

EVPN-Specific BMP RIB Statistics Extensions

draft-saum-grow-bmp-afi-safi-evpn

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Quick Recap

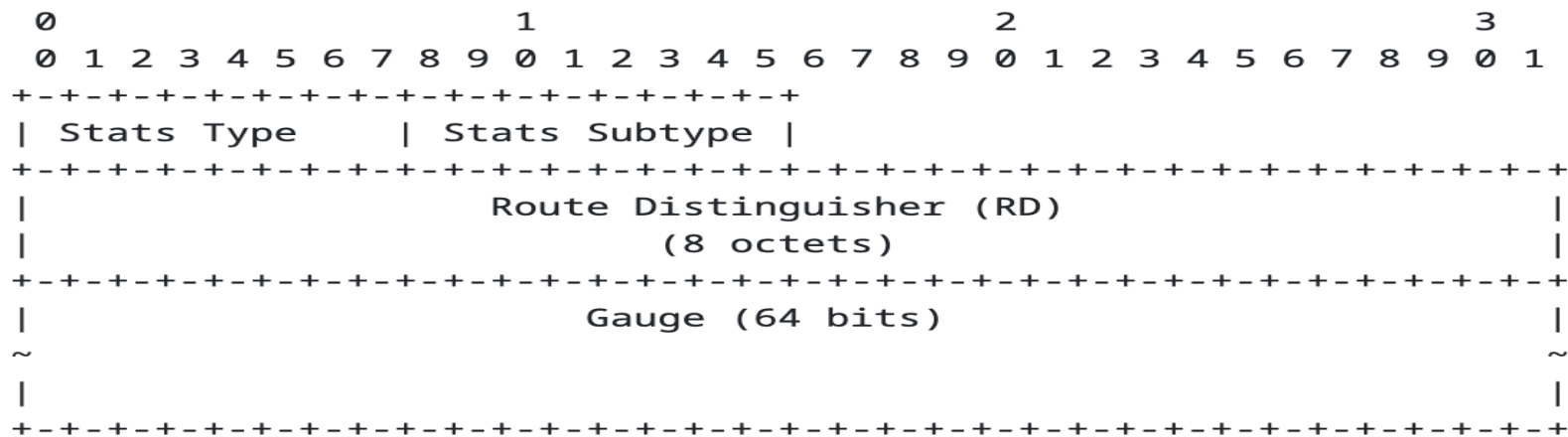
- Presented in last IETF (IETF-124) meeting.
- This draft defines a new EVPN-specific BMP statistics types.
- These statistics type are for all 5 RIB views.
- The counters defined in this document align with the EVPN YANG model described in [I-D.ietf-bess-evpn-yang-07]
- **Updates:**
 - New type & subtypes definition.
 - Per EVI (EVPN Instance) Route Statistics.

Update 1

- New Types and Subtype definition.
- Stats Type (1 bytes): EVPN stats type. Defined types are:
 - Type = 0: EVPN route statistics in the RIB.
 - Type = 1: EVPN leaked route statistics in the local RIB.
 - Type = 2: EVPN multihoming Ethernet Segments (ESs) statistics.
 - Type = 3: EVPN multihoming EVPN instances (EVIs) statistics.
 - Type = 4: EVPN aliased paths statistics
- Stats subtype (1 bytes): The stats sub type. Used when stats type is set to 0 or 1. Defined subtypes are:
 - Subtype = 0: Reserved
 - Subtype = 1: EVPN route type 1 (Ethernet Auto-discovery).
 - Subtype = 2: EVPN route type 2 (MAC/IP Advertisement).
 - Subtype = 3: EVPN route type 3 (Inclusive Multicast Ethernet Tag Route).
 - Subtype = 4: EVPN route type 4 (Ethernet Segment Route).
 - Subtype = 5: EVPN route type 5 (IP Prefix Route).
 - Subtype = 6: EVPN route type 6 (Selective Multicast Ethernet Tag Route).
 - Subtype = 7: EVPN route type 7 (IGMP Join Synchronization Route).
 - Subtype = 8: EVPN route type 8 (IGMP Leave Synchronization Route).
 - Subtype = 9: EVPN route type 9 (Per-Region I-PMSI A-D route).
 - Subtype = 10: EVPN route type 10 (S-PMSI A-D route).
 - Subtype = 11: EVPN route type 11 (Leaf A-D route).

Update 2

- Per-EVI EVPN route statistics format added.
- The statistics data is encoded as
 - 1-byte EVPN Stats types.
 - 1-byte stats sub-type. Indicates the EVPN route type associated with this statistics.
 - followed by 64-bit gauges.
- This is EVPN specific statistics counter, so EVPN AFI (20)/SAFI(70) is not encoded in BMP statistics messages format.
- Route Distinguisher (RD) (8 octets): Indicates source EVI associated with EVPN route.



Status & Next Steps

- Review comments are welcome.
- Adoption in working group