



## 1st Assignment Protocol Design WS 08/09

### Question 1: (0 points) *Preparations*

Your first task is pretty simple: read the labcourse FAQ at [http://www.net.t-labs.tu-berlin.de/teaching/ws0809/PD\\_labcourse/faq.shtml](http://www.net.t-labs.tu-berlin.de/teaching/ws0809/PD_labcourse/faq.shtml). Remember the FAQ every time you have questions or if assignments are unclear to you. Most likely they are already answered. Log in to a computer in the laboratory. Change your password immediately!

Not so difficult after all, but no points either ...

### Question 2: (100 points) *Log file analysis*

The file `/afs/net.t-labs.tu-berlin.de/home/praktikum/daten/1.uebung/logfile.gz` contains a log file from an HTTP proxy. Lines are formatted as follows:

```
time duration remote_host code/status bytes method URL rfc931 peer_status/host mime_type
```

- Write a Perl script<sup>1</sup> which computes the throughput for every logged access and outputs its results in the format `size throughput`. The file should be sorted in increasing file sizes.
- Write a second script which produces a similar output where both columns are converted to a logarithmic scale.
- Plot the results from (a) and (b) using `gnuplot`. Describe and explain the differences between the plots. Try to find an explanation for the differences.

The file `/afs/net.t-labs.tu-berlin.de/home/praktikum/daten/1.uebung/gnuplot_template.plot` contains a template you can adjust according to your needs: simply change file names and labels and call `gnuplot -persist modifiedFile.plot`.

**Due Date:** Wednesday, 29.10.08 at 23:59

**Please make sure that Email addressed to your login on the labcourse network is properly delivered and read by you regularly!**

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<sup>1</sup>You may use C, C++, Java, or **after consulting with us** a different programming language—but we definitely recommend Perl. It will be of good use to you in other excersises as well.