

The Spirit of This Course

- ❑ Viewpoint 1: « I want this course to teach me all the details of all networking protocols »
 - ex: how to setup my NAT on my ADSL modem
- ❑ Viewpoint 2: « TCP/IP is a mountain of details, I will learn when and if the need arises »
 - thus I do not need this course

viewpoint 1 is correct if you have infinite time during your education years

viewpoint 2 is correct if you have infinite time on the job when you have a problem to solve

both viewpoints are *not fun*

Learn by both Examples and Concepts

- ❑ Computer networking is 40 years of design experience
 - First paper on packet switching: 1961 (Kleinrock)
 - First router built (connection oriented): 1969 (ARPAnet)
 - TCP/IP is not a random collection of protocols, it is based on a few ideas

in this course we will learn the *concepts*

- ❑ “The devil’s in the detail”
 - it is easy to misunderstand concepts if you do not have practical experience: ex: difference between a router and a bridge ?

in this course we will gain *practical experience* by carefully selected practicals

- ❑ This is fun

What, Why, How

- I will try and teach you to always ask first
 - *Why* was this stuff invented, what problem is it solving ?
 - *What* is it doing?

before asking:

- *How* does it do its job ?

After this Course

- ❑ You will know enough concepts and have enough practical experience to
 - undertake a TCP/IP related project
 - look credible at a technical meeting (ex: IETF meeting)
 - quickly learn by yourself the details you need to know, when you need to know them