NRP YANG Modules

draft-bestbar-teas-yang-nrp-policy
draft-wd-teas-nrp-yang

TEAS WG
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Background

• Two NRP specific modeling drafts – different functional perspectives, but similar set of constructs
  • draft-bestbar-teas-yang-nrp-policy
  • draft-wd-teas-nrp-yang

• The authors of two drafts have agreed to produce a new merged draft (meeting regularly since IETF 115)
  • draft-wdbsp-teas-nrp-yang*

• The goal is to define a single NRP specific YANG draft covering both network model and device model
  • NRP network model
    • NRP Instantiation and modification
    • NRP monitoring
  • NRP device model

* To be published soon
Merged Draft Progress Summary

• Agreement on NRP Instantiation
  • The primary constructs are borrowed from draft-nrp-policy and augmented with additional attributes for IGP congruency and direct topology option from draft-nrp-model
  • An NRP policy specifies the topology associated with the NRP and specifies how resource partitioning and SLO mechanisms can be realized in IP/MPLS network, e.g. data plane partitioning, control plane partitioning, or both

• NRP monitoring
  • Mainly from draft-nrp-model, under discussion

• NRP device
  • Major nodes come from “nrp-policy”, will decide after the NRP network model is stable
NRP Selector

• NRP selector, in data plane partitioning mode, is used to identify NRP-specific forwarding resources
  • Classified as **dedicated** or **derived**
  • Encapsulation type: IPv6, SRv6, MPLS or IPv4
  • For MPLS, the authors will add **MPLS Network Actions** (MNA) specific option(s) for carrying the NRP selector based on the progress of the relevant work in the MPLS WG
“Phb-profile” definition

• Definition follows
  https://datatracker.ietf.org/doc/html/draft-ietf-teas-ns-ip-mp-1s-02#section-5.1.3
  • References the name of a pre-defined NRP phb profile

• Open Item
  • Should both “Standard profile” and “custom profile” be defined?
    • IETF Network Slice Service model (NSSM) uses “qos-policy-name”
    • IETF LxSM and LxNM use “qos-profile”

• Need WG feedback: Naming consistency, Provide both options
Next Step

• Publish the merged draft (this week) and request WG adoption
• Continue working on unresolved items
• Reviews and comments are welcome