

draft-camarillo-dmm-srv6- mobile-pocs-00

PoC update

Phase I

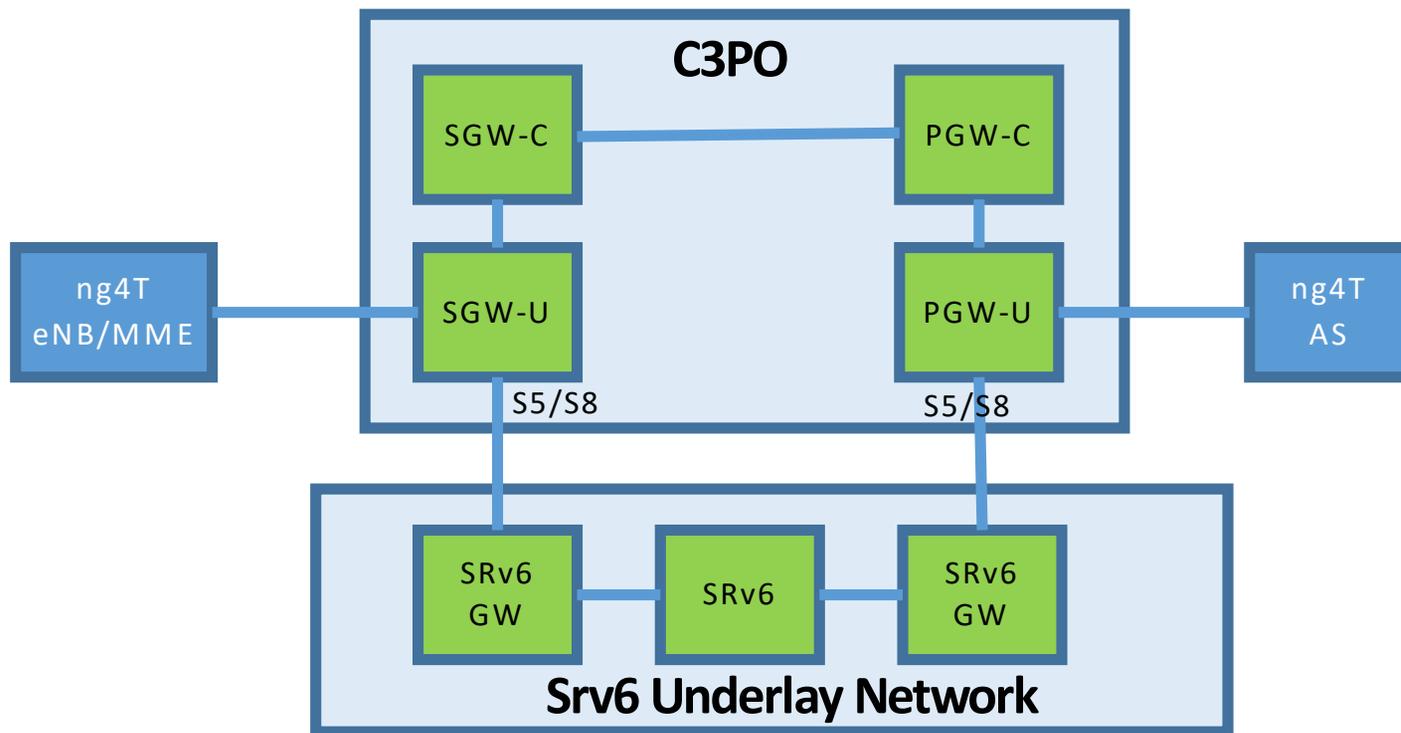
Goal

- Validate SRv6 underlay does not effect EPC
- Two Test Test Scenarios Link between SGW and PGW in the User Plane
 - IPv4/GTP encapsulation
 - IPv4/GTP interworking (embed GTP TEID in SRv6 header)

Testing Environment

- Traffic Generator
 - ng4T eNB/MME simulated 25 Ues @ 10K packets per second
- EPC
 - C3PO implementation w/ SGW-U and PGW-U on separate hardware as VMs to expose N9 interface
- SRv6 Implementation
 - VPP software deployed on separate hardware as VMs
 - 3 nodes configuration – Policy implemented at Gateways, static configuration
 - Traditional Mode configuration –

Testing Diagram



Testing Software

- C3PO software – MCORD project
 - Patch required for SGW-PGW User Plane for S5/S8 exposure
 - Not generally available yet.
 - Link: <https://gerrit.opencord.org/#/admin/projects/ngic>
- VPP software
 - Patches required, not generally available
 - Link: <https://fd.io/technology>

Results

- IPv4/GTP Encapsulation: policy based encapsulation was successful.
 - Jumbo Frames were problematic, adjusted packet size to compensate
- IPv4/GTP policy based interworking was successful.

Next Steps

- C3PO evolution- Line Rate testing
 - 7/18 code release
- Retest baseline functionality, both scenarios
- establish line rate testing of C3PO software
- Establish VPP performance baseline with respect to above

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