WS_FTP HELP INDEX

SCREEN Description

The left half of the main window is the local information.   The right half of the main window is the remote information.   In each half of the main window there are two list boxes.   The upper box is a list of directories while the lower half is a list of files.   Just to the right of the two listboxes are a column of buttons.   These are (from top to bottom):

ChgDir
MkDir
RmDir
File Mask
View
Exec
Rename
Delete

Below the listboxes, there are two status lines.   You can double click in this area to expand this listing.

CHGDIR Button

Used to change directories.   If a name is highlighted in the directory listbox, the system will change directories to that name.   If no name is highlighted, you will be prompted for the directory to change to.

MKDIR Button

Used to create a directory if possible.   You are prompted for a directory name and must supply a name that is valid for the current system.

RMDIR Button

Used to remove a directory if possible.   You are prompted for a directory name.

FILE MASK

Here you supply a file mask that is valid for the system that you are on.   You can use "-altr" in the remote side if you are connected to a UNIX host to receive names in date sequence. Any argument string may be used on the remote side that is valid on the remote system at the end of an "ls" command in a command line ftp client.

VIEW Button

Used to view a file in ASCII format by whatever <u>viewer</u> you have defined in the **OPTIONS** dialog box.

EXEC Button

Used to execute a file according to the standard file manager extension associations.   If you select the remote **Exec** button, the file is downloaded to the Windows temporary directory (defined with the DOS TMP environment variable).   If an association does not exist, you are provided with the opportunity to provide that association at execution time.   Files will automatically be downloaded in binary mode when the **Exec** button is used.

RENAME Button

Used to rename a file if possible.

DELETE Button

Used to delete a file if possible.

Description

This application is a File Transfer Protocol (FTP) client application for Windows Sockets and was designed to take full advantage of the point and click capabilities of the Windows 3.x environment.   WS_FTP provides ease of use for the beginner plus a full set of functions for the power user.   WS_FTP provides features like retention of site profiles and functions like multi-file transfer using standard windows methods.

WS_FTP conforms to the WinSock interface specification making it a WinSock compliant application.

For more information on FTP and FTP sites, please refer to the many different NETNEWS groups or one of the recent books on the Internet.

Connecting to Remote Hosts

WS_FTP contains a remote host profile capability.   Once the profile information is entered, you can connect to a remote host by simply clicking on the connect button, choosing the host from the name list and then clicking on the OK button.

Connection dialog

> CONFIG NAME
> HOST NAME
> HOST TYPE
> USERID
> PASSWORD
> ACCOUNT
> TIMEOUT
> ANONYMOUS LOGIN
> SAVE PASSWORD
> FIREWALL
> SAVE/DELETE CONFIG BUTTONS

Config Name

This is a profile or configuration name and can be anything you desire to identify the connection you are creating.   The length of this name is restricted as it is used as a section name in the WS_FTP.INI file.

Host Name

This is either a fully qualified Internet host name or an IP address.

Host Type

If you know the host type, select it from the drop down list.   If you don't know, try "auto detect".

If you can connect to a remote host but don't get a directory listing, try changing the host type in the OPTIONS dialog box.   I am still working on the "auto detect".   It does take care of about 90% of all hosts.

Userid

Enter the userid that you wish to use for this configuration.   (or you can click on the **Anonymous Login** check box to automatically enter <u>anonymous</u> as the userid.)

Password

Enter the password that you wish to use for the userid that you entered.

If this is an <u>anonymous</u> login, you should enter your full electronic mail address.   It is recommended that you place a minus (-) sign in front of your e-mail address for anonymous logins.

Instead of entering your password for anonymous logins, it is recommended that you simply click on the **Anonymous Login** checkbox.

Account

Enter the account that you wish to use for the userid that you entered if the remote host requires an account.   Note that the account is used for VM/CMS hosts for the initial password to the user's default directory.   When you ChgDir on a VM/CMS host you are prompted each time for the password to connect to that directory.

Timeout

This is the number of seconds before WS_FTP times out waiting for a host response to a command.

Note that the initial connection Timeout is determined by your WinSock DLL. Setting this value higher does not have any effect on the initial connection to the host. Setting to less than the amount of time that your WinSock DLL uses will cause the connection to fail in that amount of seconds.

