

14. Java Sockets

This page contains links to the code of an echo servers and clients, using either UDP or TCP.

1. UDP

[Download](#) the UDP Server and the UDP Client code.

Compile the code and execute it

- first in such a way that the client is running on the same machine as the server,
- then on two different machines (you may use the IP of the lab teacher's machine that is written on the blackboard)

2. TCP

[Download](#) the TCP Server and the TCP Client code.

Compile the code and run it. Then change the code

- Modify the server so that it also prints out the IP address of the client that contacted it.
- Modify the client so that you can repeat sending strings to the echo server.

2. Explore on your own

- Modify the code so that the user can manually choose the port to use.
 - What happens if the user chooses a port that is already in use?
 - What happens if the user chooses system port (<1024)?
- Modify the code so that received messages are broadcasted to all connected clients