

# RSVP + Traffic Engineering (TE)

## Agenda

- Term Test #1: confirmed for **this Wed Feb 8** (4pm, room P311)  
Will cover everything in MPLS modules 0-4 as well as Lab material
- Take up any questions from previous lectures and labs
- 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
- (Time permitting) Continue TE (Module 5)

## 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 the **day before your next lab** section.
- Exercise #1 (on BB): MPLS LSPs and Labels, due **today @2:00pm**

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