DetNet Control Plane Signaling

draft-trossen-detnet-control-signaling-01

D. Trossen, F.-J. Goetz, J. Schmitt

RECAP: Premise of the Draft

"This document provides solutions for control plane signaling, in accordance with the control plane framework developed in the DetNet WG. The solutions cover distributed, centralized, and hybrid signaling scenarios in the TSN and SDN domain. We propose **changes to RSVP IntServ** for a better integration with Layer 2 technologies for resource reservation, outlining example API specifications for the realization of the revised RSVP (called **RSVP-TSN** in the document)"
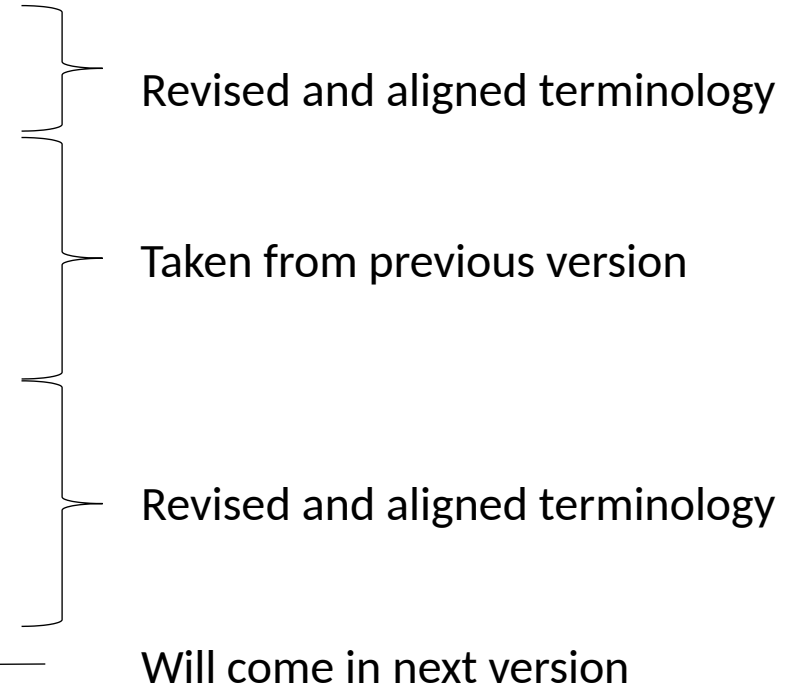
Limited the scope of draft to RSVP changes for better TSN integration

Main Changes from Last Version

- Clarified use cases
  - Two use cases for hybrid DetNet over TSN-aware customer network (with and without core network RSVP support)
- Section 3 on design rationale now
  - Former Sections 2.2, 2.3, and 2.5
- Section 4 on RSVP-TSN
  - Layer interactions revised from previous version
  - Changed API descriptions to align with DetNet terminology

Revised Structure

1   Introduction

2   Use Cases
  - Distributed DetNet UNI
  - Fully distributed DetNet UNI

3   Design Rationale
  - RAP reservation in TSN vs RSVP IntServ Model
  - Similarities and Differences between RSVP & RAP
  - Design Considerations for RSVP-TSN

4   RSVP-TSN
  - Layer interactions between RSVP & TSN
  - API for deterministic QoS
  - RSVP-TSN upper API
  - RSVP-TSN lower API
  - RSVP-TSN Message Formats

7   Security Considerations

8   IANA Considerations

9   Conclusion

10 References

Revised and aligned terminology

Taken from previous version

Revised and aligned terminology

Will come in next version

Addressing Received Feedback

- What is the scenario here? TSN over DetNet? DetNet over TSN?
  - -> Addressed in new use case section
- Clarify relation to TSN-specific data plane drafts
  - -> provided revised API descriptions
- Clarify use of flow information model
  - -> aligned terminology in revised API descriptions
- Clarify terminology overall
  - -> Done

Next Steps

- Fill in message formats and protocol info

- Seek more input from list

Feedback & Comments are highly welcome!

…including co-authors and contributions!