

# Developing a high speed connectionless file transfer system with WASM based client

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## Abstract

This paper will describe an application named FFT (Fast File Transfer) Manager that is based on Xinan's Reliable File Transfer Protocol. The system consists of a server and a client program utilizing UDP connection. The aim is to transfer big files quickly by this program on busy network connections. A *Java* based minimum viable product is ready now. This article will introduce the results of rewriting the software in C++ and the improvement of the client by a graphical user interface. Furthermore, we want to make this program available for as many platforms as we can. To achieve this goal we paid a special attention to the WebAssembly programming language. Thanks to generated WASM binary, our application can be used from a browser without installation.

*Keywords:* high speed networking, high performance computing, parallel communication, Internet, congestion control, traffic engineering, statistical analysis, scale independence.

*MSC:* 68M10, 68M12

**Acknowledgements.** This paper was supported by the FIKP-20428-3/2018/FEKUTSTRAT project of the University of Debrecen, Hungary and by the QoS-HPC-IoT Laboratory. This work was supported by the construction EFOP-3.6.3-VEKOP-16-2017-00002. The project was supported by the European Union, co-financed by the European Social Fund.