SRv6 based BGP services
draft-ietf-bess-srv6-services-03

Author(s):
Gaurav Dawra, LinkedIn
Clarence Filsfils, Cisco Systems
Robert Raszuk, Bloomberg LP
Bruno Decraene, Orange
S. Zhuang, Huawei Technologies
J. Rabaday, Nokia

Presenter:
Gaurav Dawra, LinkedIn
July-2020
Overview

The draft specifies the BGP extensions for signaling of services over SRv6

- L3VPN for IPv4 and IPv6
- Global IPv4 and IPv6
- EVPN
Draft Progress

• First presented SRv6 based L3VPN services in IDR at IETF98
• Further introduction of SRv6 based EVPN and Global services in IDR at IETF101
• Presented SRv6 Services Draft in BESS at IETF104
• Presented update packing optimizations in BESS at IETF105
• Adopted as WG document just before IETF106
• Multiple versions since adoption based on comments.
Updates since IETF 107

- Clarifications on some field encodings based on implementation feedback
  - Setting of unused flags
  - Handling of unknown behaviors

- Security Consideration section has been updated
IANA Allocation

Allocations have been made from BGP Prefix SID TLV types as below

<table>
<thead>
<tr>
<th>Value</th>
<th>Type</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Deprecated</td>
<td>&lt;this document&gt;</td>
</tr>
<tr>
<td>5</td>
<td>SRv6 L3 Service TLV</td>
<td>&lt;this document&gt;</td>
</tr>
<tr>
<td>6</td>
<td>SRv6 L2 Service TLV</td>
<td>&lt;this document&gt;</td>
</tr>
</tbody>
</table>

These match the currently deployed implementations.
Implementation & Deployment Status

• Implementations shipping & in production from Cisco, Huawei and other vendors
• Open source implementations in exaBGP, GoBGP that can leverage data-planes in Linux and FD.io
• Deployments in production at Softbank, China Telecom, Iliad, LINE Corp, China Unicom, MTN Uganda, etc.
• Multi-vendor interop at EANTC since 2018

• More details in : draft-matsushima-spring-srv6-deployment-status
Next Steps

• Draft is mature with existing implementations and deployments and authors would like to request WGLC