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 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
# Contributors

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
<th>email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pablo Camarillo</td>
<td>Cisco Systems, Inc.</td>
<td><a href="mailto:pcamaril@cisco.com">pcamaril@cisco.com</a></td>
</tr>
<tr>
<td>Lyle Bertz</td>
<td>Sprint</td>
<td><a href="mailto:lyle.bertz@sprint.com">lyle.bertz@sprint.com</a></td>
</tr>
<tr>
<td>Arun Rajagopal</td>
<td>Sprint</td>
<td><a href="mailto:Arun.rajagopal@sprint.com">Arun.rajagopal@sprint.com</a></td>
</tr>
<tr>
<td>Mark Bales</td>
<td>Sprint</td>
<td><a href="mailto:Mark.bales@sprint.com">Mark.bales@sprint.com</a></td>
</tr>
<tr>
<td>Robert Butler</td>
<td>Sprint</td>
<td><a href="mailto:Robert.butler@sprint.com">Robert.butler@sprint.com</a></td>
</tr>
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