TRAFFIC MAPPING YANG MODEL FOR TRAFFIC ENGINEERING (TE)

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• IETF has various YANG models to set up paths & services
  • but lacks a standard YANG model for identifying which traffic flows are directed on these paths & services…

• Elements can be borrowed from
  • ACL
  • Match Criteria of IETF network slice YANG
  • Flowspec (BGP/PCEP)
  • Flow match based on IP/UDP/TCP header
  • Etc
BACKGROUND
TRAFFIC MAPPING

• This can be applied to
  • Which traffic flows in which services and paths
    • A missing element in some YANG models
    • A common generic way that can be used uniformly
  • Traffic classification for SFC (and APN)
YANG STRUCTURE

TRAFFIC MAPPING

MATCH CRITERIA

ACL

FLOWSPEC

INTERFACE

FLOWS

STATS

ACTION

MAP-ID

TRAFFIC

TRAFFIC MAPPING
YANG TREE
TRAFFIC MAPPING

• Mapping of traffic flows via
  • Generic match criteria
  • ACL
  • Interface
  • Match on IP/TCP/UDP headers
  • Flowspec
• Optionally, also include actions and stats…
SOME QUESTIONS
TRAFFIC MAPPING

• Is a standard traffic mapping YANG model useful?
  • Or are we too late…
  • Or is it better for each use case to figure this out on its own?
• Is this the correct approach?
• Does this work belong in TEAS?
  • Or somewhere else?
THANKS!