

Exercise 8 – Multimedia in the Net

Task 8: Sockets

Write a small application sock, that does the following:

If given the command line parameter `-s <port>` : act as server

- Listen on TCP port `<port>` for incoming connections
- Once a client connects, send UDP packets to the client at port `<port>`
- The UDP packets may contain a wise saying.

If given the command line parameter `-c <port>` : act as client

- connect to `localhost:<port>`
- Receive UDP packets at port `<port>` and print their content to stdout.

Hand in a make file (`Makefile`) and one or more `.c` and/or `.h` files which can be compiled on a computer in the CIP pool by issuing the command
`make sock` or `make`

The resulting binary file `sock` must run on the computers in the CIP-Pool.

Provide a file `README`, which lists features, limitations, build requirements and usage hints.

Hints:

- see <http://xengren.tripod.com/linnet/> for well-commented TCP and UDP socket examples

If you have not yet done so, create a branch `/branches/<login_name>`. Create a directory `sock` inside.

Tag your final code revision as `/tags/<login_name>/exercise8` before the deadline

You shall (and have to) present your solution in the next tutorials. The program will be running on Raphael's laptop.

Deadline: Sunday, 7. January 2007, 24:00.