

RSVP + Traffic Engineering (TE)

Agenda

- Term test #1: marking should be completed by Mon Feb 27
- Questions from previous lecture:
 - "What happens when Summary Refresh is in use and one or more RSVP LSPs are *not* ok? What gets returned? See RFC 2961 "If the router does not find a message corresponding to one of the Message ID values, it sends its neighbor a Summary Refresh message with a MESSAGE_ID_NACK object that indicates the unknown Message ID. The neighbor will then transmit the regular Path or Resv message corresponding to the unknown Message ID." p. 628, NRS-II
- Review:
 - RSVP Mod 4 - Four optimizations for managing RSVP sessions
 - 7 methods of choosing a path in RSVP-TE
 - NRS-II 13.4 – loose & strict hops
- Continue RSVP-TE, Module 5:
 - complete section 1 (slides 25-55)
 - cover sections 2 (Basic TE config) and 4 (LDP-over-RSVP)

RSVP Path Selection

Seven ways RSVP path selection can be made: (NRS-II refs in brackets)

1. simply follow the IGP (default)
2. TE metrics - admin assigned "cost" - supercedes IGP; in cspf... spec (14.7)
3. bandwidth reservation (several flavours) in the prim or sec spec (15.2)
4. hops specified as "loose" or "strict" in the path specification (13.4)
5. hop limit specified using the hop-limit keyword in the LSP (14.7)
6. admin groups (link colouring; lab 5.1) in the primary... specification (14.7)
7. Shared Risk Link Group (SRLG) – for mutually exclusive prim/sec (16.2)

For lab: **Make** a tidy chart showing keywords & where each of these criteria are applied in the LSP configuration! Organize it however you will remember it best.

Configured attributes for these items is carried in type 10 Opaque LSA (or equivalent in ISIS), stored in **TED** and used by **CSPF** for generating the **ERO**.