

Encapsulating IP in UDP

draft-xu-softwire-ip-in-udp-01

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Introduction

- RFC5640 describes a method for improving the load balancing efficiency of a network carrying Software Mesh service.

Mesh service.

- Uses the Session ID field (for L2TPv3 tunnels) or the Key field (for GRE tunnels) as a "load-balancing" field (a.k.a., entropy field) .
- However, it requires core routers to perform hash calculation on the "load-balancing" field, which is not yet widely supported by existing core routers.

Since existing core routers already support balancing IP traffic

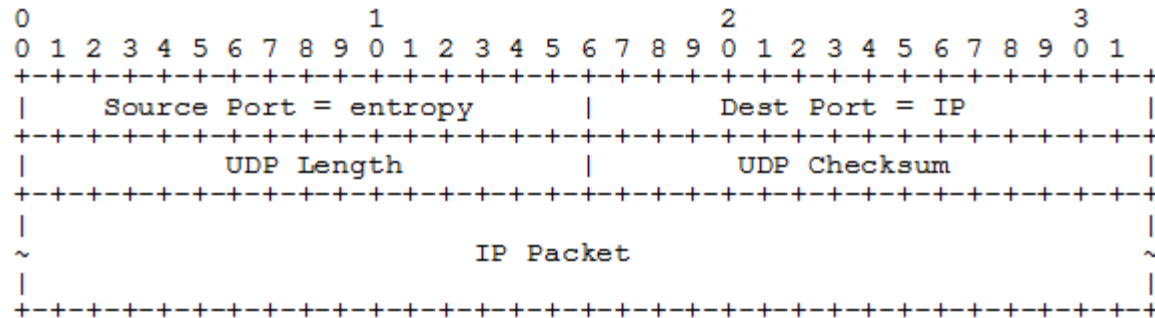
Software

of UDP packets, why not carry

service over UDP tunnels?

of In this way, it enables existing core routers to perform efficient load-balancing

IP-in-UDP Encapsulation Format



- **Source Port:**
 - contains an entropy value that is generated by ingress AFBRs through performing hash calculation on certain fields in customer packets (e.g., five tuple of UDP/TCP packets).
- **Destination Port:**
 - indicates the encapsulated payload in an UDP tunnel is an IP packet.
- **UDP Checksum:**
 - is recommended to be set to zero in order to simplify the process on tunnel egress nodes.

Next-steps

- **Comments and Suggestions are welcome.**
- **Solicit WG adoption of this doc.**