T-110.5110 Computer Networks II

10.03.2009 Examination (9-12 T1)

Choose 3 of the 4 topics below and write essays on them. Each topic has additional questions that should be considered in your essay. Discuss other relevant issues as well. Remember to consider what is important and what is not when writing your essay. You may write your essays in Finnish, Swedish, or English.

Remember to include the following information in your paper: the course name, date, student ID, name, and signature.

1. Transport layer protocols

> Describe the main features of DCCP and SCTP. Discuss the usage
> scenarios and deployment cases of these two protocols.

2. NAT (Network Address Translation) traversal

> Explain briefly what are NAT boxes and how they relate to the
> Internet architecture. What solutions are currently used to support
> NAT traversal? Consider STUN, TURN, and ICE.

3. IP Quality of Service

> What is the motivation for Quality of Service (QoS) and what things make its
> deployment difficult on the Internet? Please compare RTP, MPLS, DCCP and the
> IntServ and Diffserv architectures.

4. Locator/identity split and mobility

> What is locator/identity split and what problems of the Internet
> architecture it proposes to solve? How does it relate to host mobility?
> How does HIP and overlays relate to this topic?