

BGP Extensions for IDs Allocation

draft-wu-idr-bgp-segment-allocation-ext-01

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Overview

BGP-LS as a controller

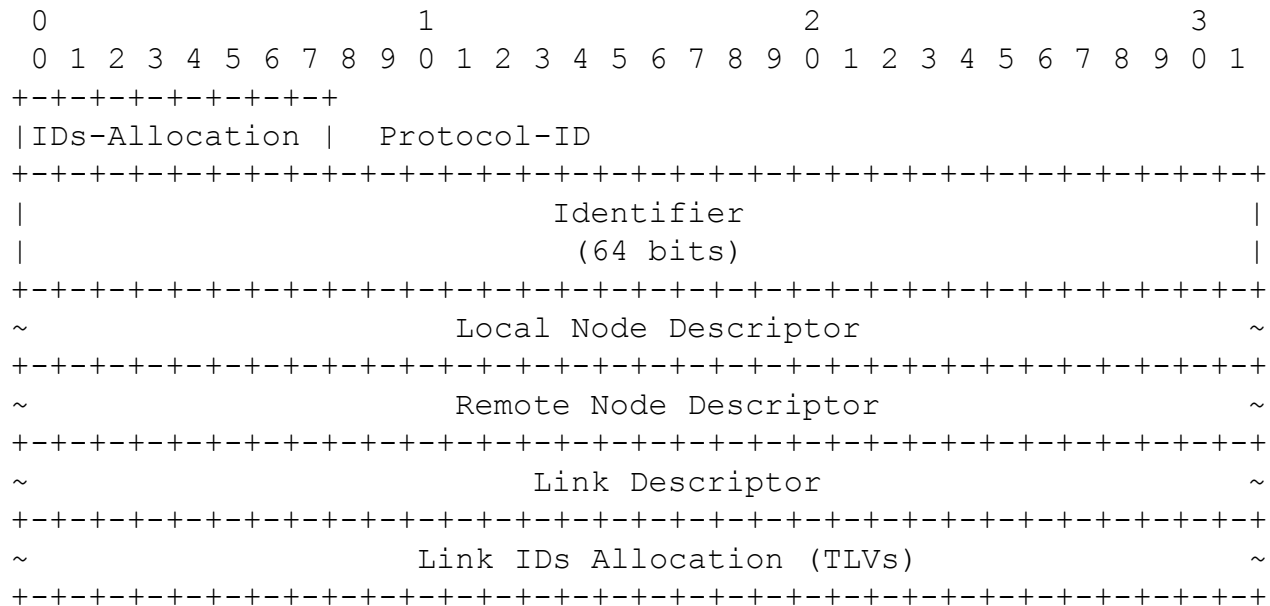
- has link state information, including TE
- allocates and manages resources

It is natural and beneficial to allocate and manage IDs as a resource.

Extensions to BGP-LS as a controller for

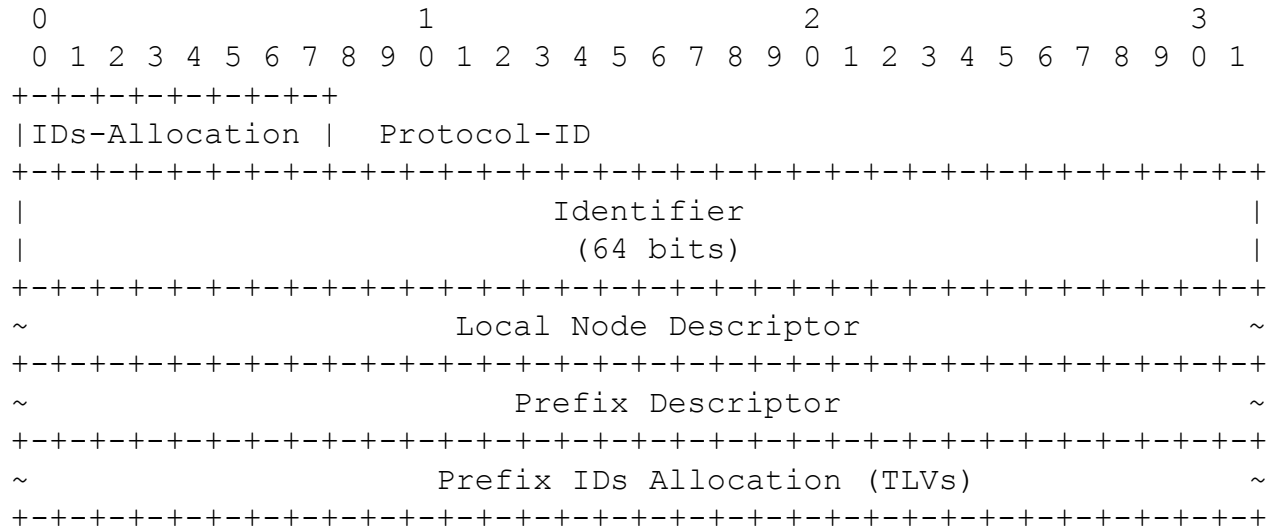
- allocating SIDs for SR
- **allocating indirection identifiers (IIDs) for flow redirect**
- ❖ defines a new Protocol-ID , called IDs-Allocation (IDA)
- ❖ Node NLRI with IDA is used for allocating IDs associated with node
- ❖ Link NLRI with IDA is used for allocating IDs associated with link
- ❖ Prefix NLRI with IDA is used for allocating IDs associated with prefix

Updates: Link NLRI for IDs Allocation



- Adj-SID TLV (1099): It contains SID allocated for the link/adjacency
- LAN Adj-SID TLV (1100): It contains SID allocated for the adjacency/link to a non-DR router on a broadcast, NBMA, or hybrid link.

Updates: Prefix NLRI for IDs Allocation



- Prefix-SID TLV (1158): It contains SID allocated for the prefix
- Prefix Range TLV (1159): It contains a range of prefixes and the SIDs allocated for the prefixes.

Next Step

Request for adoption