
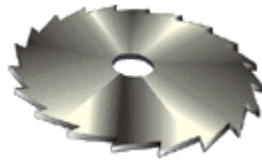


This Application is the extended rich FTP Client™, that supports:

- various Operation Systems with installed Java Virtual Machine from 1.4 version
- multiple Filename encodings (e.g. UTF-8)
- active and passive connections
- multiple configurations
- logging system
- [user help and program info system](#) as build-in HTTP server
- single file installation
- in bundle with Lotus Domino Java Addin Task [ftp-server](#):
  - [directory replication](#) with commands RZLST and [RZREP](#)
  - file stub delete with command [STUE](#) on server and local
  - file touch with command [TOUCH](#) on server and local
  - FTPS and Certificate support with command [CERT](#)
- Application is green (does not need installation) and is [USB stick ready](#) 



Written in pure



- **Scenario one**  
Your Enterprise has a large file pool, than does not fit in any database and needs to be replicated. The test replication of Notes database with 4 documents with attachments of summary length of 400 Mb took 3:42 minutes. The same file replication over FTP took only 0:45 (~20%) on the same systems and disks.
- **Scenario two**  
Your Developer team works with large shared source file pool (e.g. Java or C++ source, resources and classes), which needs to be up-to-date on laptops, inside the firm, at home and remotely as well
- **Scenario three**  
Your mobile or traveling employee required secure FTP connection to the company server with less administrative adjustments on Lotus Notes infrastructure
- **Scenario four**  
You need a simple and reliable FTP client freeware application
- **Scenario five**  
Easy adjustable file replication with/over multiple server
- **Scenario six**  
Simple mainanance of your files storage
- **Scenario seven**  
For fast daily backups.

... and many others reasons to convert your daily routine tasks in just a few mouse clicks operation



- System requirement: Java Virtual Machine version 1.4 or higher installed
- Microsoft **Windows 2000, XP** and other **WIN32** based operating systems  
Copy the **ftp-client.exe** file into *directory of your choice* \*.  
Application could be started from there or by using the shortcut from any place.
- Other operating systems e.g. **Linux** or **Mac OS**  
Copy the **ftp-client.jar** file into *directory of your choice*.  
Application could be started from there with command line:  
`java -Xms64m -jar ftp-client.jar`  
on Linux a **launcher** could be created

**Commandline options:**

- `--connect`  
connect to the remote server using last configuration just after start of application
- `--stub file|directory`  
stub delete file or directory (recursive) and exit

**Note:** XML configuration file "eFTP.XML" will be automatically created by the application and will be updated in the same directory by the end of each session.

---

**\* Known limitations**

- On Microsoft Windows platforms the absolute path can contain only US-ASCII and may contain defined at OS level codepage characters.



1. Install Java Runtime Environment (JRE) version from 1.4 on your computer.
1. Create "jre" directory on your USB stick
1. Copy directories "bin" and "lib" from your JRE installation to the just created directory on memorystick  
That will enable you to start the Application on Windows systems without JRE preinstalled. But you can still start the ftp-client.jar file under other operation systems with JRE preinstalled. And you can repeat this operation for other operation systems - simply choose another directory on memorystick. Make sure that your operation system supports the file system on USB stick.
1. Copy ftp-client.jar or ftp-client.exe to *directory of your choice* \*
1. Use following command line (*you may create a batch file under memorystick root*) to start the Application:  

```
/jre/bin/java -  
Dswing.defaultlaf=com.sun.java.swing.plaf.windows.WindowsLookAndFeel -  
Xms64m -jar /[directory of your choice]/ftp-client.jar
```

  1. The first parameter order Java Virtual Machine to use WindowsLookAndFeel, you may omit this parameter
  1. The second parameter allocates 64 Mb of the memory for Application. (in case your machine is not equipt with a large RAM you may omit this parameter.)



