DRAFT-MINTO-IDR-BGP-AUTODISCOVERY

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SCOPE FOR AUTO DISCOVERY

• Reduce mundane configuration
• Currently scoped for layer 3 single-hop
• Provide transport information for initial tcp connection set up
SERVICE ADVERTISEMENT PROTOCOL

- Based on UDP multicast
- Support for ipv4 and ipv6
- TLV based messages
- Advertise Transport information with expiry time
- Refresh advertise information before expiration
- Loosely coupled with BGP
PROTOCOL PDU LAYERS

- PDU: Header[Messages[TLVS]]
- Header contains: Version, Length, Identifier along with individual messages
- Identifier being used to determine sending device
- Draft describes two messages:
  - Service Advertisement Base message
  - BGP Advertisement message
SERVICE ADVERTISEMENT- BASE MESSAGE

- Mandatory message
- Used for protocol operation
- TLVs:
  - Lifetime
    - Sender driven
  - Config Sequence
  - Authentication
BGP SERVICE ADVERTISEMENT MESSAGE

• Minimal information for bgp peer bring up
• TLVs:
  • Local-address
  • Security TTL
  • Security Authentication
  • Link-address
  • Transport preference
EXPIRATION OF BGP PEER INFORMATION

- Protocol provides initial information to bring up bgp peering.
- Upon expiry, keep connections established until:
  - Operator configured interval for auto-discovery state.
  - Connection is terminated by remote-end (Recommended).
CHANGE IS TRANSPORT INFORMATION

• Change in config sequence number for peering-address needs connection termination.
• To ensure latest auto discovery information is used for connection establishment.
THANK YOU!!