# Introduction

The objectives of simple file transfer protocol are as follows:

1. to promote sharing of files (computer programs and/or data)
2. to shield a user from variations in file storage systems
3. to transfer data reliably and efficiently

This specification is to be a simple, lightweight program that satisfies a simple need to transfer files between hosts. It is also an open program that allows any client with the right address and port number to be able to transfer and download data.

# The FTP model

The protocol should use TCP as its transport layer protocol.

The server must be able to serve multiple client requests simultaneously

# Data transfer functions

## Data representation and storage

## Data types

### ASCII (Type A)

The default type for this implementation is the ASCII type. It is intended for transfer of text files.

The <CRLF> sequence is used where necessary to denote the end of a line of text.

### Image (Type I)

This type is used to send files that are not text based, using a contiguous bits that is packed into 8 bit transfer bytes.

## Data Transfer Modes

Stream Mode

Block Mode

# References

<https://www.geeksforgeeks.org/c-program-for-file-transfer-using-udp/>

<https://tools.ietf.org/html/rfc959>