Internet Routing

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General information (1)

- Area: BKS – Hauptstudium Vertiefer
- Time
  - Wed: 10:00 – 12:00
- Room
  - MA 042
- Language
  - English (questions can be asked in German!)
- Web site
  - http://www.net.t-labs.tu-berlin.de/teaching/
General information (2)

Prerequisite
- Network Protocols and Architecture
- Basis Kommunikationsnetze
  or corresponding experience

Exam
- For those that need it 😊
- Oral or written exam after semester end
  (depends on # of participants)
What is this course?

- Not an introduction on the Internet
- Focus: Routing in the Internet
  - Methodology
    - Principles
  - How does routing in the Internet actually look like
    - Different protocols
    - Business structure
    - Topology / route choice
  - How do the differences in wireless change the routing protocol choices
Review by example

- Overview Internet architecture
- Internet protocols
  - TCP, UDP, IP, IP addresses
- Internet Applications
  - Web, DNS, ...
- Layer 2
  - Ethernet / Switching / ARP
- Introduction to wireless
  - Channel characteristics / Mobility / Failures
Internet routing

- Routing principles
- Wireless routing in the beginning
- Routing in the Internet
- Traffic engineering and MPLS
- Wireless Internet routing
- Novel Internet routing architectures
- Taking advantage of the wireless channel
- Overlay/Underlay interactions