1 [192.168.0.3] - e3  
 2 File 3 Command 4 Certificate 5 Config 6 Help

37 Configuration 38 39 52 53 40 41 42 43 44 45 46 47 48 49 50 51

6 JM-W2k-WS01 22 use textures, ic... 7 D:\

8 Host Address 9 Port number 10 Initial remote folder  
 92.168.0.3 2121

11 Username 12 Password 13 Connection  
 edgar Miltinch/EdM/DE \*\*\*\*\* active

14 Protocol 15 Transfer mode 16 Transfer type  
 FTP Plain Mode S Binary Data

17 Charcoding 18 List command 19 RZREP filetime resolu...  
 8-bit Unicode LIST default

20 Checksum 21 Keep alive (s) 24 Socket timeout (s)  
 CRC 30 1

23 Certificates 24 Resume broken  
 uploads  
 downloads

25 Remote Presel...  
 @Index  
 @Personal

32 Connect  
 33 Disconnect  
 34 Reset  
 35 Save  
 36 Delete

ftp> TYPE I  
 200 binary mode set  
 ftp> TYPE A  
 200 ascii mode 26  
 ftp> TYPE I  
 200 binary mode set

27 Connected to: 192.168.0.3 00:36:17,374 28 192.168.0.3 29 30 31



### 1. File Menu

- 1. [Connect](#)
- 1. [Disconnect](#)
- 1. [Clear Log and Console](#)
- 1. [Copy Console to Clipboard](#)
- 1. [Show Configuration](#)
- 1. [Show File View](#)
- 1. [Exit](#)

### 1. Command Menu

- 1. [Update View](#)
- 1. [Copy](#)
- 1. [Delete](#)
- 1. [Change Directory](#)
- 1. [Rename](#)
- 1. [Make Directory](#)
- 1. [MD5 Digest](#)
- 1. [Replicate](#)
- 1. [Replicate with Options](#)
- 1. [Stub](#)

1. [Touch](#)

## 1. Certificate Menu

1. [Request SSL Certificate](#)
1. [Request SSL Certificate per mail](#)
1. [Manage Keystore](#)

## 1. Config Menu

1. [Save Configuration](#)
1. [Delete Configuration](#)
1. [Encrypt Configuration](#)
1. [Import Configuration](#)
1. [Export Configuration](#)
1. [Refresh Configuration](#)
1. ... List of saved configurations...

## 1. Help Menu

1. [About](#)
1. [Check for update](#)
1. [Memory](#)
1. [Help](#)