File transfers will not time out and must be canceled to end the transfer in the case of a lost connection.

Port

This is the port to connect to on the remote host.   This is normally 21, however, it may be something different if you are going through a firewall.

Anonymous Login

Checking this box will automatically enter <u>anonymous</u> as your userid and enter your e-mail address as the password.

FIREWALL

If you are behind a <u>firewall</u> host, click this box.   You must insure that the firewall information has been correctly filled out.   You can specify a <u>PORT</u> to be used for the firewall.

WS_FTP supports five types of firewalls.

Use SITE command.
Firewall host, userid and password is required.   User is logged on the firewall and the remote connection is established using **SITE remote_host**.

Use USER command after logon.
Firewall host, userid and password are required.   User is logged on the firewall and the remote connection is established using **USER remote_userid@remote_host**

Use USER command, no logon.
Firewall host required, userid and password are ignored.   **USER remote_userid@remote_host** is sent to firewall upon initial connection.

Use proxy OPEN command.
Firewall host required, userid and password are ignored.   **OPEN remote_host** is sent to firewall upon initial connection.

PASV Mode.
There is another kind of firewall, which is not specifically configured.   A router-based firewall is one which allows connections to be established in one direction only.   The router itself is invisible to the user.   However, the default mode within FTP is that "data" connections are established by the server rather than the client.   To work with a router-based firewall requires using the <u>PASV Mode</u> of FTP.   The PASV mode of operation can be turned on from the Options screen.

(Code for type 0 was initially provided by Jeff Welty)
(Code for type 1 and PASV was initially provided by Robert E. Stockwell.)

Save Password

Only check this box if you are the only user of your computer and no one else has access to your Windows directory.   Password are stored in the WS_FTP.INI file and even though they are encrypted, it is an easy encryption to break (especially since the source is distributed).

SAVE/DELETE CONFIG BUTTONS

The SAVE and DELETE buttons are provided in order to help you manage the configurations. **A configuration is automatically saved when you select the OK button** and there is no imposed limit on the number of configurations that you may have.

The DELETE button can be used to remove unwanted entries and the SAVE button can be used to save an entry without trying to actually connect to the host.   The CANCEL button exits the dialog box without saving any changes to the current configuration.

TRANSFERRING FILES

File <u>uploads</u> and <u>downloads</u> do NOT timeout.   You must CANCEL the operation in the event that you lose the connection to the remote host.

During the transfer of files, the HELP button changes to ABORT if the <u>HASH</u> option is off or an ABORT dialog box is displayed if the HASH option is on.   The current transfer may be cancelled by clicking on the CANCEL or ABORT button.   File uploads will cancel immediately while file downloads may take up to 30 seconds to cancel.   In both cases, the partial file is not deleted automatically.

<u>Transferring multiple files</u>
<u>Transfer mode</u>
<u>Double clicking in list boxes</u>
<u>Changing Directories</u>
<u>HINTS</u> <u>Auto Transfer of Files</u>

AUTO TRANSFER OF FILES

It is possible to automatically transfer a file from a remote host with a command line parameter.   To do this with an ICON:

1.	set the "Command Line" for the icon to "**ws_ftp hostname:full_path_to_file**"

2.	set the "Working Directory" to where you want the file to be placed.

3.	set the "Description" to something descriptive.

If this is not an anonymous ftp session and a password is required by the host and not specified in the configuration, you will be prompted for the password (and account if applicable).

During the transfer of files an ABORT dialog box is displayed.   The current transfer may be cancelled by clicking on the CANCEL button.   File downloads may take up to 30 seconds to cancel after clicking on CANCEL.   The partial file is not deleted automatically.

Processing rules for this are to use the host, userid, password, account and gateway/firewall information specified in the configuration **hostname** if one exists.   If one doesn't exist, it is assumed that the **hostname** is an actual host and the userid will be anonymous and the password will be the specified e-mail address.

Hints

CHANGING THE DEFAULT LOCAL DIRECTORY

To set the default local startup directory to be something other than where WS_FTP is located

a.   Highlight the WS_FTP icon and press ALT-ENTER (or select File Properties) in the Program Manager.

b.   Change the Working Directory to your desired directory.

