BGP Monitoring Protocol (BMP) -02

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BMP Refresher

- BMP is a protocol to allow a monitoring station to receive routes from a BGP speaker
  - The key is the monitoring station receives *all* routes, not just active
  - Considerably better than ASCII screen-scraping
- Accomplished using Route Monitoring messages
  - Basically encapsulated BGP UPDATEs
- Plus a few other message types for stats and state changes

BMP Refresher [2]

- Common header contains (essentially):
  - Version and message type
  - Identity of peer (IP address, ASN, etc)
  - Timestamp
- All messages flow from router to monitoring station
- draft-ietf-grow-bmp-02

Changes in -01 Draft

- Corrected a few code points (made documented type codes match deployed implementation)
- That is all

Changes in -02 Draft

- Incorporates WG feedback
- Adds Peer Up (PU) notification message
  - Encapsulates OPEN messages exchanged between BGP speaker and peer
- Adds L(ocal-RIB) flag to common header
  - Allows monitoring station to know if routes are from the Adj-RIB-In (pre-policy) or the Local-RIB (post-policy). Pre-policy is preferred when possible.
- Version bumped to 2
- Editorial Changes

Feedback Received on -02

- Suggest AS_CONFED loop stat report (to correspond to AS loop)
- Clarification that monitor MUST ignore messages it doesn't understand
- Include FSM state and event in reason = 2 Peer Down messages (local system closed session without notification message)
- Add length field to fixed header
  - Currently would be redundant, but allows monitors to skip over messages they can't parse
- Vendor-specific message type range?
- Initiation message with vendor, equipment, software, etc information (perhaps just a string)

Next Steps

- Consider and incorporate feedback in -03
- Implement (and iterate as necessary based on experience)
- Need monitor implementations for interoperability testing before we can progress spec!
  - Current in-house test jig not sufficient…