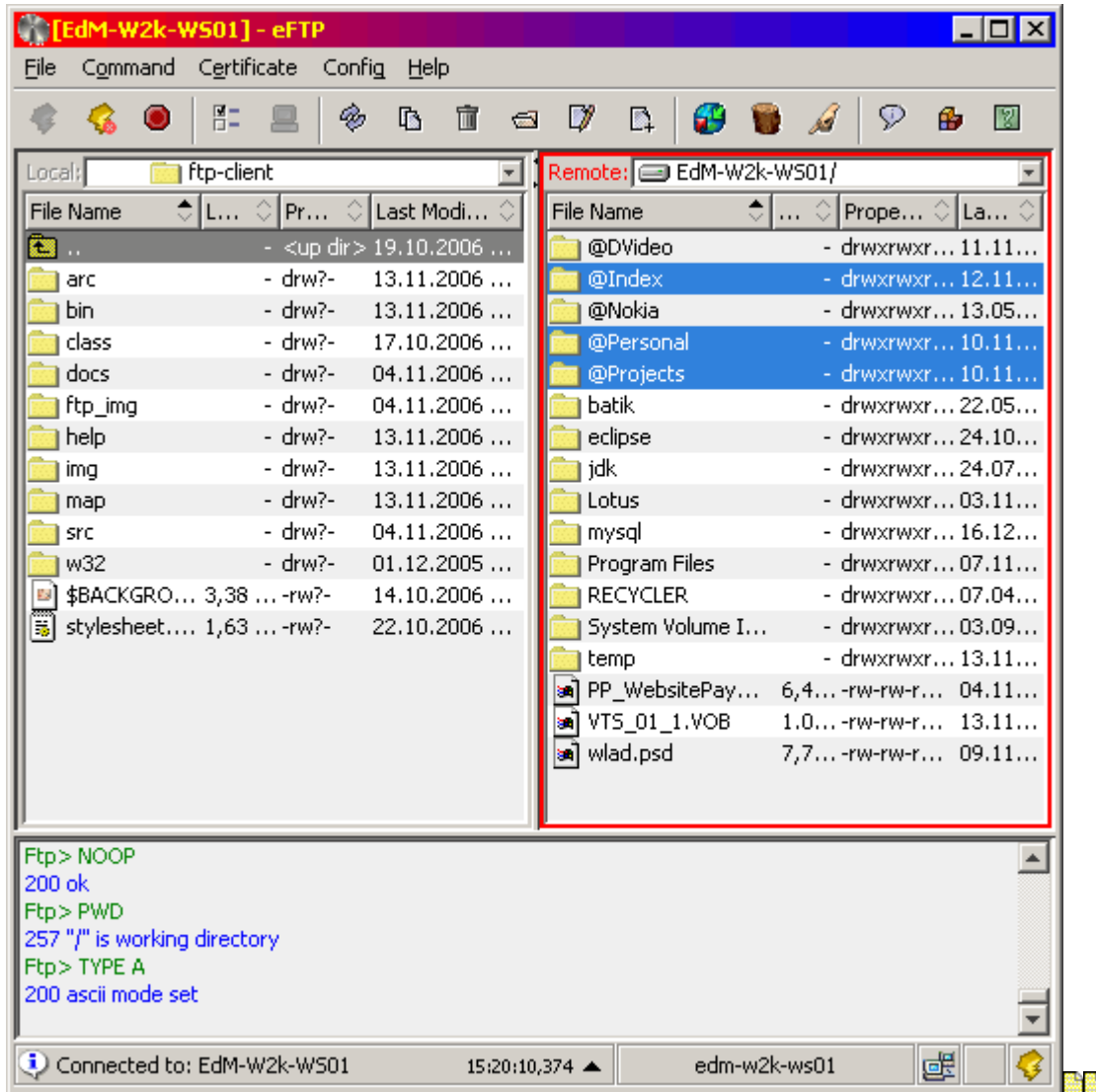
1. [Configuration](#)
1. [Initial local folder](#)
1. [Host Address](#)
1. [Port number](#)
1. [Initial remote folder](#)
1. [Username](#)
1. [Password](#)
1. [Connection](#)
1. [Protoco](#)
1. [Transfer mode](#)
1. [Transfer type](#)
1. [Charcoding](#)
1. [List command](#)
1. [RZREP filetime resolution](#)
1. [Checksum](#)
1. [Keep alive](#)
1. [Use textures, icons](#)
1. [Certificates](#)
1. [Resume broken downloads, uploads](#)
1. [Remote Preselection](#)
1. FTP Console Log Window
1. Application Status Log
1. Connected Host Name
1. Remote Host Address Type  
This is TCP/IP address class.
1. Connection Type

1. Application Status Icon

Every not grayed out field and parameter can be changed without to disconnect from host.







