

Making BMP usable offline

`draft-lucente-grow-bmp-offline`

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IETF GROW WG

draft-lucente-grow-bmp-offline



- Problem statement:
 - Peer Up messages build state
 - BGP sessions are typically long-lived
- Send a Peer Summary at regular time intervals

draft-lucente-grow-bmp-offline

```
0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1
+---+---+---+---+---+
|   Version   |
+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+
|                                     Message Length                                     |
+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+
|Msg Type = TBD1|
+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+
|   Type = TBD2 (2 octets)   |   Length (2 octets)   |
+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+
~ Value = Per-Peer Header + Peer Up Notification (variable) ~
+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+
|   Type = TBD2 (2 octets)   |   Length (2 octets)   |
+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+
~ Value = Per-Peer Header + Peer Up Notification (variable) ~
+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+
~                                     Peer TLV 3 .. N                                     ~
+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+
```

BMP v4: TLV support for BMP Route Monitoring and Peer Down Messages

`draft-ietf-grow-bmp-tlv`

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draft-ietf-grow-bmp-tlv



- 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 IETF119 / draft-ietf-grow-bmp-tlv-14

- No additional drafting work, one open question:
 - Guess REACH, UNREACH, [..] is part of the same UPDATE message:
 - How do we count indexes? (Luuk)
 - Linear (as currently described in the document)
 - Structured (ie. sets of NLRIs, indexes are relative to the set)
 - Mandate one set per BGP Update PDU (not a fan but worth mentioning)
 - ~~Groups of groups~~

Since IETF120 / draft-ietf-grow-bmp-tlv-14

- Additional questions:
 - Make TLV'd Peer Up and Peer Down messages?
 - Add sequence number to Common Header?
 - Do we have all timestamps we need?

BMP v4: TLV support for ~~BMP Route Monitoring and Peer Down Messages~~

`draft-ietf-grow-bmp-tlv`

?

~~BMP v4: TLV support for BMP Route Monitoring and Peer Down Messages~~

draft-ietf-grow-bmp-tlv

?

Filtering Adj-Rib-In and Adj-Rib-Out to BMP receivers

`draft-pcm-grow-bmp-adj-ribs-filtered`

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IETF GROW WG

Intuition

- Loc-RIB features a F flag for filtered RIB
- Post-Policy Adj-Rib-In, Post-Policy Adj-Rib-Out miss this flag
- It can simply be useful to have this feature available:
 - For completeness of the protocol
 - For use-cases:
 - Limit the fire-hose to data of interest
 - Filter down to Afs of interest
 - ...

Since IETF 120

- No additional drafting work
- WG Adoption?