

MPLS LSP Protection

Essentials: Failure detection; (Hot-)Standby vs non-standby Secondary LSPs

Agenda

- Lab Exam: group times are now posted in the BB gradebook!
- Reminder: **Post-lab #12** will be due @ 11:59pm on **Thu Apr 6** for everyone
- Field trip de-brief: importance & scale of virtualization; # of network nodes;
 - How was the SDN presentation? (I had to slip out early!)
 - hand out swag from Nokia
- Review: Lab 10 – MTU values
- Review SA Module 3 – VPLS topologies
 - Hub & spoke; hierarchical; spoke-terminated; don't forget full-mesh!!
- Back to MPLS: Module 6 on Resiliency: Secondary LSPs and FRR;
Section 1: 3-16; Section 2: 30-41; Section 3: 76-99
- Let's talk about jobs for this summer (4:50pm onwards)

Assignments and Lab work

- Read: NRS-II Ch 16 and MPLS Module 6 slide deck
- Lab #11: MPLS Labs 6.1, 6.3: Secondary LSPs, Fast Re-Route
N.B: Compare with NRS-II Labs 16.1 – 16.4
Config slides: MPLS Mod 6: 34, 38, 90
- Lab 10 post-lab: due by 11:59pm **the day before** your lab session #11.

MPLS Resiliency

The key to this section is understanding the difference in behaviour between *Standby* and *Non-Standby* secondary LSPs, and Fast Re-Route for *node* or *facility* protection.

For the FRR, consider the difference between link colouring vs strict/loose paths:

- Which one allows a *node* (ie. router) to be specified, but *not* a link?
- Which allows a *link* to be specified, but *not* a node?

Be sure to make a chart of all the different terminology in this Module:

- primary LSP; secondary LSP; (hot) standby; non-standby
- one-to-one backup; facility backup; node protection; link protection
- PLR; MP; head end; tail end