

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)

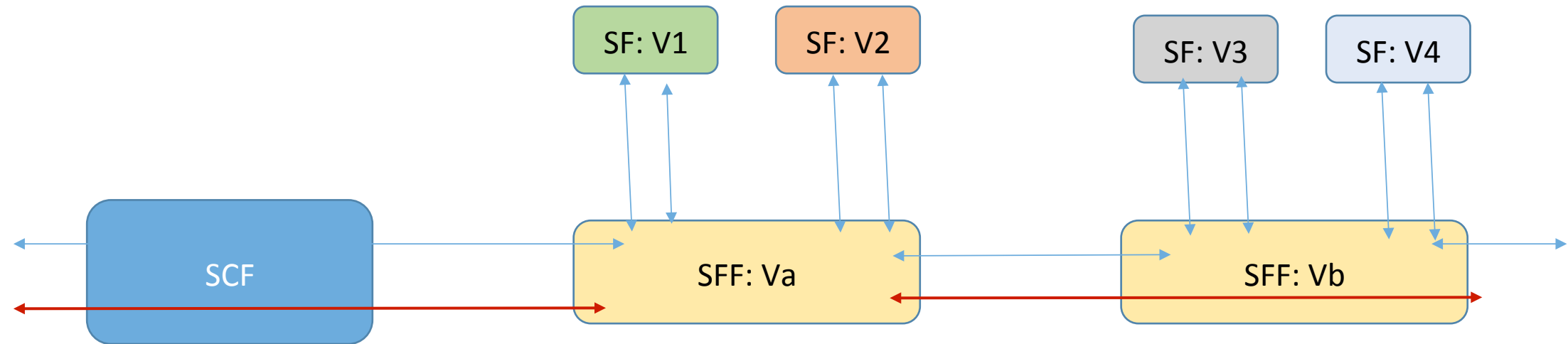
Problems:

- 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