

Data Plane

Extensions

Types

Criticality

Size - upper bound, processing devices
pkts increase

Are extensions needed?

If so where?

Vswitch to Vswitch (software/hardware)

Gateway to internet

Std extensions as vendor

Do ~~Are~~ extensions need to be hardware friendly?

VNI size - 24 or 30 (bits)

size

Do transit devices need to
look past extensions

Length field for
extensions
4 byte alignment



Who modifies? Checksum update?

TLV or fixed formats (GUE)

Order or not-ordered

End-to-End or NVE to NVE
(can headers change inter NVE)

Ordering

Hard ware processed extensions
earlier in header?

Extensions mandatory or optional?

Make extensions separate protocols/
headers - /oses over arching
length field
+ may be carried over non-NVO3 segments

Do extensions need to go over
non-underlay portions end-to-end -
between halves of a split NVE +
over non-NVO3 link between NVO3
domains

Security

How do we protect the header?

Separate protection from the payload?

Should the data plane provision
for OAM

bit in the header?

extensions?

what OAM info needs to be
carried?

→ OAM discussion

Extensions - potential standard

Inband OAM

Security - header

~~TTL~~?

Header Checksum

Fragmentation

Payload transform

Remote checksum offload

Tunnel stitching - facilitate next hop
tunnel

Support Vendor Extensions

Data center VPN to WAN VPN
translation