PROBLEM STATEMENT FOR INTER-DOMAIN INTENT-AWARE ROUTING USING COLOR

draft-hr-spring-intentaware-routing-using-color

IETF 116

S. Hegde, Juniper Networks
D. Rao, Cisco Systems

S. Sangli, C. Bowers Juniper Networks Inc.
S. Agrawal C. Filsfils K. Talaulikar Cisco Systems
K. Patel Arrcus, Inc J. Uttaro ATT
B. Decraene Orange A. Bogdanov BT L. Jalil Verizon
A. Alston Liquid Telecom X. Xu China Mobile
A. Gulko Edward Jones M. Khaddam Cox communications
LM. Contreras Telefonica D. Steinberg Lapishills Consulting Limited
J. Guichard Futurewei W. Henderickx Nokia
Agenda

- Updates from last version
  - Service Intent Requirements
  - OAM Requirements
  - Updates to Deployment Requirements
- Next steps
Service Intent Requirements

- E2E intent-aware paths spanning multiple domains
  - The intent requirement applies to CE-PE links as well
    - Minimization of E2E metric
      - Delay metric, igp metric etc
    - Exclusion/inclusion of link-affinity

- Virtual network functions deployment
  - Service chain indicated via color
OAM Requirements

- Support E2E Ping/traceroute
  - Support MPLS ping/traceroute based on RFC 8029 and RFC 8287
  - RFC 9256 based mechanism for SRv6
- Ability to validate path inside a domain
- Statistics on the ingress/transit/egress on a per path/per color basis
Updates

- Traffic steering requirements updated for per-flow steering
- Deployment Requirement section updated with new section on domains with non-congruent color to intent mapping
Next Steps

- Request review and comments
- Work on Multicast Requirements
- Ready for WG adoption
Thank you