

RSVP-TE Path Diversity using Exclude Routes

draft-ietf-ccamp-lsp-diversity-04.txt

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Background

- In London the chairs asked the authors of the following drafts to meet and see if they could work out their differences
 - draft-ietf-ccamp-lsp-diversity-03
 - draft-zhang-ccamp-route-exclusion-pathkey-01.txt
 - draft-fedyk-ccamp-uni-extensions-04
- After two meetings, we agreed to accept each others' methods
- Between then and now there was much email exchange and editing

My perspective

- **The IP / Optical environment is much more vendor diverse than either the IP or Optical environments themselves**
- **Various vendors will build what they need to control their piece(s)**
- **Our systems may be stitched together in many ways**
- **To serve the market we need to play well together**

The merger

- **A single vehicle for passing diversity information will be used, thus:**
- **A new diversity XRO subobject is defined**
- **Sub-subobjects will carry the reference for exclusion with one of these forms of identification:**
 - **Client Initiated Identifier**
 - **PCE Allocated Identifier**
 - **Network Allocated Identifier**

Next Steps

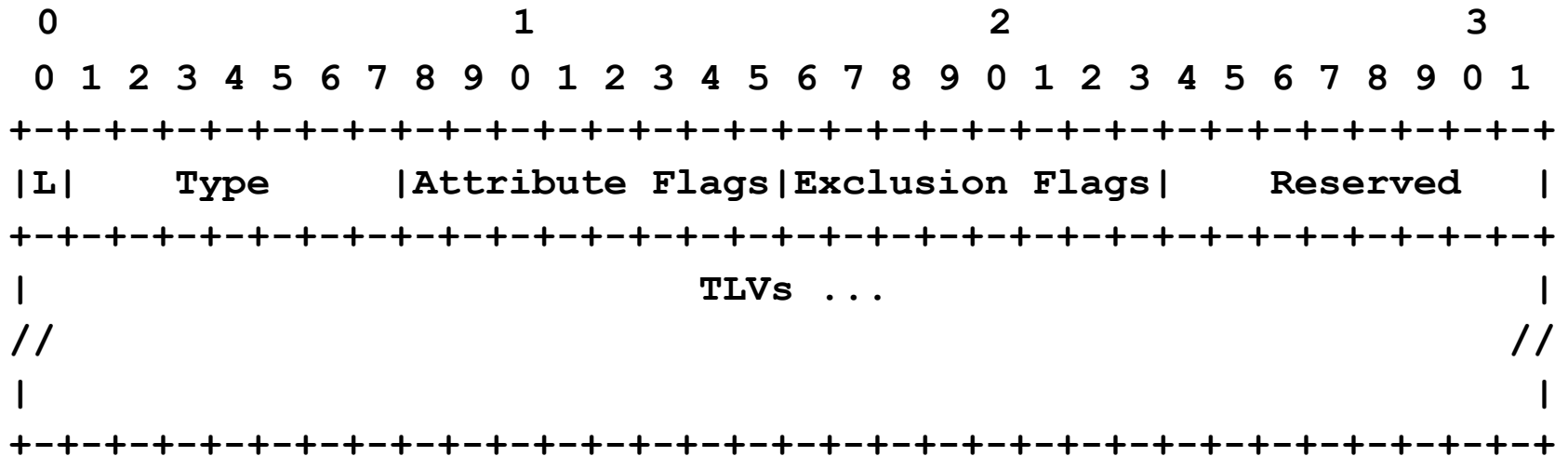
- **Authors would like to request WG feedback.**



Thank You.

