BMP Loc-RIB Extension

draft-ietf-grow-bmp-loc-rib

Serpil Bayraktar and Tim Evens, Cisco
Paolo Lucente, NTT

22 Nov 2019
IETF GROW WG
Drafting status

• Drafts first presented in Chicago (March 2017)
• Key draft to expand BMP protocol functionality beyond the existing RFC
• Since IETF 105:
  ▪ Loc-RIB:
    • no changes to the draft!
    • We may have found something minor during the BMP Hackaton
TLV support for BMP Route Monitoring and Peer Down Messages

draft-ietf-grow-bmp-tlv

Paolo Lucente, NTT
Yunan Gu, Huawei
Henk Smit

22 Nov 2019
IETF GROW WG
Problem statement:
- Not all BMP message types support TLVs

Ideas in the draft:
- Support TLVs in Route Monitoring
- Support TLVs in Peer Down
- Bump version for backwards compatibility
Since IETF 105

- Draft got adopted by the WG
- Minor editorial changes
- Peer Down case got better specified:
  - Reason code 1 and 3, a BGP Notification PDU follows; the PDU MAY be followed by TLV data
  - Reason code 2, a 2-byte field to give additional FSM info follows; this field MAY be followed by TLV data
  - For all other Reason codes, TLV data MAY follow the Reason field
Next steps

- No open questions
- If no objections, shall we start to wrap-up?
Support for Enterprise-specific TLVs in the BGP Monitoring Protocol

draft-lucente-grow-bmp-tlv-ebit

Paolo Lucente, NTT
Yunan Gu, Huawei

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IETF GROW WG
Problem statement

“Vendors need the ability to define proprietary Information Elements, because, for example, they are delivering a pre-standards product, or the Information Element is in some way commercially sensitive”
Introduction

- PEN => IANA-assigned Private Enterprise Number
- Goal: By using a PEN in a TLV we can make it enterprise-specific
- Idea borrowed by IPFIX
IANA-governed TLVs encoding

```
+-------------+  +-------------+  +-------------+
| E |       Type |     Length (2 octets)     |
+-------------+  +-------------+  +-------------+
|              Value (variable) |
+-------------+  +-------------+
```
Enterprise-specific TLVs encoding

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Next steps

• Open questions:
  • Not much, tbh
  • Perhaps recommend that any sub-TLVs should have E-bit
  • Perhaps E-bit may be applicable to Message Types too

• Feedback & propose WG adoption?
Compression of BMP Route Monitoring messages

draft-msri-grow-bmp-compression

Mukul Srivastava, Juniper
Paolo Lucente, NTT

22 Nov 2019
IETF GROW WG
Problem statement
Proposal

• Flag compressor info in a TLV in the Init Message
• Have a new Message Type for Compressed Route Monitoring (CRM)
• Essentially apply draft-przygienda-idr-compressed-updates to BMP
exit(0)