Generic UDP Encapsulation for IP Tunneling

draft-ietf-tsvwg-gre-in-udp-01

Lucy Yong

March. 2014 London

Update

- Become a WG draft
 - WG plan to complete this work by the end of 2014
- Comments on mailing list
 - zero checksum concern, especially for IPv6 network
 - the flow packet w/ GRE-in-UDP is treated as a regular UDP app. in network
 - Need to follow the guideline in RFC5405
 - Massive discussions on mpls mailing list for the similar issue
- Update from last version
 - checksum, applicability statement
 - fragmentation reference to draft-bonica-intara-gre-mtu

Applicability Statement

 Recommend using the GRE-in-UDP in a network where the congestion control is not a concern or the congestion is under controlled by the network

 If using the GRE-in-UDP on Internet or likely environment, the guidelines in RFC5405 MUST be followed

UDP Checksum

- UDP checksum MAY set to zero
- UDP checksum SHOULD be used in the environment where the UDP packets may be mis-delivered
- Tunnel egress SHOULD perform the UDP checksum verification upon receiving a packet with a non-zero checksum
- For an IPv6 network, UDP checksum SHOULD be used
 - to disable it for performance reason, the considerations in [RFC6935][RFC6936] MUST be examined

Next Steps

- Wait on IESG/TSV consensus on guideline for tunneling foo over UDP
- Address comments from this group