



INSTITUTO SUPERIOR TÉCNICO

Traffic Engineering

Lab Project #2

Part B

MPLS

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1 Goal

To simulate a MPLS network with GNS3 and Cisco IOS.

2 Equipment

PC with GNS3, VPCS, Wireshark and Cisco IOS.

3 Setup

Using the same network topology of Part A, configure the network such that MPLS is used within the core network.

Test the LDP protocol. Check end to end MPLS connectivity. Identity the default LSP. Check IP routing tables and LIB/LFIB entries. Introduce a failure in the default LSP and check the overall IGP behavior, and changes to IP routing tables and LIB/LFIB, and MPLS recovery. Show/verify how PHP works.

As soon as everything is functional, call your lab supervisor to assess the implemented setup. Do not leave the lab before confirming with the supervisor the status of your project.

4 Assignment duration

This assignment is the second part of a project which will cover 4 lab sessions. The delivery of the report will be only required upon completion of all lab sessions.