

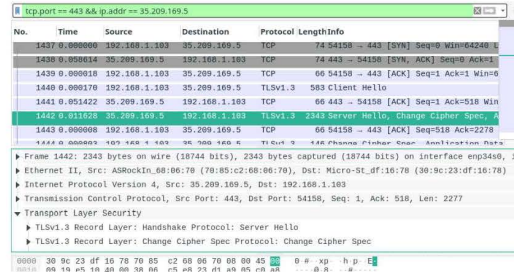
FileVector

Private, Secure, Non-Persistent File Transfer

FileVector is a client/server software service that provides a simple, secure, and privacy-focused method of sharing digital files with colleagues anywhere in the world over the open internet.

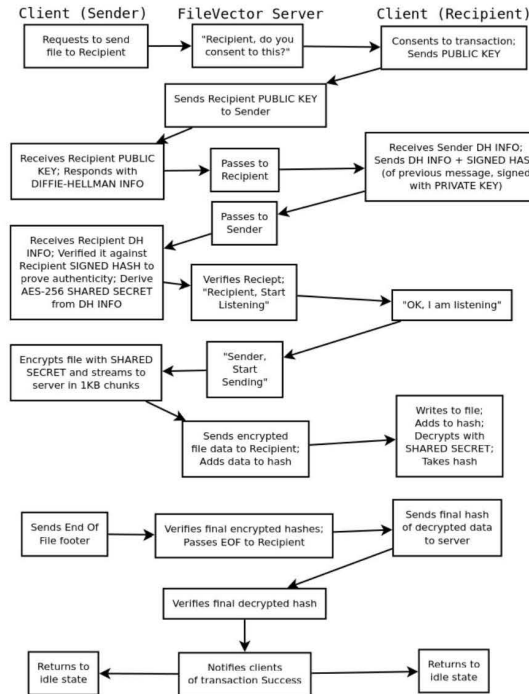
Other file sharing solutions compromise on simplicity and privacy, such as with FTP servers, or compromise on security and non-persistence, such as with Cloud Storage Providers (e.g. Dropbox, Google Drive). The FileVector server software guarantees privacy and non-persistence by allowing users to add other pseudo-anonymous users as contacts, via their usernames, and by not retaining (i.e. storing a copy of) any data that is transferred through the private tunnel.

The FileVector client software guarantees simplicity and security by providing a user-friendly graphical interface for sending files that are first encrypted locally using keys that only users have access to, not the FileVector server.



The image shows a Wireshark network capture of a TLSv1.3 handshake. The handshake starts with a Client Hello (Seq=1) and continues through Server Hello, Change Cipher Spec, and Encrypted Extensions. The final step shown is the Client Change Cipher Spec (Seq=5), indicating the secure channel is established.

The figure to the left is an example of the TLSv1.3 tunnel that encapsulates the FileVector protocol. FileVector clients use two TLS connections; one is a control socket for communicating with the server using a custom protocol about the state of the client and its transactions, and the other is a socket created for each file transfer.



This flowchart is the consent and encryption negotiation protocol that takes place for every file transaction.



FileVector Main Menu (Proof Of Concept)

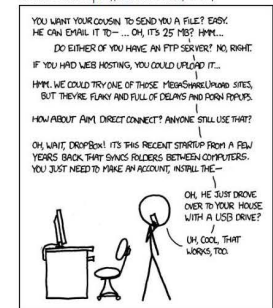


FileVector File Selector (Proof Of Concept)

FileVector utilizes industry standard cryptography libraries and basic distributed software architecture to solve the problems created by both other types of file sharing methods, while introducing only minimal drawbacks, such as both the sender and recipient of the file having to be online and connected to the FileVector server simultaneously.

Lastly, FileVector is completely cross-platform, as it is able to run on Windows, Mac, Linux, and Android, as well as multiple processor architectures.

source: <https://kxkd.com/949/>



IT'S LIKE HOW WE'VE HAD THE INTERNET FOR DECADES, YET 'SENDING FILES' IS SOMETHING EARLY ADOPTERS ARE STILL FIGURING OUT HOW TO DO.