

RSVP + Traffic Engineering (TE)

Agenda

- Field trip: **Fri Feb 9** Bring a lunch or some \$\$ to buy one at Tim Horton's
- Term Test #1: **Wed Feb 14** (starts at 3pm); everything to-date incl. labs!
- Take up any questions from previous lectures and labs
- Continue RSVP-Traffic Engineering in Module 5:
 - including CSPF: what is it and how does it work? (Mod 5.46-50)
- Complete RSVP (Mod 4)
 - Four optimizations for managing RSVP sessions:
Hello Protocol, Refresh randomization, Msg-ID + ACK, Summary Refresh
- NRS-II 13.4 – loose & strict hops

Assignments and Lab work

- Read: MPLS Module 4 (entire; by Wed)
- Continue studying for test #1:
 - re-read: NRS-II book: Chapters 12, 13
Hey! Is this starting to make more sense now?!!
- Lab 5 post-lab: due by 11:59pm on the day of your lab section's due date.
- Exercise #1 (on BB): MPLS LSPs and Labels, due **Wed @3:00pm**

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:

1. carried in type 10 Opaque LSA (or equivalent in ISIS),
2. stored in **TED**, and
3. used by **CSPF** for generating the **ERO**