BMP Loc-RIB: Peer address

draft-francois-grow-bmp-loc-peer-01

IETF 117

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Agenda

- Reminder
- Feedback received
- Update
- Debate

Reminder

- BMP Loc RIB (RFC 9069) provides a view on Loc-RIB
  - Peer-address field in per-peer header is zero-filled
    - You don’t know which peer gave you the paths you put in Loc-RIB
    - Requires effort when digging in the data,
      especially in multi-path/add-path scenarii
  - Unfortunate as BMP implementations may have the information
- We’d like to allow to provide this information

How

- Draft opens two options
- Allow the peer-address to be non zero-filled
  - Backward compatibility…
  - Default behaviour remains zero-filled, cfg to enable the behaviour
- Use draft-ietf-grow-bmp-tlv
  - TLV type "Peer-Address TLV" to be reserved
  - Ignored by collectors who can’t recognize it by design

Feedback #1: Option 1 is messy

- Option 1: Allow the peer-address to be non zero-filled
- Nice on paper
- Maybe less so IRL
  - Implementations may suffer as update was not anticipated in the code and new flags may be improperly dealt with
  - Operator will have to pay attention and configure stuff selectively based on router and collector capability, maybe for things not to break

Feedback #2: VRF Imports

- “It’s nice to get to know the peer from which I received a loc-rib path, but if the path was imported from another VRF, you’re unable to figure out the right context for this peer address”
- True…

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- *Rx Peer Address TLV*
- Previous VRF Name TLV
- Origin VRF Name TLV
- VRF Name Sequence TLV

Previous VRF Name TLV

- Loc-RIB on VRF *V*
- A Path received in VRF *cust1* was imported into *global*, then into *V*
  ⇒
- Previous VRF Name TLV is: “global”
- (*V* is already identified through RFC9069)

Origin VRF Name TLV

- Loc-RIB on VRF *V*
- A Path received in VRF *cust1* was imported into *global*, then into *V*
  ⇒
- Origin VRF Name TLV is: “cust1”
- (V is already identified through RFC9069)

VRF Name Sequence TLV

- Loc-RIB on VRF *V*
- A Path received in VRF *cust1* was imported into *global*, then into *V*
  ⇒
- VRF Name Sequence TLV is:
  [“global”, “cust1”]
- (V is already identified through RFC9069)
- Pro
  - Everything in one message, no need to work on collection-side
- Cons
  - Maybe difficult for some BMP implementations to obtain the sequence from the context where this was message was generated
  - Devs won’t like it

Self originated prefixes

- Zero-filled RX Peer Address TLV means it was self originated in the corresponding VRF

Debates

- “Origin VRF TLV is the only one needed”
  - For the purpose of resolving the peer address, yes
  - Yet the VRF import information is a nice piece of information for monitoring purposes…
- Ok solution to deal with VRF imports?
- Cancel idea of updating RFC9069 Peer Address field?

WG Doc?