SFC Metadata Model
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draft-vallamkonda-sfc-metadata-model-00.txt
SFC Metadata

Benefits:

• Allows information exchange between SFs: for flow and/or SF.
  • Inband: thus no need for OOB mechanisms which can bring timing and out of order issues.

• Accommodates:
  • Generic SFs
  • Vendor specific SFs.
SFC: Metadata (contd)

Problems:

• Vendor interoperability of Metadata.
• Standards (NSH) have syntax but not semantics although some NSH meta-data schemas have been proposed (like draft-guichard-sfc-nsh-dc-allocation-04, draft-meng-sfc-nsh-broadband-allocation-00, draft-napper-sfc-nsh-mobility-allocation-02)
• Semantics are critical for packet injection, SF communications and NFV, among other things.
SFC: Metadata (contd)

• The proposal: draft-vallamkonda-sfc-metadata-model-00.txt supports:
  • SFC model is described by: https://datatracker.ietf.org/doc/rfc7665/
  • https://datatracker.ietf.org/doc/draft-ietf-sfc-nsh/

• Supports MDType 1 and 2.
• Scalable framework for multi-vendor support.
• Uses yang models.
• Provides a method for extensible data types.
Examples

Metadata in-band in SFC communicated between SFs.
Summary

In conclusion we need

• 1- terminology for humans discussing metadata semantics
• 2- a format data model for metadata semantics
• 3- a machine-readable description of metadata semantics
• 4- vendor customization and interoperability.

We think the language introduced in section 5 could be used in the various *-allocation drafts.

We are in Stage 1 and all input and suggestions are highly appreciated.
Q&A