



BA/MA/SA

Fiber at Home, Fiber on the Phone?

Transport Layer Protocol: Do it Yourself!

Uplinks at home get increasingly faster: 1 Gbit/s uplinks are no longer only something for business customers who buy anything and chronically pay too much for it anyway – no, they are actually becoming available for private customers for a decent price as well. When we look at our phones however, the bandwidth is still mediocre. So what are you going to do about that?

Combining your phone and your fast up-link at home only gives you one obvious idea: Use a computer at home as a proxy. But this is probably not going to improve your situation. But, as you are in charge of the communication between your phone and your computer: Why should you use TCP?

By developing an own transport layer protocol, and by using it as a communication means between your computer at home and your phone, we hope to increase performance. The only question remaining: How fast can you transport data?

We have some ideas with which you could start, but we are of course excited if you bring your own ideas!

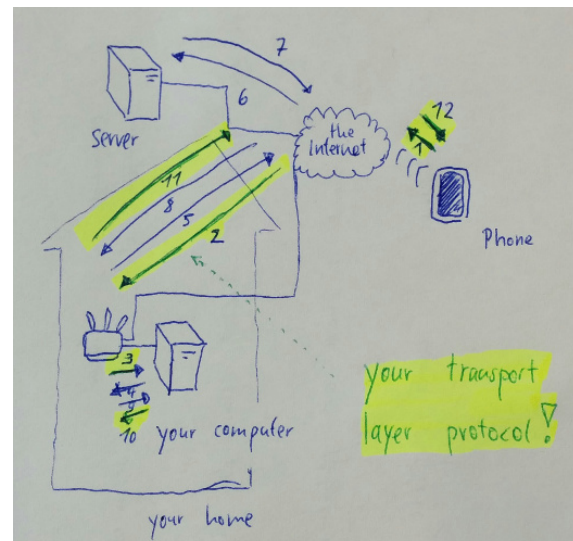


Figure 1: Magic Science, to be done by you

Some ideas: Forward Error Correction with dynamically changing the redundancy, selfish send rate control, disguising as TCP (fake header).

Interested? If you are interested, we are happy to hear from you and to have a small chat.

Requirements

- Good programming skills and creativity.
- The student(s) should be able to work independently on this topic.

Contacts

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