

OAM for Deterministic Networks with IP Data Plane

draft-mirsky-detnet-ip-oam

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IP DetNet OAM

- Split draft-mirsky-detnet-oam:
 - draft-mirsky-detnet-mpls-oam
 - draft-mirsky-detnet-ip-oam
- Since PREOF is not used in DetNet IP, existing IP OAM, e.g., Ping, Traceroute, BFD, should work
- DetNet flow in IP identified by 6-tuple:
 - Destination IP address
 - Source IP address
 - IP protocol
 - Destination port
 - Source port
 - DiffServ Code Point (DSCP)
- All active IP OAM protocols run over UDP and are identified by their respective well-known destination port numbers
- Challenge – ensure that IP OAM is in-band with a DetNet IP flow

Keep IP OAM in-band

- Mapping IP OAM to DetNet IP flow
- DetNet IP interworking with DetNet MPLS or TSN
 - DetNet IP flow over Foo
 - IP OAM must be treated as the monitored DetNet IP flow
 - DetNet IP flow mapped to/from Foo
 - IP OAM – Foo OAM interworking to provide e2e OAM visibility, e.g., RFC 7023 MPLS and Ethernet OAM Interworking

Next steps

- DetNet IP OAM over:
 - DetNet MPLS tunnel
 - TSN domain
- Your comments, suggestions, questions always welcome and greatly appreciated

Thank you!