

RSVP + Traffic Engineering (TE)

Agenda

- Test #1: **Wed Feb 6** CA412; everything to-date including labs!
- Review: 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 + Summary Refresh, ACK
- 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 11:59pm on your lab section's due date (**Sun/Thu**)
- Exercise #1: MPLS LSPs and Labels, due today! **Mon @ 11:59pm**

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 are:

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