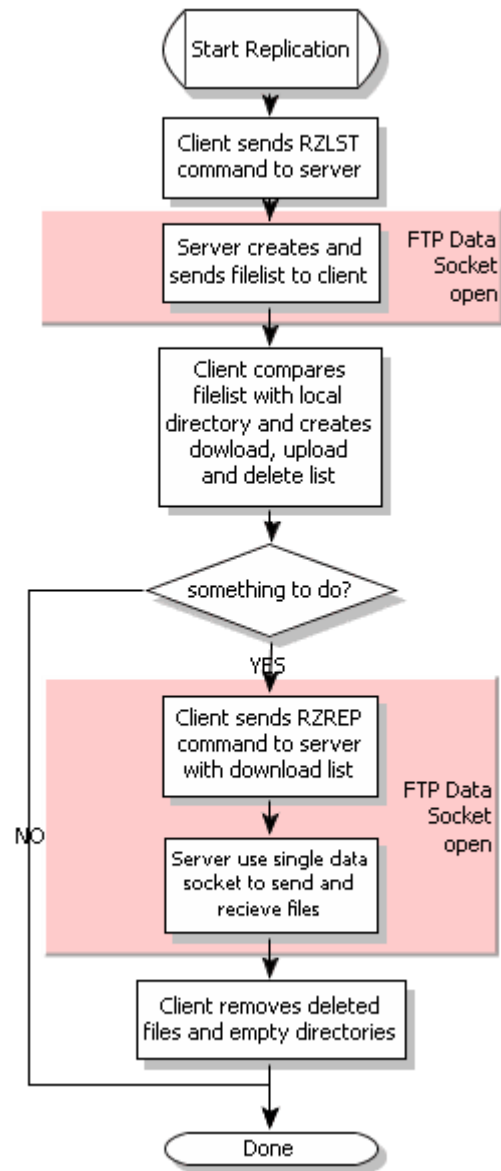
- The File View Screen displays two File Views: *local* (1) and *remote* (2). The active file view is framed and highlighted in red color. Those views have similar to 'Norton Commander' interface and support drag-and-drop function. For drag-and-drop more than one file use right mouse button. To select more than one file /directory hold 'Ctrl' key and use mouse left button. The combobox shows current directory. Working directory can be changed in highlighted combobox. You can change the files sort order, by clicking File View labels.
- Local File View**  
Display local files and directories. The Application will try to show file icons on Windows based Platforms. You can [switch off](#) this feature in case it causing delay in File View display.
  - Remote File View**  
Display files, directories and links on remote machine.

