

Log More Routing Events in the BGP Monitoring Protocol

draft-geng-grow-bmp-rel-enhancement-03

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Main Updates

- **Minutes Grow IETF125:** <https://datatracker.ietf.org/doc/minutes-125-grow/>
- **Jeff Haas:** cautioned against using free-form UTF-8 text strings in protocol elements, noting that they are difficult to parse and interpret. He suggested considering structured data instead and asked what actions a receiving application is expected to take with such information.
 - ◆ **Response:** Log Action code point indicates the reported event. The UTF-8 diagnostic string is removed to avoid potential issues that may arise during parsing and interpreting. Will consider whether to carry some structured data in the Data part.

Main Updates

- ❑ **Minutes Grow IETF125:** <https://datatracker.ietf.org/doc/minutes-125-grow/>
- ❑ **Narasimha Prasad:** noted that care is needed when selecting routing events to report, as some events, particularly those related to next-hop changes, can become very chatty when the network is unstable.
 - ◆ **Response:** Have added some texts in the operational section.

Appropriate caution SHOULD be taken when picking routing events to report, as next-hop related updates may produce heavy message loads during network instability. Mitigation measures SHOULD be deployed on both reporting and receiving sides. For example, local endpoints can apply event filtering controls, while receivers maintain corresponding processing mechanisms to handle potential high-volume event bursts gracefully.

Main Updates

❑ Expanded BGP SR Policy Routing Event Extensions

- ◆ Expanded from one single TBD5 entry in v00 to three events (TBD5-TBD7) covering invalid candidate paths, illegal segment lists, and software specification limit violations, with a reference to RFC 9256.
- ◆ TBD5 = Invalid-Candidate-Path
- ◆ TBD6 = Invalid-Segment-List (**New**)
- ◆ TBD7 = Exceeded-Spec-Limit (**New**)

Main Updates

□ Operational Considerations

- ◆ **Specified device-side reporting rules:** Devices generate BMP REL notifications upon FlowSpec/SR Policy validation or installation failures after receiving policy routes from controllers, RRs or BGP peers.
- ◆ **Defined collector-side requirements** for event storage, context correlation, real-time alerting and offline troubleshooting.
- ◆ **Selecting routing events to report** as next-hop related updates may produce heavy message loads during network instability.
- ◆ **Clarified limitation:** The defined events only report failure states without dedicated recovery notifications; operators need cross-correlation with other BMP messages and local device status to identify fault clearance.

Main Updates

- **IANA allocation request**

- ◆ Explicitly formalized the request to IANA for seven new Log Action TLV code points corresponding to TBD1 through TBD7.

- Added co-author **YuJia Gao** from Zhongguancun Laboratory.

Thanks!

Comments are welcome.