DETERMINISTIC6G

Some Considerations on Multiple Configuration Domains

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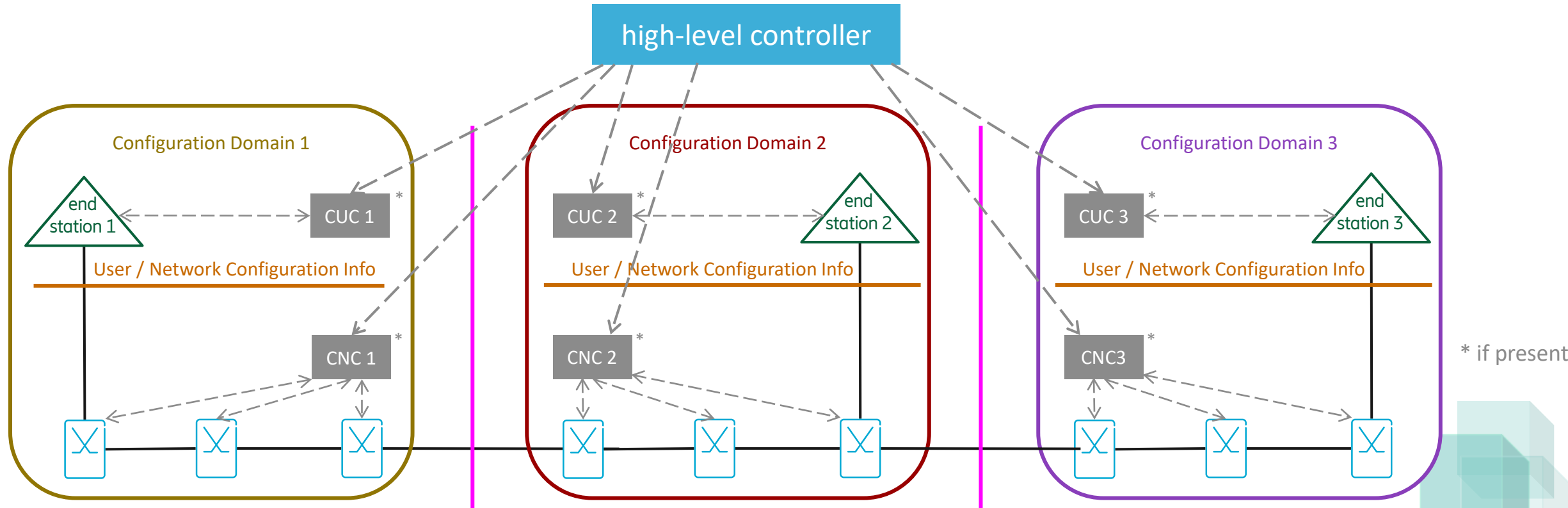
Background & **Goal**

❑ IEEE Std 802.1Qdj-2024:
  3.1 Configuration Domain: A set of stations that are under a common configuration and management scheme, and a single administration.

❑ Some earlier presentations:

[1] "TSN Inter-domain Considerations", July 2021
  https://www.ieee802.org/1/files/public/docs2021/new-farkas-inter-domain-considerations-0721-v01.pdf

[2] "Some Thoughts on Multiple Configuration Domains", September 2024
  https://www.ieee802.org/1/files/public/docs2024/new-farkas-multiple-configuration-domains-0924-v01.pdf

❑ **Goal of this** (https://www.ieee802.org/1/files/public/docs2025/new-farkas-multiple-configuration-domains-0325-v01.pdf) **presentation:**
  ❑ **Have a group discussion on potential work on multiple configuration domains**

High-level Controller

❑ **Takeaway**: Having high-level controller is a viable approach (P7, P12, P13, P14 in [2])

   ❑ (It is also called Hierarchical SDN if the configuration domains apply centralized approach)

❑ Certain tasks (e.g., VID translation, Stream transformation) cannot be solved otherwise

Potential Next Steps

❑ There are a lot of questions and tasks to be solved for multiple configuration domains
   ❑ some of them are listed in [2], but not all

❑ **Should we start working towards starting a new project on multiple configuration domains?**

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