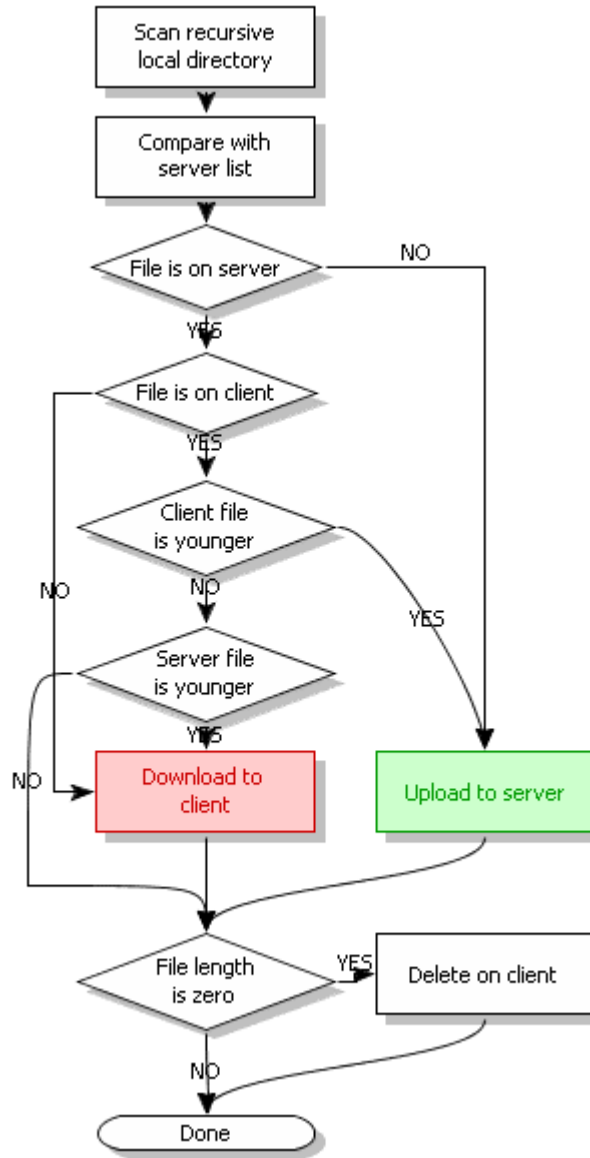


• 0.1	Beta version	
• 1.0	first release	10.2004
• 2.0	first Release with RZLIST & RZREP	
• 2.1	optimized release	
• 2.1.1.700	resume broken uploads & downloads	
• 2.1.1.750	MODE Z support for LIST and file transfer	
• 2.2.1.790	implicit SSL support	
• 3.1.1.820	Certificate Management	
• 3.1.1.880	KeepAlive option	
• 3.2.1.945	XCRC & MD5 support	
• 3.3.2.485	FileTable change	12.07.2006
• 3.3.2.820	configuration encryption	26.07.2006
• 3.3.3.001	Help server support	25.09.2006
• 3.3.3.500	Status bar support	25.10.2006
• 3.3.3.919	Socket timeout option	05.11.2006
• 3.3.4.210	Delete incomplete file on replication error	11.12.2006
• 3.3.4.250	Check for update	12.12.2006
• 3.3.4.285	Replicate with Options: only send, receive and delete local files	21.01.2007
• 3.3.4.322	Option: Create deletion stubs on remote for not local existing files	31.01.2007
• 3.3.4.331	Added mnemonics to configurations menu items	14.02.2007
• 3.3.4.338	Added 'live' filecheck in replication	18.03.2007
• 3.3.4.357	Added file view row focus borders	28.04.2007
• 3.3.4.378	Added replicate after connect option	26.05.2007
• 3.3.4.392	Added --connect command line options; Register STUB command in Windows registry	26.05.2007
• 3.3.4.406	Fix: no action with selected upDir '..'	06.07.2007
• 3.3.4.411	Fix: replication upload file w/o local filesystem access rights	17.07.2007
• 3.3.4.418	Fix: STOR w/o permission	06.08.2007
• 3.3.4.420	Fix: minor Stub delete	23.08.2007



## Process Description





**Note:** all empty directories will be deleted on client and on server after replication



- IBM Lotus Domino™ server Addin ftp-server is an enterprise-suited, [RFC959](#) compliant, Java written (write once, run everywhere).
- This is the ideal solution to exchange files between systems with different OS and to [replicate](#) large amount of files between servers and workstations/laptops.
- Server design required minimum maintenance and almost a near-zero-administration: in fact, in most cases, you have only to create a new user-home-directory. Of course, the administrator can do it with the eFTP client.

#### Supported Platforms

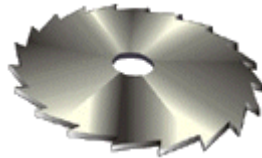
Any operation system with [IBM Lotus Domino™](#), from 6.0.3 version.

#### Tested Platforms and Versions

- IBM Lotus Domino™ 6.0.3
  - Microsoft Windows 2000™ Service Pack 4
  - Microsoft Windows XP™ Service Pack 1 and 2
  - SuSE Linux™ 8.0
- IBM Lotus Domino™ 7.0.1
  - SuSE Linux™ 10.1
  - Microsoft Windows 2000™ service Pack 4



