

# DRAFT-MINTO-IDR-BGP-AUTODISCOVERY-01

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# SCOPE

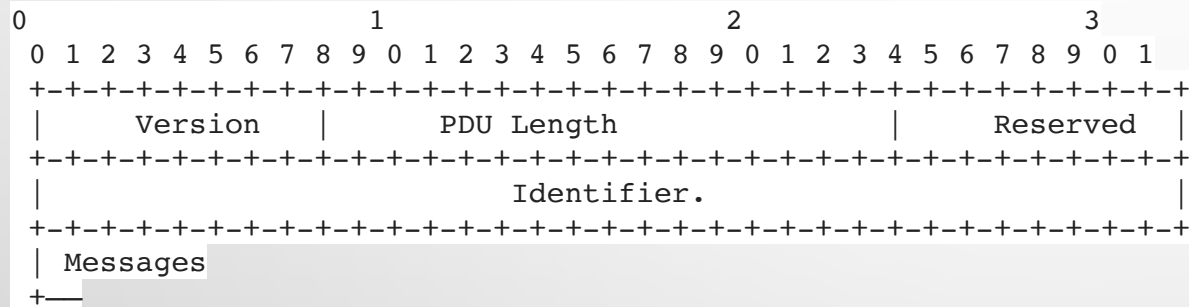
- REDUCE NODE SPECIFIC MUNDANE CONFIG
- SCOPED FOR LAYER-3 SINGLE HOP
  - LINK & LOOPBACK BASED PEER
- ADVERTISE TRANSPORT PARAMETERS

# PROTOCOL OPERATION

- BUILD TOP OF UDP USING LINK LOCAL MULTICAST TO AVOID LINK MEDIA DEPENDENCY.
- TLV BASED AND TLVS ARE GROUPED WITH MESSAGE.
- PERIODICALLY ADVERTISE TRANSPORT INFORMATION WITH LIFE TIME.
- SUPPORT ON THE FLY LIFE TIME CHANGE BY SENDER.
- REFRESHES INTERESTING EVENT SUCH AS NEW ADVERTISER/REQUEST FOR FAST DISCOVERY.
- LOOSELY COUPLED WITH BGP

# PDU LAYERS

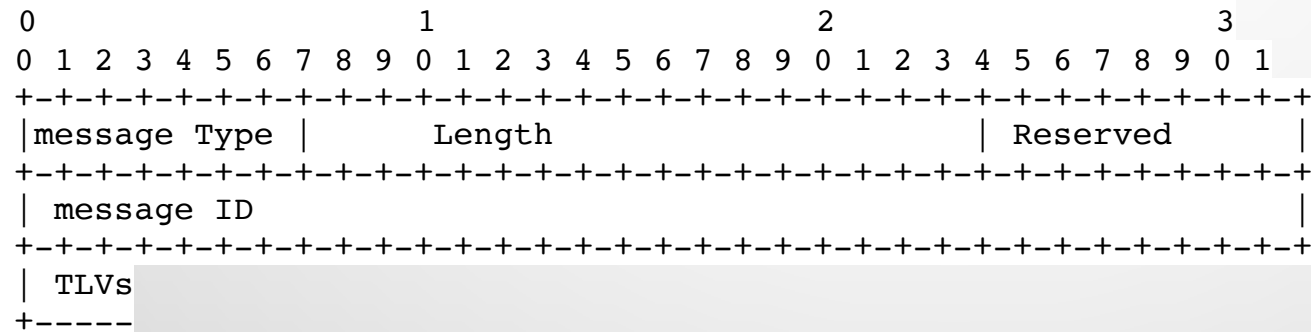
- PDU-HEADER[MESSAGES[TLVS, ... ] ...]



- IDENTIFIER: UNIQUELY IDENTIFIES PDU SENDER [BGP-ID].
- DRAFT VERSION 00 DEFINE 2 MESSAGES
  - SA BASE - FOR PROTOCOL OPERATION
  - BGP ADVERTISEMENT - BGP PARAMETERS.

# PDU LAYERS

- MESSAGE



message Type: This 1-octet value identifies type of message.

**Message Length:** Specifies the length in octets of the Message ID and TLVs.

Message ID :32-bit value used to identify this message. Used for logging purpose.

# PDU LAYERS

## TLV format.

0										1										2										3									
0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1								
Type										Length										Value																			
Value ..																																							

Type: 1-octet value to interpret the value with in message. Same type value could be reused in different message.

# CHANGES IN VERSION 1 DRAFT SA BASE

- THE SA BASE MESSAGE IS MANDATORY MESSAGE AND MAINLY USED FOR THE PROTOCOL OPERATION.
- NEW TLV
  - ***REFRESH REQUEST - TO SUPPORT FASTER DISCOVERY AFTER RESTART.***
- EXISTING TLVS
  - REMAINING LIFETIME
    - SENDER DRIVEN LIFETIME
  - CONFIG SEQUENCE
  - AUTHENTICATION

# CHANGES IN VERSION 1 DRAFT BGP ADVERTISEMENT MESSAGE

- THE BGP ADVERTISEMENT MESSAGE DESCRIBES TRANSPORT PARAMETERS.
- CHANGES IN TLVS
  - **LOCAL ADDRESS**
    - *FROM SINGLE ADDRESS TO ADDRESS LIST WITH FLAG AND PREFERENCE.*
    - *V4 & V6 GET DIFFERENT TLV TYPE*
    - *PREFERENCE FILED REMOVES ADDRESS FAMILY PREFERENCE TLV*
  - **LINK ADDRESS**
    - *ADD SUPPORT TO MAC ADDRESS ALONG WITH IPV4/V6*
- SECURITY TTL
- SECURITY AUTHENTICATION
- TCP MSS
- TRANSPORT PREFERENCE



# THANK YOU 😊

- DRAFT [HTTPS://WWW.IETF.ORG/ID/DRAFT-MINTO-IDR-BGP-AUTODISCOVERY-01.HTML](https://www.ietf.org/id/draft-minto-idr-bgp-autodiscovery-01.html)
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