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Implementation of New Secure File Transfer Protocol Using Triple-DES and MD5

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Abstract

There are several ways to transfer files from one computer system to another or from one user to another. But they are less secure. Secure File Transfer Protocol (SFTP) aimed at developing a secure file transfer system for fast and secure file transmission. This is a WinForms application in which, software on one system communicates with software on another remote system. It prevents passwords and other sensitive information from being transmitted in the clear over the network. Here the data as well the key used for the encryption will be encrypted by a software key. The 32-byte long private key is generated by SFTP, from the data and personal information of the user. It is again encrypted by using the static software key of SFTP and sent it along with the data. Software key and the sender's private key are hidden from the clients, so it provides more security to the data. This key is required to decrypt the data at the receiver. SFTP allows for the search of remote files and lock of files on a range of remote systems. Add-on directory listings and screen share are shown in an SFTP client. SFTP provides an interactive screen sharing between clients.

Keywords:-*Security, Encryption, File Transfer, MD5, Secure Shell, DES.*

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