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1. Copy "**ftp-server.jar**" to:
  - A. Domino program directory on Windows 32 Systems.
  - A. Domino data directory on UNIX Systems. Usually /local/notesdata
1. Copy "**disp.dll**" to Domino program directory *only* on Windows 32 OS with Domino 6 version. This library is necessary for UTF-8 filename support under JVM 1.3.
1. Copy "**ftp-server.settings**" and "**ftp-server.groups**" to:
  - A. Domino program directory on Windows 32 Systems.
  - A. Domino data directory on UNIX Systems.
1. Edit "**notes.ini**" file:
  - Add entry "**JavaUserClasses=D:\Lotus\Domino\ftp-server.jar**"  
Replace "D:\Lotus\Domino\" with absolute ftp-server.jar path.
  - Edit entry "**ServerTasks=**" and add "**RunJava addin.Ftp**"
  - add **JavaEnableJIT=1** to increase performance.
1. If you want to use FTPS mode, edit java.security file and insert two security providers:

```
security.provider.1=sun.security.provider.Sun
security.provider.2=com.sun.net.ssl.internal.ssl.Provider
```

Currently available providers must be properly renamed. Usually this section after edit will be:

```
# List of providers and their preference orders (see above):
#
security.provider.1=sun.security.provider.Sun
security.provider.2=com.sun.net.ssl.internal.ssl.Provider
security.provider.3=com.ibm.jsse.IBMJSSEProvider
security.provider.4=com.ibm.crypto.provider.IBMJCE
security.provider.5=com.ibm.security.jgss.IBMJGSSProvider
security.provider.6=com.ibm.security.cert.IBMCertPath
```

java.security file is located in: %domino\_program\_directory%/jvm/lib/security

1. Type "**load RunJava addin.Ftp**" to start FTP Server Addin on Domino console. You may need to edit settings and groups files.
1. "**ftp-server.REQ**" file with license request, will be generated after the first start of the application.
1. Send an e-mail to [e.miltinch@bluebottle.com](mailto:e.miltinch@bluebottle.com) with the attached "request file" .
1. After your data proof, you will receive the "**ftp-server.LIC**" "license file".
1. Save "license file" to:
  - A. domino program directory on Windows 32 Systems.
  - A. domino data directory on UNIX Systems.
1. Restart FTP Server Addin with "**load RunJava addin.Ftp**"

1. Done!
1. For best performance, please use (in order of priority):
  1. Domino 7 for Linux
  1. Enable JIT
  1. RAM from 1 Gb
  1. Fast hard drives
  1. Frequently defragment working hard drive partition(s)
  1. Additional network card
  1. Additional CPU(s)
- **Remember!** Addin runs with Domino Server user and file system access rights.



• 0.1	Beta version	
• 1.0	first release	10.2004
• 2.2.2.094	Fix: Don't allow to STUB, TOUCH, RMD, XDEL, RZREP, RZLST with argument '.' (up dir)	05.07.2007
• 2.2.2.097	Fix: Don't allow to STUB, TOUCH, XDEL, RZREP w/o write permission	06.08.2007
• 2.2.2.102	Added support for dynamic IP router address	21.08.2007





Example ftp-server.settings file:

```

1 # ftp-server.settings sample
2 port=21
3 ssl.port=431
4 ssl.ssl-protocol=TLS
5 passive=constant
6 countsubdir=false
7 loglevel=1
8 unixgroup=admin
9 sessiontimeout=180000
10 prevYearFormat=MMM\ dd\ \ yyyy
11 createindex=true
12 unixuser=notes
13 charcoding=UTF-8
14 currYearFormat=MMM\ dd\ HH:mm
15 bindaddress=192.168.0.4
16 router=miltinch.homedns.org
17 clients=192.168.0.*
18 unixfilemask=666
19 connections=0
20 ftplogfile=ftplog.nsf
21 # EOF

```

#### 1. Comment line

#### 1. Port

FTP protocol server port. Usually 21

#### 1. SSL.Port

Port for FTPS protocol.

#### 1. SSL.SSL-protocol

SSL protocol default TLS

#### 1. Passive

Passive data port assigning strategy.

##### 1. Constant

Will be "control socket port" + 1 used. Useful for under firewall installations. But there is theoretically problem possible if two or more users sends at same time PASV command.

##### 1. Variable

Will be first available port used.

