IETF hackathon for SRv6 Mobile User Plane

IETF 106
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Singapore



Hackathon Plan

- Simplify the mobile networks
 - "draft-ietf-dmm-srv6-mobile-uplane"
- Implement mobile user-plane requirements into one single layer.
 - Segment Routing IPv6 (SRv6) to be able to integrate mobile user-plane into the underlying layers.

What got done

- What we achieved:
 - 5G aware mobile user-plane functions on VPP and P4.
 - Be able to interwork with other SDO protocol (GTP) in Stateless.
 - Github: https://github.com/filvarga/srv6-mobile
 - The code has been submitted to VPP gerrit to be reviewed.

What we learned

- Modularity for the code and the protocol
 - Some SRv6 Mobile code require modularity.

- A new function idea implemented could be a feedback:
 - SRv6 End function for GTP-U decap and table look up.

Wrap Up

Team members:

- Satoru Matsushima
- Tetsuya Murakami (First hackathon)
- Kentaro Ebisawa
- Pablo Camarillo
- Filip Varga

• P4 code

https://github.com/ebiken/p4 srv6/tree/ietf106

Scapy to generate 3GPP 5G user-plane packet (GTP-U)

https://github.com/secdev/scapy/b lob/master/scapy/contrib/gtp.py