Statistics

# 1. Data size: 500 Mb

**1.1 TCP**

**1.1.1 Streaming**

Client {

Elapsed time: 00:00:01.1612616

Number of messages: 8001

Number of bytes: 524288000

}

Server {

Elapsed time: 00:00:01.7784034

Number of messages: 8004

Number of bytes: 524353535

}

**1.1.2 Stop-and-Wait**

Client {

Elapsed time: 00:00:00.6878420

Number of messages: 8001

Number of bytes: 524288000

}

Server {

Elapsed time: 00:00:00.1200467

Number of messages: 8002

Number of bytes: 524025875

}

**1.2 UDP**

**1.2.1 Streaming**

Client {

Elapsed time: 00:00:00.5974703

Number of messages: 8125

Number of bytes: 524288000

}

Server {

Elapsed time: 00:00:08.9017521

Number of messages: 8117

Number of bytes: 523771720

}

**1.2.2 Stop-and-wait**

Client {

Elapsed time: 00:00:00.5718094

Number of messages: 8125

Number of bytes: 524288000

}

Server {

Elapsed time: 00:00:10.6869468

Number of messages: 8125

Number of bytes: 524288000

}

# 2. Data size: 1 Gb

**1.1 TCP**

**1.1.1 Streaming**

Client {

Elapsed time: 00:00:01.8652553

Number of messages: 16385

Number of bytes: 1073741824

}

Server {

Elapsed time: 00:00:02.9033182

Number of messages: 16386

Number of bytes: 1073807359

}

**1.1.2 Stop-and-Wait**

Client {

Elapsed time: 00:00:01.5098231

Number of messages: 16385

Number of bytes: 1073741824

}

Server {

Elapsed time: 00:00:00.2671072

Number of messages: 16386

Number of bytes: 1073020975

}

**1.2 UDP**

**1.2.1 Streaming**

Client {

Elapsed time: 00:00:01.2172077

Number of messages: 16639

Number of bytes: 1073741824

}

Server {

Elapsed time: 00:00:08.7673197

Number of messages: 16603

Number of bytes: 1071418564

}

**1.2.2 Stop-and-wait**

Client {

Elapsed time: 00:00:01.0490760

Number of messages: 16639

Number of bytes: 1073741824

}

Server {

Elapsed time: 00:00:11.5325012

Number of messages: 16639

Number of bytes: 1073741824

}

Options

The application consists of a server executable and a client executable.

1. The server has the following parameters: [PORT] [IS\_STOP\_WAIT\_ENABLED], where:

**PORT** - the port for the connection

**IS\_STOP\_WAIT\_ENABLED** - marks if the stop-and-wait mechanism is enabled.

**\*** Both parameters are ***mandatory***.

1. The client has the following parameters: [SERVER\_ADDRESS] [PORT] [PROTOCOL\_TYPE] [DATA\_FILE\_LOCATION\_ABSOLUTE] [IS\_STOP\_WAIT\_ENABLED], where:

**PORT** – the port of the server to connect to

**SERVER\_ADDRESS** – the address of the server to connect to

**PROTOCOL\_TYPE** – 0 for TCP and 1 for UDP

**DATA\_FILE\_LOCATION\_ABSOLUTE** – the data file location (absolute location)

**IS\_STOP\_WAIT\_ENABLED** – marks if the stop-and-wait-mechanism is enabled.

\* All the parameters are ***mandatory***.