

TCP/IP LABS

SERGIO BARRETO

Labs

- You work **in groups of 2**

- One written report per group

- ▶ Fill in the answers **directly** in the assignment PDF file (Use Adobe Reader XI)
- ▶ Upload it on Moodle

- **Deadline** for uploading the lab report:

- ▶ Given on Moodle, but typically is the week after the last session of the lab, **at midnight, the day before** the lecture begins.

- Some labs require a public IPv6 address for your computer

- ▶ If you don't have one at home, we make available a wireless access point around **INF019** (should work in INF1) that assigns to your machine **both IPv4 and IPv6 addresses** via DHCP(6)
- ▶ SSID: lca2-tcpip-labs / KEY: tcpip1516

Lab Utilization Rules

- Extra lab slot on **Tuesdays 16h-18h** in INF019 – Internet Engineering Workshop
 - ▶ Bring your own PC
 - ▶ Option 2: Linux workstations in INF019
- You can ask to have **access to INF019**
 - ▶ any time of the day and of the week (exception: maintenance periods)
- **What you need to do:**
 - ▶ **Go to moodle and fill in the “Lab Utilization Questionnaire”**
 - ▶ We will then give you access to INF019 in 2-3 working days.
- In particular:
 - ▶ Keep all lab material in good state
 - ▶ Watch out for thieves (close windows and doors before leaving **INF019**)
 - ▶ Respect the EPFL network rules

Roadmap

Module 1
Network Layer
Basics

Labs
0 and 1

Module 2
Network Layer,
(advanced)
MAC layer

Lab
2

Module 2
Transport layer
Socket programming

Lab 3

Module 4
Single Domain
Routing

Lab 4

Module 5
Traffic Control

Lab 5

Module 6
Internet Routing

Lab 6

Module 7
Interworking 6-4,
Reservations

Research Exercise
(Option)

Labs 0 and 1

■ Half-labs

■ Lab 0 – introductory

- ▶ Network tools on your PC
- ▶ IPv4 / IPv6
- ▶ Recommendation: Finish it ASAP to leave more time for lab 1
- ▶ **Deadline:** Wed, September 23, 23h59 (in one week!)

■ Lab 1 – virtual environment – important for next labs!

- ▶ The main objective: getting used to VirtualBox & GNS3
- ▶ Other objectives: static network address configuration, iptables
- ▶ Do it as soon as possible, things can go wrong...
- ▶ **Deadline:** Wed, October 7, 23h59 (two more weeks)

Organizational stuff

■ TAs are here to help – ask questions!

- ▶ Also, Google is your friend
- ▶ (but especially stackoverflow.com)

■ There is a different TA in charge of each lab

- ▶ ... and of grading it!

■ Give **brief** answers in the report

- ▶ They should convince the grader that you really understand, without being too boring

■ No cheating

- ▶ There have been cases in the past – just don't do it, it's embarrassing!
- ▶ Labs are not very difficult, they just require some time

Enjoy!

