BMP Loc-RIB Peer Address

draft-francois-grow-bmp-loc-peer-03

Pierre FRANCOIS, INSA Lyon - pierre.francois@insa-lyon.fr

Maxence YOUNSI, INSA Lyon - maxence.younsi@insa-lyon.fr

Paolo LUCENTE, *NTT - paolo@ntt.net*

Quick diff from -02 to -03

- editorial changes

Local Path-ID

draft-younsi-grow-local-path-id-02

Maxence YOUNSI, INSA Lyon - maxence.younsi@insa-lyon.fr

Pierre FRANCOIS, INSA Lyon - pierre.francois@insa-lyon.fr

Paolo LUCENTE, *NTT - paolo@ntt.net*

Agenda

- Comments received
- Changes to the draft
- Working implementation

Comments received

- *“This is more state to keep, with possibly expensive data structures”*

  - Jeff

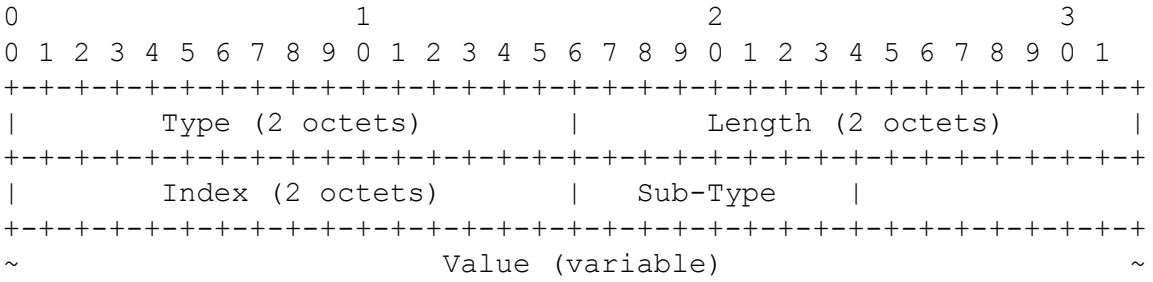
Changes to the draft

- Allow larger unicity scope for the LPID (Local Path ID)
- Add vrf_id in design recommendation
- Fixed an encoding ambiguity introduced in the -01 version

Implementations can generate LPIDs using the vrf_id to leverage already existing data structures (BGP RIBs)

Changes to the draft

- Add TLV Sub-Types to the “Local Path ID TLV”



“Local Path ID TLV” encoding

Code	Name	Length	Section
0x00	Local Path ID Value	Variable	Section 3.2.1
0x01	Unavailability Reason Code	2 bytes	Section 3.2.2

TLV “Sub-Type” List

Changes to the draft

- Add reason codes for unavailable Local Path IDs.
  - Sub-Type: 0x01 | Unavailability Reason Code
  - Value:

Code	Description
0x00	Unknown Reason
0x01	Origin process did not provide a Local Path ID.
0x02	All Local Path ID have already been allocated.

LPID Unavailability Reason Codes

Working implementation (producer side)

- Implementation of -00 in FRRouting
  - Allocation implemented in two ways
    - Checking LPIDs already in use for the destination (CPU expensive)
    - Bitfield LPID allocator for each destination (MEM “expensive”)
  - Export in BMP with a BMPv4 TLV
  - https://github.com/mxyns/frr/tree/local-path-id

Next steps

- IANA considerations section
- Ongoing: Implementation of LPID on the collector side

Thank you!

Questions?