightly scoped PAR to extend 802.1AB
 - 2. Add as a contribution to 802.1ABdh
 - 3. Define in 60802

How the Work Could Be Structured

- Options to deterministically share data plane communications across TSN Domains:
 - 1. Add the methods to 802.1Q through contributions to existing PAR's:
 - 802.1Qdj
 - 802.1Qdd
 - 2. Create a new PAR to specify a new protocol running on LRP.
 - 3. Create a new PAR adding methods to existing 802.1Q configuration models.
 - 4. Create the methods solely in 60802.