

# BMP Peer Up Message Namespace

`draft-ietf-grow-bmp-peer-up`

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IETF GROW WG

# Problem statement

“One message type, the Peer Up message, lacks a set of TLVs defined for its use, instead sharing a namespace with the Initiation message. This document updates RFC 7854 by creating an independent namespace for the Peer Up message.”

# BMP Initiation and Peer Up Information TLVs

(Status quo)

0	String	<a href="#">[RFC7854]</a>
1	sysDescr	<a href="#">[RFC7854]</a>
2	sysName	<a href="#">[RFC7854]</a>
3	VRF/Table Name	<a href="#">[RFC9069]</a>
4	Admin Label	<a href="#">[RFC8671]</a>
5-65530	Unassigned	
65531-65534	Experimental	<a href="#">[RFC7854]</a>
65535	Reserved	<a href="#">[RFC7854]</a>

# BMP Initiation Information TLV

(this draft)

0	String	<a href="#">[RFC7854]</a>
1	sysDescr	<a href="#">[RFC7854]</a>
2	sysName	<a href="#">[RFC7854]</a>
3	Reserved	
4	Reserved	
5-65530	Unassigned	
65531-65534	Experimental	<a href="#">[RFC7854]</a>
65535	Reserved	<a href="#">[RFC7854]</a>

# BMP Peer Up Information TLV

(this draft)

0	String	<a href="#">[RFC7854]</a>
1	Reserved	
2	Reserved	
3	VRF/Table Name	<a href="#">[RFC9069]</a>
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65535	Reserved	<a href="#">[RFC7854]</a>

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

`draft-ietf-grow-bmp-tlv`

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06 Nov 2023

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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

# Status / open issues draft-ietf-grow-bmp-tlv

- ~~Move the BGP PDU into a TLV~~
- ~~Justified Stateless parsing TLVs~~
  - Idea to make it one field (from Luuk)
- ~~Bump version to 4~~
- Time to pause & re-implement the draft in software
  - (more on the next slide)



# Hackathon: Wireshark dissector for BMPv4

```

  Ethernet II, Src: be:f7:8f:70:36:33 (be:f7:8f:70:36:33), Dst: f6:a6:25:64:d0:e8 (f6:a6:25:64:d0:e8)
  Internet Protocol Version 4, Src: 99.99.100.1, Dst: 99.99.100.99
  Transmission Control Protocol, Src Port: 50850, Dst Port: 1790, Seq: 688, Ack: 279, Len: 336
  BGP Monitoring Protocol, Type Route Monitoring
    Version: 4
    Length: 168
    Type: Route Monitoring (0)
    Per Peer Header
    BMPv4 TLV: BGP Message
      Type: 4
      Length: 74
      Index: 0
      Value: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff 00 4a 02 00 00 00 2b 40 01 01 00 50 02 00 00 40 03 04 00 00
      Border Gateway Protocol - UPDATE Message
        Marker: ffffffffffffffffffffffffffffffffff
        Length: 74
        Type: UPDATE Message (2)
        Withdrawn Routes Length: 0
        Total Path Attribute Length: 43
        Path attributes
        Network Layer Reachability Information (NLRI)
    BMPv4 TLV: Route VRF/Table Name
      Type: 3
      Length: 6
      Index: 0
      Value: global
    BMPv4 TLV: BGP Add-Path Capability
    BMPv4 TLV: BGP Multi-Label Capability
      Type: 7
      Length: 1
      Index: 0
      Value: True
    BMPv4 TLV: Group
      Type: 5
      Length: 8
      Index: 0
      Group ID: 69
      Target Count: 3
        Index: 420
        Index: 69
        Index: 21
  BGP Monitoring Protocol, Type Route Monitoring

```

Thank you Maxence!

# Support for Enterprise-specific TLVs in the BGP Monitoring Protocol

`draft-lucente-grow-bmp-tlv-ebit`

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Yunan Gu, Huawei

06 Nov 2023

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# 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”

# Since IETF117 / draft-ietf-grow-bmp-tlv-ebit-03

- Added E-bit for Stats Types

# Status / open issues draft-ietf-grow-bmp-tlv-ebit

- No open issues at the moment
- Some feedback to process
- **Dependency on `draft-ietf-grow-tlv` for WGLC**

# Logging of routing events in BGP Monitoring Protocol (BMP)

`draft-lucente-grow-bmp-rel`

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06 Nov 2023

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# Intuition

- Add an event-driven message type to BMP:
  - Alerting
  - Reporting
  - On-change analysis
- Complement to:
  - State Synchronization (Route Monitoring)
  - Debugging (Route Mirroring)
  - Session reporting (Peer Up, Peer Down)
  - Stats

# Status / open issues draft-lucente-grow-bmp-rel

- Timid attempt at defining the Policy Discard TLV
  - Currently just a string
  - Goal: let's not F35 it
  - What would YOU like to get here?
- Plenty of work to do, ie. detail all other TLVs
- Feedback to process
- WG Adoption call ongoing:
  - Show your interest by Nov 8<sup>th</sup>!