# SRv6 for Mobile User-Plane

draft-ietf-dmm-srv6-mobile-uplane-04

IETF104

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# Summary of Updates from v03 to v04

### • Lightweight updates

- Pseudo-code correction.
- Some clarification text for predefined SRv6 functions, Traditional mode, IPv6 user-traffic and Args.Mob.Session.
- Simplified the text regarding Network Slicing.

### • Naming complaint

- Args.Mob.Session : No any ideas received after IETF103.
- T.M.Tmap : "T.M.GTP4.D" was proposed instead.

### Another major feedback from review comments

• Whether to support 'Drop-in' scenario. (i.e; IPv4 SA and UDP src port transparency for GTP-U)

## **Feedback from Hackathon**

- Two target functions has been implemented for VPP and P4 Switch.
- New mapping rule of GTP-U<->SRv6 has been studied
  - It is possible to support both 'Args.Mob.Session' and 'Drop-in' scenario.
- The codes are now open-sourced:
  - <u>VPP</u> and <u>P4</u>

Target Function	Description
End.MAP	Forwards the receiving IPv6 packet and update the IPv6 DA with mapped SID.
End.M.GTP6.D	Decap the receiving GTP/UDP/ <b>IPv6</b> packet and encap with IPv6 header, or IPv6 header with SRH based on the address/ID mapping rule and binding SR-Policy
End.M.GTP6.E	Decap the receiving IPv6+SRH packet and encap with <u>IPv6</u> /UDP/GTP-U header based on the address/ID mapping rule.
End.M.GTP4.E (SRv6 -> GTP-U)	Decap the receiving IPv6+SRH packet and encap with <b>IPv4</b> /UDP/GTP-U header base on the address/ID mapping rule.
T.M.Tmap (GTP-U -> SRv6)	Decap the receiving GTP/UDP/ <b>IPv4</b> packet and encap with IPv6 header, or IPv6 header with SRH based on the address/ID mapping rule and binding SR-Policy.
End.Limit	Limit the throughput of the packet flow with mapped SID.
**NEW**	Translate GTP-U Echo Request to ICMP Echo Request and vice versa
**NEW**	Translate GTP-U Echo Reply to ICMP Echo Request and vice versa

Address Mapping Pule for @ LETF104 Hackathon Local F. J.M. GTP4 E Remote SRGW SPU6 M. Twap  $\rightarrow$ End MGTP4 E TRUG DA/Last SID 3 127 TPV4 SA Ø Pemote Prefix ÐA IPU4 A CF NAD UÐ DST Port SIC Port IPU6 SA 127 TEID LOCAL SPGW Src Prefix τρ4 5 A Ø GTE 2 bit 5G Specific IDS

## Next Steps

#### • <u>Reflect the review result</u>

- More correction for pseudo-code.
- Improving clarity and readability to deal with the rest of feedback comments.
- Any other feedbacks from WG are really welcome.

#### • <u>Update mapping rules between GTP-U and SRv6</u>

• Reflect the hackathon takeaways to the spec.

#### • Implementation

• If you are interested in hackathon to implement SRv6 mobile user plane, you're welcome to join.

# Thank you

Questions and comments?