OVERCOMING NAME CONVERSION PROBLEMS

If you have problems with remote to local file name conversions, check the <u>Prompt</u> option in the **Options** dialog box.   You will then be shown the proposed file name and allowed to change it.

CHANGING DIRECTORIES

To change directories, click on the desired directory and press the **ChgDir** button.

If you want to change to a directory without traversing the full tree, make sure there is no name selected in the list box and click on **ChgDir** (works with **RmDir** also).   When changing drives on a remote system, you usually have to enter a directory name in addition to the drive letter.

You can also double click on a directory name to change to that directory.

DOUBLE CLICKING

You can double click on a directory name to change to that directory or double click on a file name to transfer that file (or to execute the file depending on the options).

Double Click Options
Transfer
Execute
Nothing

FILE TRANSFER MODE

Use **Binary** mode to transfer all files unless you know the file only contains text, then use **ASCII**.

If you KNOW that the host that you are transferring to or from is the same as your local host, you CAN always use BINARY mode and never use ASCII.

Transfer Modes
ASCII
BINARY
L8

SAVING A "VIEWED" FILE

If you use **View** to display a remote file and then wish to save that file and have the viewer set to **NOTEPAD**, you can select the **SaveAs** menu option and save the file to whatever name you want.

TRANSFERRING MULTIPLE FILES

To transfer multiple files, use the SHIFT or CTRL keys when selecting filenames.   (this is a standard windows method).

To select two or more items in sequence

1   Click the first file that you want to select and drag the mouse pointer down, releasing the mouse button on the last file in the group.

- OR -

1.   Click the first file that you want to select.

2   Press and hold down SHIFT while you click the last file in the group.

To select two or more items out of sequence

Press and hold down CTRL while you click each file.

To cancel a selection

Press and hold down CTRL while you click the selected file.

After selecting the desired files, press the desired transfer direction button.

DRAG AND DROP FEATURE

You can drag one of more files from the Windows File Manager and drop them anywhere on the main window (or when iconized) and they will be transferred to the current directory of the remote host using the current transfer mode (ASCII/binary).

You cannot drag and drop directories, nor can you drag or drop from the remote host to another application.

DIRECTORY DISPLAY PROBLEMS

If you can connect to a remote host but don't get a directory listing, try changing the host type in the connect or options dialog boxes.   I am always working on the "auto detect" and host types.   It does take care of about 90% of all hosts.

Some hosts MAY not be properly auto-detected and must be set at connect time!

DEBUG MENU

You can bring up a popup menu by clicking the right mouse button when the cursor is pointing at the gray area of the main window.   This gives you access to some additional FTP commands.   **(NOT RECOMMENDED FOR THE BEGINNER!)**

Options

VIEWER
EMAIL
AUTO CONNECT
LONG DIR LIST
DOUBLE CLICK
LISTBOX FONT
TYPE
VERBOSE
PORT CMDS
STORE UNIQUE
RECEIVE UNIQUE
PROMPT
COMPLETION BELL
XFER DIALOG (HASH)
AUTO UPDATE RMT
PASV MODE

Double Click
Transfer
Execute
Nothing

Transfer Modes
ASCII
BINARY
L8

Viewer (Option)

This is the program that is invoked for **LongDir** and **Display** buttons.   The default value is **notepad**.

EMail (Option)

This is used as the default password for <u>anonymous</u> logins as required by most anonymous ftp sites.

It is recommend that you place a minus (-) sign as the first character of your email address in order to turn off descriptive messages on the remote host.

Auto Connect (Option)

Controls whether or not WS_FTP displays the connect dialog box when it first starts.

LONG DIR LIST (Option)

When turned on, additional file information is displayed when possible.   Not all host types are supported!

LISTBOX FONTS (Option)

This is used to change the font that is used in the listboxes.   SysVar is the default system font and is a variable font.   SysFix is the fixed system font and will improve the alignment of columns in the boxes.   AnsVar is the ANSI Variable Font, which is a narrower font than the System font.   AnsFix is the ANSI Fixed Font.