#### 1. Countsubdir

##### 1. False

##### 1. True

#### 1. Loglevel

#### 1. Unixgroup

#### 1. Sessiontimeout

#### 1. prevYearFormat

Application use this parameter to format date/time in file listing command for dates prior current year. You should change this this paramater only if you now what are you doing.

1. **Createindex**

1. **Unixuser**

1. **Charcoding**

1. **CurrYearFormat**

Application use this parameter to format date/time in file listing command for current year dates. You should change this this paramater only if you now what are you doing.

1. **Bindaddress**

1. **Router**

1. **Clients**

1. **Unixfilemask**

1. **Connections**

1. **FTP Log File**

Optional.

1. **End Of File**



Example ftp-server.groups file:

```

1 # groups file sample

2 default=rw--,00:01,E:\\ftp\\*

3 ZZ_ftp_user=rw--,00:01,E:\\ftp\\*

4 ZZ_AdminDB=r--a,00:00,D:\\

5 Edgar\ Miltinch/EdM/DE=rwxa,00:01,D:\\

6 # EOF

```

### **Syntax:**

<group\_name>=<r|-><w|-><x|-><a|->,<UU>:<DD>,<root\_path[\*]>

<group\_name>

Can be any except "Anonymous" Notes DB ACL entry. E.g. default, groupname, notesname etc. Note: you must use backslash before space.

Examples: \*/EdM/DE, default, ZZ\_Admin\_FTP

<r|-><w|-><x|-><a|->

Read / Write / Execute / Admin access. Admin access is for Windows Environment Drive mount possibility.

Examples: rwx, r--, rw--

<UU>:<DD>

Upload / Download ratio. Currently not used.

<root\_path[\*]>

Root path for user. If use the asterisk at the end, it will be replaced with current user shortname. Root path must be created before user can login!

Examples: D:\ftp\\*, C:\FTP\_ROOT\User1, /home/miltinch

### **How are effective access rights computed:**

1. List of user notesnames and groups (notesnames first) is created.
1. List is compared with ftp-server.groups entries, and equal entries are weighted:
  - read access - 1
  - write access - 10
  - execute access - 100
  - admin rights - 1000
1. First entry with highest weight is used, and will be for control printed by login on Domino console



Command	Action
tell ftp help te ftp he	display help screen
tell ftp version te ftp ve	display program version info's and Notes version
tell ftp show certificate te ftp sh ce	display certificate info
tell ftp show settings te ftp sh se	display contents of <a href="#">ftp-server.settings</a> file
tell ftp show groups te ftp sh gr	display contents of <a href="#">ftp-server.groups</a> file
tell ftp show info te ftp sh in	display session's info in form: FTP: (1) 5FC62A12 active Thread[(2) 192.168.0.3,5,main] <(3) SSL> (4) Edgar Miltinch/EdM/DE (5) [RZREP] (6) 20,1 sec 1. sessionID 1. remote IP 1. <i>optional:</i> protocol 1. Notes name 1. <i>optional:</i> active command (if any) 1. session control socket inactivity time
tell ftp show memory te ftp sh me	display memory, thread and system property info window. Does not work under headless environment.
tell ftp cert [ROOT username] te ftp ce [ROOT username]	make a new root SSL X.509 certificate; create or replace a X.509 user certificate and keypair and save it in file 'shortName.keystore'
tell ftp drop [sessionID all] te ftp dr [sessionID all]	drop's one (over sessionID ) or all sessions
tell ftp set [Variable] [Value] te ftp se [Variable] [Value]	set's any of <a href="#">ftp-server.settings</a> file entry. Note that you can change only variables, that are in this file (you can't add a new one)
te ftp group	<group_name>=<r -><w -><x -><a ->,<UU>:<DD>,<root_path[*]>
te ftp delete group [group] te ftp del gr [group]	delete a group from <a href="#">ftp-server.groups</a> file
te ftp delete certificate [username] te ftp del ce [username]	delete a certificate for specified user
te ftp quit te ftp q	terminate ftp-server



