Requirements for MPLS Network Action Indicators and MPLS Ancillary Data

draft-ietf-mpls-mna-requirements-02
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Overview

• Captures the key requirements for MPLS network actions that affect forwarding or other processing of MPLS packets:
  • Network Action Sub-Stack Indicator
  • Network Action indicators
  • Any ancillary data required to perform the indicated action

• Product of the MPLS Open Design Team

• Requirements largely derived from a number of proposals for additions to the MPLS label stack to allow decisions about actions based on application data

• Requirements are on protocol design, NOT implementations
WG Adoption Process

• draft-bocci-miad-adi-requirements-04
• Around 30 comments made on the list which were collated by Loa
• Following the guidance of the chairs, the authors added these to an appendix A: Working Group Adoption Comments
• Published draft-ietf-mpls-miad-mna-requirements-00 and subsequently revised to draft-ietf-mpls-mna-requirements-00
• Comments, and MPLS list/OpenDT meeting discussion, addressed in this and subsequent revisions
• Appendix A will be removed shortly
Main Changes

• Terminology aligned with draft-andersson-mpls-mna-fwk
• Refocusing around Network Actions instead of Ancillary Data
  • Ancillary Data Indicator -> Network Action Indicator
• Clarification of in-stack vs. post-stack requirements
  • In-stack ancillary data requires strong justification
• Distinction between network action sub-stack indicator (a.k.a MNA label in framework) and network action indicator
  • Allows NAI and/or AD to be in-stack or post-stack
• Clarified that solution specs MAY support user-defined actions, and if they do, they MUST explicitly reserve a user-defined range in IANA policy
• Reorganization of requirements into appropriate sections
Draft Structure (Changed since last IETF)

- Terminology
  - New Terms needed to define new objects in MPLS
- General Requirements
  - A set of design principles that underpin this work
- Requirements on Network Action Indicator Sub-stack
  - Indicator in the label stack of network actions
  - This needs a solution-agnostic definition to be added
- Requirements on Network Action Indicators
- Requirements on Ancillary Data
- Appendix containing working group adoption comments
Next Steps

• Several versions of the draft have been reviewed line-by-line in the MPLS Open Design Team
• Appendix containing WG adoption comments will be removed in next revision
• Please review and post comments to the MPLS list
• Authors believe the draft is mature and close to MPLS WG last call quality