Backup / Reference

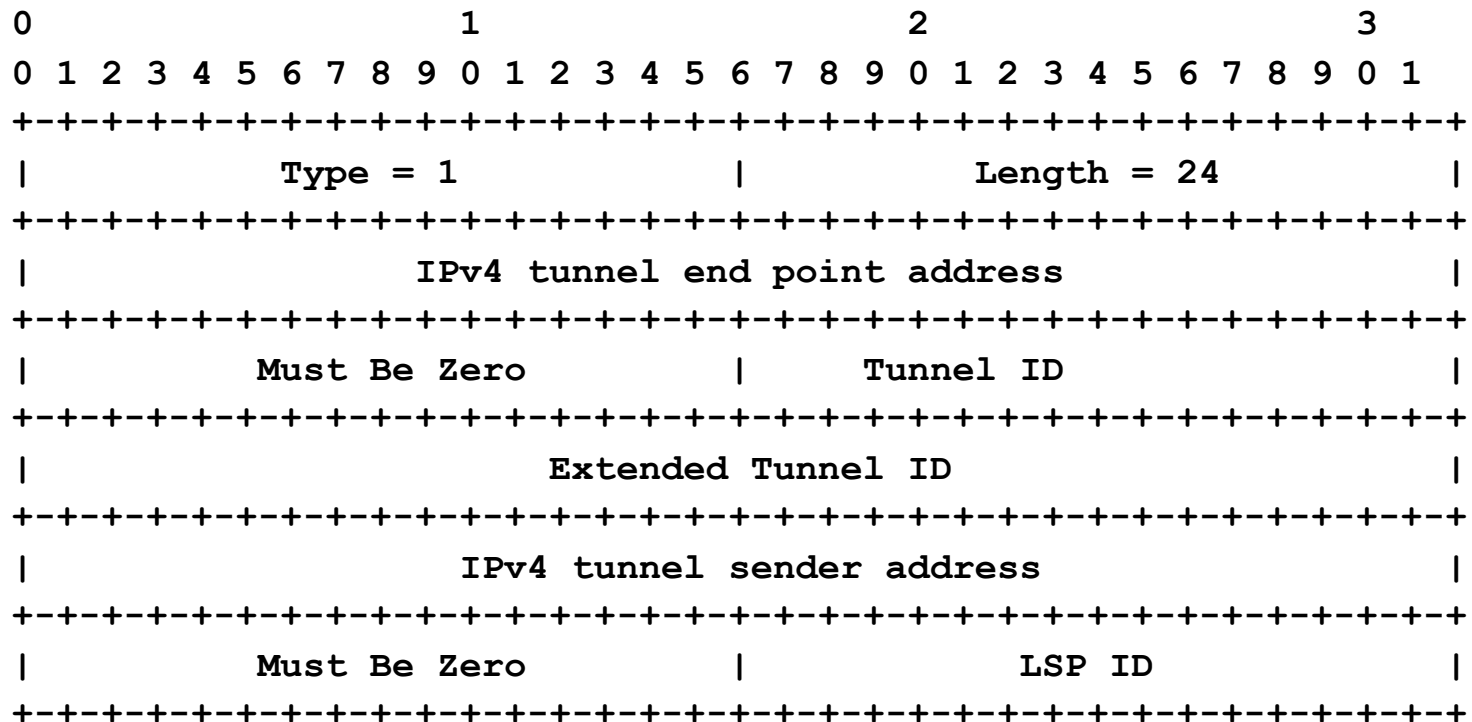
Diversity XRO subobject Encoding



- The L-flag is used as per [RFC4874], i.e., mandatory or best-effort exclusion.
- The following types of TLVs are defined:
 - IPv4/ IPv6 tunnel identifier TLV (client initiated identifier).
 - IPv4/ IPv6 Path Key TLV (PCE allocated identifier)
 - IPv4/ IPv6 Path Affinity Set (network allocated identifier)
- Attribute and exclusion flags are equally applicable to all TLVs.

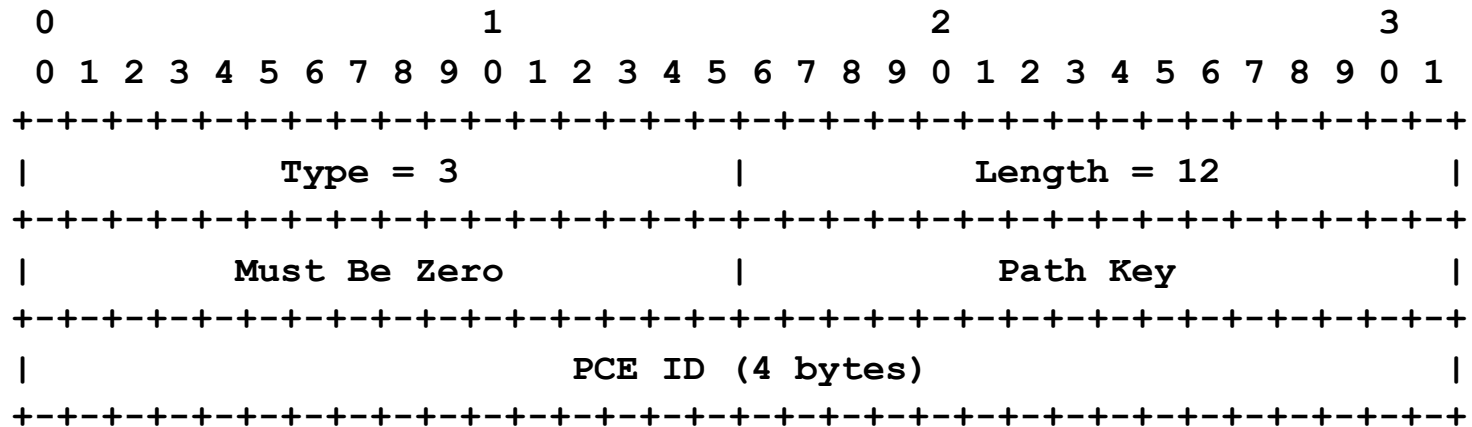
IPv4 P2P tunnel identifier TLV

- This is a client initiated identifier encoded as RSVP-TE FEC.
- An IPv6 equivalent TLV is also defined (type 2)



IPv4 Path Key TLV

- This is a PCE allocated identifier carrying the Path Key.
- An IPv6 equivalent TLV is also defined (type 4)



IPv4 Path Affinity Set TLV

- This is a network allocated identifier encoded using the PAS identifier.
- An IPv6 equivalent TLV is also defined (type 6)

