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…