1. **Is there drag-and-drop functionality?**  
Yes, but only inter-application.
1. **Why the first replication of the same directory takes more time than next one?**  
Because the operating system caches file structure requests.
1. **Why while i have only one SSL certificate, it worked, but after second one - not?**  
You must select in the ["configuration screen" server certificate](#) and your keypair for current server.
1. **I connect to FTP server and replication actions are grayed out. Why?**  
That because those actions are enabled only, when server responds to FEAT command with RZREP feature. And that is only Domino Server addin.
1. **Why on my new dual core computer all animations are shown, but on my older notebook not?**  
That because all animations and progress info refresh threads have minimal priority to give maximal processor time for background tasks.
1. **Sometimes the copy animation stops for short time and then go. Why?**  
That are data socket timeouts, probably the remote server is busy or the network is overloaded.
1. **Sometimes if i connect to remote server, i become error message socket read timeout. What can i do?**  
You may need to increase [socket timeout](#) in the [configuration screen](#).
1. **On some slow connections application just stops and shows working icon in status bar. Why?**  
You may need to decrease [socket timeout](#) in the [configuration screen](#).
1. **I just copy the ftp-client file to other directory and all my configurations and certificates are lost. Why?**  
Just becource the eFTP.XML and eFTP.keystore files must be copied too.
1. **I'm uploading a couple files to the remote server and become error message 'file not found' in the console. Why?**  
You have enabled resume broken uploads for this server and application try to determine how long is that file on the server.
1. **I become the error message "Can't find the main class" or "Jar file could not be found", if i start application?**  
Please refer the [installation page](#).
1. **What a hell is going on?**  
*i really don't know... difficult to say..*



To do this	Press this
Go to the next page.	ALT+RIGHT ARROW
Go to the previous page.	ALT+LEFT ARROW <i>or</i> BACKSPACE
Move forward between frames.	CTRL+TAB
Move back between frames.	SHIFT+CTRL+TAB
Scroll toward the beginning of a document.	UP ARROW
Scroll toward the end of a document.	DOWN ARROW
Scroll toward the beginning of a document in larger increments.	PAGE UP
Scroll toward the end of a document in larger increments.	PAGE DOWN
Move to the beginning of a document.	HOME
Move to the end of a document.	END

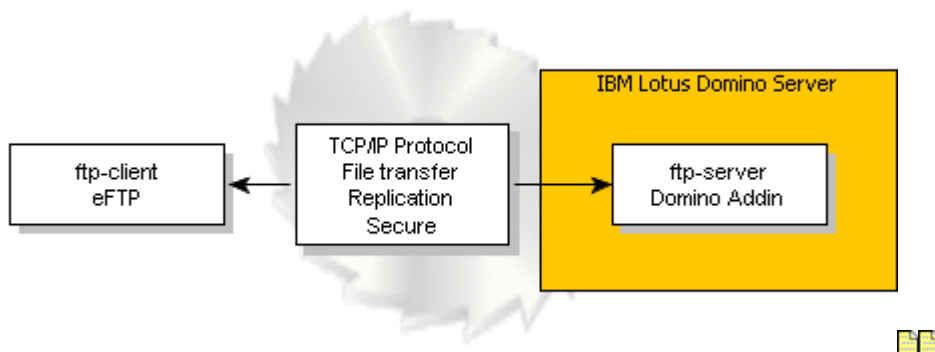


eFTP™ provides a complete FTP platform that allows organizations to extend the benefits of their IBM® Lotus® Domino® messaging and collaboration applications with native file transfer and replication. This is an extended FTP™ client-server application. Containing:

- server side [ftp-server](#) further *ftp-server*™ or *Domino Addin*  
Commercial product, needs license.
- client side rich [ftp-client](#) further *eFTP client*™ or *eFTP*™  
It's a freeware part of the Application.

The most important extended FTP functionality is available only in bundle:

- [File replication](#)
- Personal certificate for FTPS mode



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