

# SRv6 BGP-LS

## draft-dawra-idr-bgpls-srv6-ext-00

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# MUST READ !!!!!!!

[draft-filsfils-spring-srv6-network-programming](#)

## Also Read

[draft-dawra-idr-bgp-sr-service-chaining-00](#)



# Agenda

- Problem
- Solution



# What we want to do

- Enable advertising of Nodes 'LocalSID' table towards the controller.
- Enable discovery of topological or service sub-paths, called “segments”.



# Agenda

- Problem
- Solution



# Node Attribute TLVs

- SRv6 Node Level Attribute TLVs to signal Node level Capabilities and Local SID Function Table.

TLV Code	Description	Length	Section
TBD	Capabilities TLV	variable	Sec 2.1.1
TBD	SID TLV	variable	Sec 2.1.2



# Node Capability TLV

- Announce the SRv6 capability of the router and to indicate the nature of its support for the SRH operations
- Support following Sub-TLVs:
  - Maximum SL sub-TLV
  - Maximum End Pop SRH sub-TLV
  - Maximum T.Insert SRH sub-TLV
  - Maximum T.Encap SRH sub-TLV
  - Maximum End D SRH sub-TLV



# Node SID TLV

- Announce the SR SID value associated with the Segment Routing Functions (such as End, End.T, END.DX6 etc)





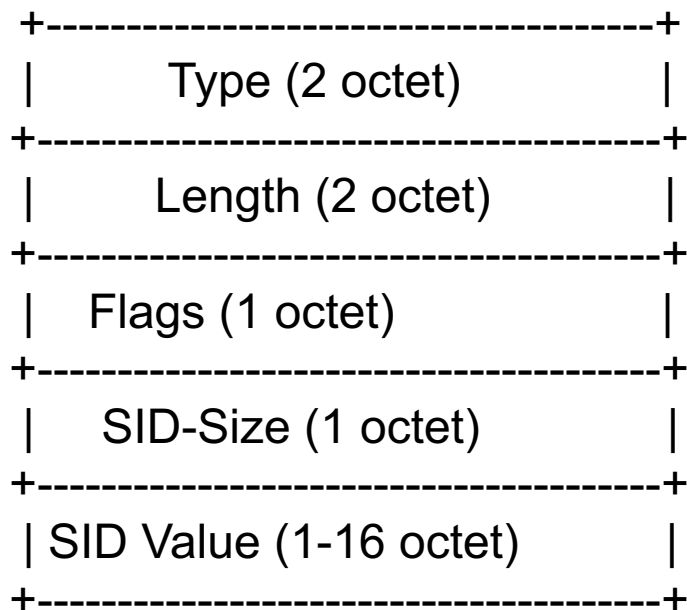
# Link Attribute TLVs

- SRv6 SIDs with their link or adjacency level functions (e.g. END.X function)

TLV Code	Description	Length	Section
TBD	P2P X-SID TLV	variable	Sec 2.2.1
TBD	LAN X-SID TLV	variable	Sec 2.2.2

# Link P2P X-SID TLV

- Announce the adjacency level functions for P2P Links.



Type:

TBD

Length

Length of Sub-TLV

Flags:

IGP: I-D.bashandy-isis-srv6-extensions

SID Value:

Value based on the SID-Size



# Link LAN X-SID TLV

- The LAN Adjacency Attribute TLV allows a node to announce adjacencies to all other nodes attached to the LAN in a single instance of the BGP-LS Link NLRI.

+-----+
Type (2 octet)
+-----+
Length (2 octet)
+-----+
Neighbor-ID (6 octet)
+-----+
Flags (1 octet)
+-----+
SID-Size (1 octet)
+-----+
SID Value (1-16 octet)
+-----+

Type:

TBD

Length

Length of Sub-TLV

Flags:

IGP: I-D.bashandy-isis-srv6-extensions

Neighbor-ID:

Neighbor or system-ID

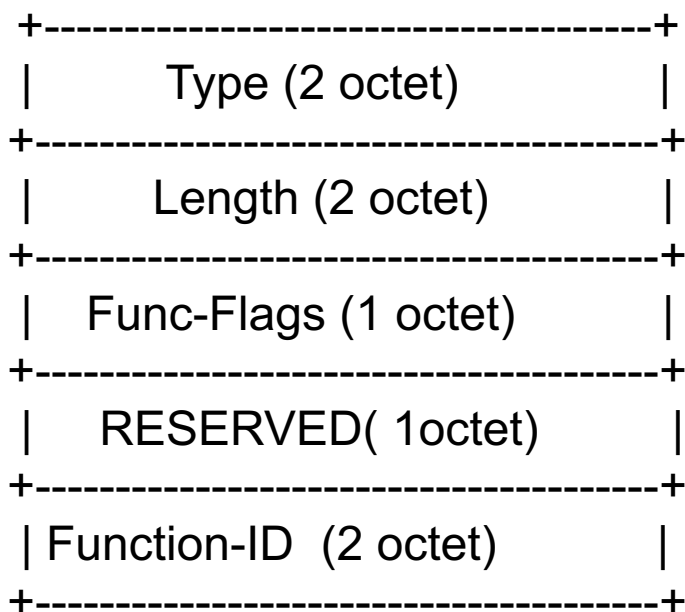
SID Value:

Value based on the SID-Size



# Function Sub-TLV

- Function Identifier of the SID Encoded in the TLV.



Type:

TBD

Length

Length of Sub-TLV

Function Flags:

Future

RESERVED:

Future

Function-ID:

Value from SR Function Identifier



# Draft: Next Steps

- Seeking WG input and feedback
- Suggestions/comments are welcome!!

