Course Overview

Network Management

Prof. Dr. Panagiotis Papadimitriou

Course Description

- Description
    - Advanced networking course on principles, technologies and architectures for the management of:
        - transit networks
        - virtual networks
        - large enterprise networks
        - data-center networks

- Prerequisites:
    - Good understanding of Internet architecture and protocols (e.g., TCP/IP)
    - Courses:
        - Netze und Protokolle, or
        - Rechnernetze

Course Schedule

- 2-hour Lecture
    - Lecturer: Prof. Panagiotis Papadimitriou
    - Time: Wednesday 10:00 – 11:30
    - Room: 1514

- 1-hour Exercise
    - Tutor: David Dietrich
    - Time: Wednesday 11:45 – 12:30
    - Room: 1514

Course Structure

- Introduction to Network Management

- Simple Network Management Protocol (SNMP)

- End-host Configuration Management

- Router Configuration Management

- Middlebox Configuration Management

- Virtual Network Management

- Large Enterprise Network Management

- Data-center Network Management

Reading Material

- Lecture and Exercise slides:
  - Slides will be uploaded to Stud.IP

- Books (optional):
  - "Computer Networking: A Top-Down Approach" by J. Kurose and K. Ross
  - "Mastering Networks: An Internet Lab Manual" by J. Liebeherr and M. Zarki
  - "Computer Networking : Principles, Protocols and Practice", http://cnp3bis.info.ucl.ac.be/

- Other material:
  - Papers, surveys, and Internet drafts for advanced topics (e.g., virtual network management, datacenter network management)

- Grading:
    - Examination (written) at the end of the term
    - Registration will be required to participate in the exams (more details before the end of the term)

Contact Information

- Office Hours:
  - Thursday, 11:00 – 12:00
  - Office: 1421

- Contact:
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