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Practical Exercises
Communication Systems (Rechnernetze II)
Topic 01: Basics 1

This exercise sheet will cover basic knowledge needed for Communication Systems.

Exercise 1:

1. Log on to your laptop. When you use the laptops provided by the course, you should not need a username or password. Instead, you are loged on automatically.

2. Open an xterm (Applications > Acessoires > Terminal) or by pressing Alt+F2 and entering `gnome-terminal` for Gnome or `konsole` for KDE.

Exercise 2:

1. Try to find out the IP address and MAC address of your laptop.

2. What is the hostname of your laptop?

3. Try to get to know the hostname of your neighbour's laptop. (Without asking him)

Exercise 3:

1. What kind of informations can be obtained by the ping command?

2. Ping your neighbour's laptop!

3. Ping `whitehouse.gov` and `www.duma.gov.ru`. What differences can you see and why?

Exercise 4:

1. What kind of informations can be obtained by the traceroute command?

2. Test the command with your neighbour's IP address and with some others (for example 134.79.10.46 or 132.230.200.200)?

3. What information can you get when you trace `whitehouse.gov` and `www.duma.gov.ru`?

Exercise 5:

1. What kind of informations can be obtained by the netstat command?

2. Test the commands netstat, netstat -t and netstat -u on your machine.

3. What information do you get using netstat -tl?