

# **BGP-LS Extension for Distribution of IP Tunnel Information**

draft-dong-idr-ls-ip-tunnel-00

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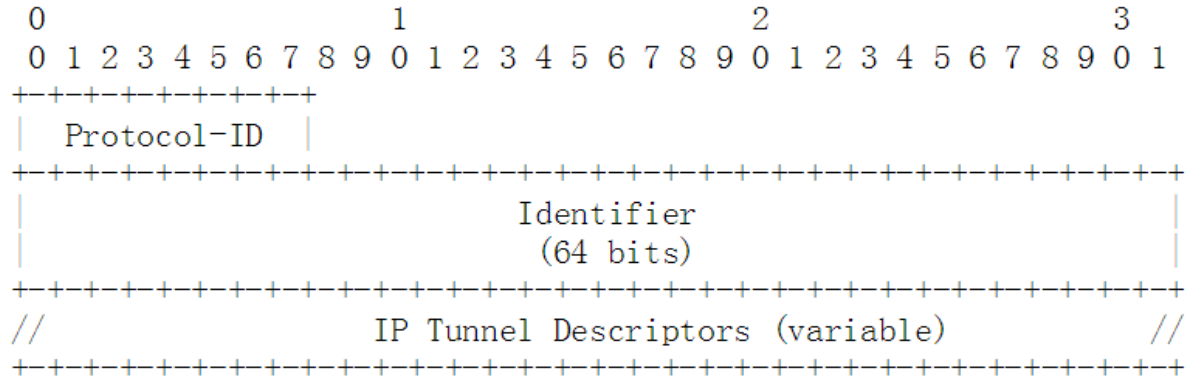
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# Background

- IP Tunnels are widely used in networks which do not deploy MPLS
- When mapping service flow to IP tunnel, controller needs the information of available IP tunnels
- This document proposes to extend BGP-LS to distribute IP tunnel information

# Proposed Solution

- New NLRI type for IP tunnel identifier information



- Protocol-ID:

- Static configuration
- Specific IP tunnel signaling protocol

- IP Tunnel Descriptor TLVs

- IPv4/6 Tunnel Head-end address
- IPv4/6 Tunnel Tail-end address
- Tunnel ID
- Tunnel Type

} **reused from TE-LSP**

# Proposed Solution (cont.)

- IP Tunnel Parameters TLV
  - Carried in BGP LINK\_STATE Attribute
  - Only used with IPv4/IPv6 Tunnel NLRI
  - Defined sub-TLVs
    - Tunnel Name
    - Description
    - Status
    - Encapsulation: format and semantics determined by Tunnel Type
    - CoS
    - MTU

# Operational Consideration

- Existing BGP-LS operational procedures applies
- Ingress nodes of IP Tunnel is responsible for the distribution of IP tunnel information
- Egress nodes of IP tunnels MAY report the IP tunnel information

# Next Steps

- Solicit comments & contributions
- Improve the draft accordingly