MTU Extended Community for BGP-4

draft-zeng-idr-bgp-mtu-extension-01

Q. Zeng, J. Dong (Huawei Technologies)

IETF82 IDR Nov. 2011 Taipei

Background

• MTU discovery of inter-AS LSP

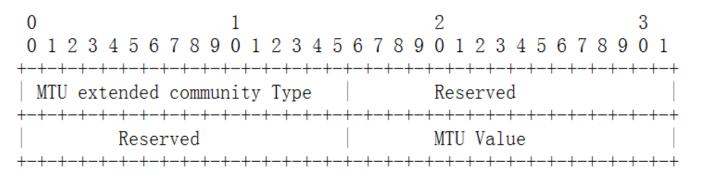
- established using labeled BGP (RFC3107)

- Typical use cases
 - Inter-AS VPN Option C
 - Carrier's carrier
 - Seamless MPLS

— . . .

Solution Review

- BGP LSP Path MTU:
 - Path MTU of the LSP from a given BGP LSR to a specific prefix
- BGP LSR Link MTU:
 - Minimum link MTU between a given BGP LSR and its downstream BGP LSR
- A new BGP extended community
 - MTU extended community



Changes in -01

- Add a section of problem statement
 - takes inter-AS VPN option C as example
- Correct the Path MTU calculation
 - the minimum of the received BGP LSP Path MTU and (BGP LSR Link MTU - 4 octets)
- Considerations on route flapping
- BGP LSP and LDP LSP Stitching
 - Path MTU of the intra-AS LDP LSP is set to the BGP LSP Path MTU of the LSR

Next Steps

- Solicit comments & feedbacks
- WG adoption?

Solution (Cont.)

• Signaling procedures

