DetNet Application in Ring Topologies

draft-jiang-detnet-ring-02

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Updates in Version 02

- Aligned with the newest Detnet Architecture and Data plane drafts (draft-ietf-detnet-architecture, detnet-dp-sol-mpls)
  - Using PRF, PEF & POF functions
  - Support the packet reorder function
Multicast ring in Detnet

P2MP Multicast Service

PRF, PEF & POF

T-label
S-label
Seq#

Termination

Leaf

PRF

Root

A

B

C

D

E

F

G

H

Leaf

Leaf

Leaf

103rd IETF – Bangkok
Interconnection of Rings

P2MP Multicast Service
Summary & Next Step

- Detnet ring is highly resilient, very efficient in multicast
  - To reduce delays in Detnet, only reorder near leafs, i.e., on egress nodes
  - Support high resiliency & in order delivery of services
  - No matter how many leaf nodes, only 2 copies of packets are sent, one for CW, and one for CCW

- Call for WG adoption?
Thank You