draft-ietf-idr-te-lsp-distribution-09

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Overview

• Defines a new BGP-LS NLRI Type for TE Policy advertisement

• Covers different types of TE Policies
  • RSVP-TE
  • Segment Routing
  • Local Cross Connects

• Signals the path details and status
Updates in version 09

• Alignment of Segment Routing Policies with draft-ietf-spring-segment-routing-policy adopted by SPRING WG

• Major updates for SR Policy advertisement
  • Updated descriptors to align with SR Policy Architecture
  • Updated attributes to not just advertise the segment-list but also other key attributes and status

• Editorial changes in other parts of the document for clarity and section re-organization

• No changes for RSVP-TE advertisements
SR Policy Descriptor

Describes the SR Policy Candidate Path in the TE Policy NLRI
SR Policy State TLVs

Attributes of the TE Policy NLRI for SR Policies

1. SR Binding SID TLV
   - Indicates the BSID in use and its properties

2. SR Candidate Path State TLV
   - Indicates whether the CP is active and its validation state
   - Indicates how the CP was instantiated (e.g. PCE initiated, PCE delegated, ODN instantiated, etc.)
   - Other attributes and properties like Preference, Priority, etc.

3. SR Candidate Path Name TLV
SR Policy State TLVs – contd.

4. SR Candidate Path Constraints TLV
   • Indicates the algorithm and constraints associated with the path
   • SR Affinity Constraint sub-TLV
   • SR SRLG Constraint sub-TLV
   • SR Bandwidth Constraint sub-TLV
   • SR Disjoint Group sub-TLV

5. SR Segment List TLV
   • One or more Segment-Lists associated with the CP
   • Indicates whether it was computed dynamically or was explicit path
   • Indicates the computation and validation/resolution state
   • Also indicates the weight and algorithm of the SR Policy
   • Includes one or more SR Segment sub-TLVs
SR Policy State TLVs – contd.

6. SR Segment TLV
   - Indicates the segment-type and a type-specific descriptor
   - Indicates the SID corresponding to the segment
   - Indicates the validation/resolution status of the SID

7. SR Segment List Metric TLV
   - Sub-TLV of the SR Segment List TLV
   - Indicates the metric type, metric value and bounds for the computation
Procedures

• SR Policies may be instantiated on the headend by
  • Local configuration
  • PCEP
  • BGP SR Policy

• Headend reports the SR Policies instantiated on it via BGP-LS using this specification

• Document describes how Attribute TLVs are used to convey the state of the SR Policy
Next Steps

• Document needs review in view of the content changes
• Requesting WG review and any inputs/feedback
• Consider early code-point allocation for implementations