Geneve applicability for service function chaining

Sami Boutros
Dharma Rajan
Philip Kippen
Vmware

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Geneve applicability for service function chaining

• New Geneve option TLV for the service function list forming the SFP.
  – Encodes list of service function ip addresses.
  – A sub-tlv for HMAC for security following procedures described in [draft-ietf-6man-segment-routing-header]

• New Geneve option TLV for NSH Metadata
  – To carry NSH metadata type 1 fixed and type 2 variable length.
Geneve applicability for service function chaining

- Based on a classification set the service function list (SFL) option TLV with IP addresses of the service functions.
- Resolves the service first function ip addr, to the NVE connected to it.
- Identifies the SFL option, and locates it's SF in the list based on an index.
- Deliver inner packet to SF possibly along with some metadata encaped w/ NSH if the SF is NSH aware, or using other encapsulations like vlan or q-in-q encap.
- For return packets, the NVE node, resolves the next service function ip address, to next NVE connected to the service function.

- Deliver Return packets to customer destination
Next steps

• Seeking comments?

Thank you