

A REVIEW ON FTP CLIENT/SERVER TECHNOLOGY

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Abstract: -

FTP is built on a client-server architecture and uses separate control and data connections between the client and the server. FTP users may authenticate themselves using a clear-text sign-in protocol, normally in the form of a username and password, but can connect anonymously if the server is configured to allow it. For secure transmission that hides (encrypts) the username and password, and encrypts the content, FTP is often secured with SSL/TLS ("FTPS"). SSH File Transfer Protocol ("SFTP") is sometimes also used instead, but is technologically different.

Keywords: - Review, ftp, client/server, technology



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I. INTRODUCTION TO FTP

FILE TRANSFER PROTOCOL allows you transfer files between two computers on the Internet. FTP is a simple network protocol based on Internet Protocol and also a term used when referring to the process of copying files when using FTP technology.

II. FTP CLIENT / SERVER

To transfer files with FTP, you use a program often called the "client." The FTP client program initiates a connection to a remote computer running FTP "server" software. After the connection is established, the client can choose to send and/or receive copies of files, singly or in groups. To connect to an FTP server, a client requires a username and password as set by the administrator of the server. Many public FTP archives follow a special convention for that accepts a username of "anonymous." FTP allows you to transfer files between two computers on the Internet. FTP is a simple network protocol based on Internet Protocol and also a term used when referring to the process of copying files when using FTP technology.

The first FTP client applications were command-line applications developed before operating systems had graphical user interfaces, and are still shipped with most Windows, Unix, and Linux operating systems. Dozens of FTP clients and automation utilities have since been developed for desktops, servers, mobile devices, and hardware, and FTP has been incorporated into hundreds of productivity applications, such as Web page editors.

III. MODES OF TRANSMISSION

FTP supports two modes of data transfer:

- Plain text (ASCII)
- Binary

A common error when using FTP is attempting to transfer a binary file (such as a program or music file) while in text mode, causing the transferred file to be unusable.

IV. FTP SERVER

An **FTP server** is a required software application on networks that wish to support file sharing using the File Transfer Protocol.

Name	Platform	Details
ALFTP	Windows only	Personal FTP server
Cerberus	Windows only	FTP,
FTP Server	SFTP, HTTPS web	client, IPv6, SOAP-based web services API, Windows Active Directory / LDAP

	Logical OC	Mac OS X, Windows, Linux, *BSD, Solaris, etc.	FTP, SFTP, HTTP, HTTPS, WebDAV and WebDAV over SSL, Plugin API, Windows Active Directory / LDAP authentication, SQL authentication, Web UI administration, Events / Alerts, file revisions and synchronization.
	Complete FTP Server	Windows	
	Microsoft Internet	(Windows only)	FTP, FTPS
	FileZilla	Windows	FTP, FTPS, (FTPS is supported in IIS 7 and later)
Windows Vista/7 Server 2003/R2, 2008/R2	supports autoban, speedlimits, IP Filter, Groups, Shared folders, compression,	Information Services	
		NASLite	Linux based FTP/NAS server, n, scriptable
		Synclify.me Server!	Windows only FTP, FTPS, SFTP, SSH, internal and Active Directory authentication, PKI authentication
		War FTP Daemon	Windows 9X/2000/XP/2003 One of the original FTP servers made for the windows platform and still available.
		WS FTP Server	Windows only: XP or later WS_FTP stands for WinSock File Transfer Protocol. It's developed and sold by Ipswitch, which offers it with three different prices: an FTP server, an SFTP server, and the full Corporate version with encrypting and SCP2.
			eventhandling subsystem.

V. FTP CLIENT

An **FTP client** supports downloading of files across the Internet from computers called *FTP servers*. FTP stands for File Transfer Protocol, the technology that allows FTP clients and servers to communicate over computer networks. An FTP client is a software program with a GUI (graphical user interface) that provides various options to help manage the process of transferring files.

To transfer files with FTP, you use a program often called the *client*. An FTP client program initiates a connection to a remote computer running *FTP server* software. After the connection is established, the client can choose to send and/or receive copies of files, singly or in groups. To connect to an FTP server, a client requires a username and password as set

by the administrator of the server. Many public FTP archives follow a special convention for that accepts a username of "anonymous."

Simple FTP clients are included with most network operating systems, but most of these clients (such as FTP.EXE on Windows) support a relatively unfriendly command-line interface. Many alternative third-party FTP clients have been developed that support graphic user interfaces (GUIs) and additional convenience features. In any FTP interface, clients identify the FTP server either by its IP address (such as 192.168.0.1) or by its host name (such as ftp.about.com).

FTP supports two modes of data transfer: plain text (ASCII), and binary. You set the mode in the FTP client. A common error when using FTP is attempting to transfer a binary file (such as a program or music file) while in text mode, causing the transferred file to be unusable.

Client	First public release date	Software license	Copy files over 2 GB limit [1]	Interface
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Client	First public release date	Software license	Copy files over 2 GB limit [1]	Interface	Interface
Macfusion					
AF's FTP Interface					
NcFTP	1991	Clarified Artistic License		GUI source	?
net2ftp	1998	MIT CLI	Yes (January)	GPL	? application
cyberduck	2001	GPL GUI	Window Yes		Yes
edtFTPj	2007	GPL	Java	Swish Explorer 2000	Yes LGPL JAR file shell extension
edtFTPu	2003		Window Yes	LGPL n s DLL	
FileZilla	2001 (January)	GPL	Yes GUI 2000	tufp WinSCP	1999 BSD ? CLI GPL GUI Yes
FireFTP	2004 (September)	MPL 1.1	Yes (since version 2.0.5)	Firefox add-on	1999 GPL CLI Yes
Fugu	2003	BSD	?	Easy to use GUI	Supports FTP, FTP over SSL/TLS
gFTP	1998	GPL	Yes	GTK+ Protocol (SFTP)	IPv6 support
	1996 (August)	GPL	Yes	CLI	Available in many languages Supports resume and transfer of large files >4GB

- Powerful Site Manager and transfer queue
- Bookmarks
- Configurable transfer speed limits
- Filename filters
- Directory comparison
- Network configuration wizard
- Remote file editing
- Keep-alive

- Logging to file
- Remote file search

VI. TECHNOLOGY/PLATFORM OVERVIEW

An edition of the Java platform is the name for a bundle of related programs from Sun which allow for developing and running programs written in the Java programming language. The platform is not specific to any one processor or operating system, but rather an execution engine (called a virtual machine) and a compiler with a set of libraries that are implemented for various hardware and operating systems so that Java programs can run identically on all of them.

- **Java Card:** A technology that allows small Java-based applications (applets) to be run securely on smart cards and similar smallmemoryfootprint devices.
- **Java ME (Micro Edition):** Specifies several different sets of libraries (known as profiles) for devices which are sufficiently limited that supplying the full set of Java libraries would take up unacceptably large amounts of storage.
- **Java SE (Standard Edition):** For general-purpose use on desktop PCs, servers and similar devices.
- **Java EE (Enterprise Edition):** Java SE plus various APIs useful for multitier client server enterprise applications.

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