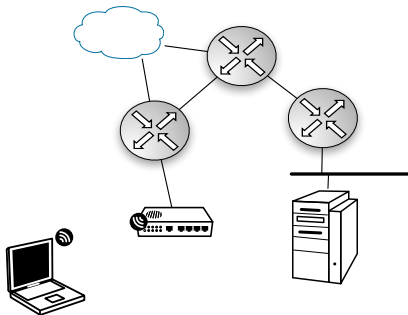


Computer Networks Principles

Martin Heusse



Computer Networks Principles

- Motivation for proposing this course
 - ✓ There are more and more network-enabled devices
 - ✓ More than ever, running the **Internet Protocol!**

Computers, cell phones, wireless sensors...



- Scope – What you will learn in this class:
 - ✓ (What is it?) Basic principles of data (=packet) networks
 - ▶ Packet routing, routers, switches...
It took... 50 years... for this *simple* idea to prevail!
 - ▶ Data link technologies (Ethernet, ADSL, WiFi)
 - ✓ (How is it used?) Common applications (web, email, DNS, ...)
 - ✓ (How to use it?) Networking in a programmer's perspective
 - ✓ Performance aspects

Course format

- Lectures: 7 × 1.5 hours
- Tutorial classes (exercises): 7 × 1.5 hours
- Labs: 4 × 3 hours
 - ✓ Networking gear, setup&configuration, performance
 - ✓ Routing (How do you communicate to enable... communication?)
 - ✓ Programming