

# Inter-AS LSPs

- ◆ Overview of Draft
- ◆ Future Steps
- ◆ Issues

# Overview of Draft

- ◆ Inter-AS labels distributed by BGP using RFC3107, RFC2858.
- ◆ Two proposed methods to establish inter-AS LSPs:
  - Importing labeled routes into AS interior allows a single label stack end-to-end. Elemental LSPs formed using LDP, RSVP-TE, etc. are “spliced” to BGP-distributed labels.
  - Import only BGP Next Hop LSPs into AS interior, requiring a two label stack.
- ◆ Clarifications:
  - BGP Next Hop field in MP\_REACH\_NLRI attribute contains the same value as that in the NEXT\_HOP attribute
  - Appearance of particular address prefix only once in an Update message
  - Label 0x800000 in MP\_UNREACH\_NLRI doesn't withdraw unlabeled route
  - BGP labeled routes are atomic; cannot separately use prefix unlabeled
  - Label stack depth can be limited in BGP labeled routes
- ◆ Detailed example LSP setup and Update message

# Future Steps

- ◆ Another draft “Inter-City MANs” addresses inter-AS LSPs.
  - draft-menezes-inter-city-man-mpls-00.txt
  - “Carrier’s Carrier” model vs. inter-AS model.
  - Should consider merging the drafts.

draft-mroz-ppvnp-inter-as-lsps-  
00.txt

# Issues

- ◆ RSVP-TE not specifically addressed.
- ◆ LDP targeted peer session scalability not addressed.