Verbose (Option)

Should be labeled debug!   This enables extra debug messages in the message window at the bottom of the main window.   (These messages generally are of no value to the user as all error messages are displayed even when the verbose option is off.)

Prompt (Option)

Enables local/remote filename prompting.   For each file that is transferred, you will be shown the proposed destination file name and allowed to change it.   You CAN enter a full pathname to a different directory if you wish.

Store Unique (Option)

This option causes the transmitted file names to not conflict with existing files *if the remote host supports the STOU FTP command*.   The new filename will be determined by the remote host.

Receive Unique (Option)

This option causes the received file names to not conflict with existing files.   The new filename will be changed so that the sixth though eighth character of the filename will be a number from 000 to 999.

PORT Cmds (Option)

This causes the PORT nn,nn,nn,nn,nn,nn command to be sent to the remote system each time a file is transferred.

This should always be left on.   This option is NOT saved along with the other program options.

Bell (Option)

Causes bell to sound at end of each file transfer.

Hash (Option)

When this option is off, the HELP button changes to ABORT during file transfers. When the option is on, an ABORT dialog box will be displayed during file transfers that displays the status of the transfer.

AUTO UPDATE RMT (Option)

When this option is not checked, the remote directory list will not be refreshed after uploading a file.   This can be accomplished manually by clicking in the remote side <u>file mask</u> and pressing ENTER.

PASV MODE (Option)

PASV Mode forces "data" connections to be established by the client, rather than the server (which is the default).   PASV Mode may be required for users which are behind a router-based firewall.

Double Click Transfer (Option)

When you double click on a filename, the file is transferred to the opposite side.   (If you double click on a file on the local side, it is uploaded to the remote system.   If you double click on a file on the remote side, it is downloaded to the local system.)

Double Click Execute (Option)

When you double click on a filename, the file is executed using the same rules as if double clicked on in the file manager.   If you double click on a remote file, it will be transferred in binary mode to the Windows temporary directory and will be executed from the current directory using the same rules as if double clicked on in the file manager.

Execute Buttons

Double Click Nothing (Option)

When you double click on a filename nothing happens.

ASCII (Transfer mode)

Used for TEXT file transferring.   The end of line character that is different on different type of computers.   This will insure that the end of line character is translated properly.

If you KNOW that the host that you are transferring to or from is the same as your local host, you CAN always use BINARY mode and never use ASCII.

Binary (Transfer mode)

Used for non-TEXT file transferring.   Executable programs, word processing documents, spreadsheets, databases, graphic and sound are some examples of files that MUST be transferred in BINARY mode.

If you KNOW that the host that you are transferring to or from is the same as your local host, you CAN always use BINARY mode and never use ASCII.

L8 (Transfer mode)

Used for VMS non-TEXT file transferring.

Execute Buttons

When you click on a filename in the local side and then click on execute, the file is executed using the same rules as if it were executed in the file manager.

If you click on a remote filename and then click on execute, it will be transferred in binary mode to the Windows temporary directory and will be executed from the current directory using the same rules as if executed in the file manager.

If the filename has an extension other than .EXE, .COM, .BAT or .PIF, then the file associations from the file manager are used.   If the extension has no association, you will be allowed to specify the association at run time.   This association is saved in the WIN.INI file in the Extensions section and will also be valid for the file manager.

You can set associations by clicking the right mouse button in a gray area of the screen and selecting Associate from the popup menu.

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Firewall code originally written by Jeff Welty and Robert E. Stockwell.

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Private contributions for my effort would not be turned down but are totally unnecessary. This program was developed entirely on personal equipment using personal time and personal resources.   My association with the U.S. Army has no bearing on the design or implementation of this program nor does it imply that the U.S. Army, Fort Gordon, the United States Military Academy or the U.S. Army Computer Science School endorses the use of this program.

LATEST VERSION

   The "home" site (where to get the latest version) of **WS_FTP** is FTP.USMA.EDU. **WS_FTP** is located in the **/pub/msdos/winsock.files** directory.   The configuration information is:

```
NAME:       WS_FTP
HOST:       FTP.USMA.EDU
TYPE:       AUTO DETECT
USERID:     anonymous
PASSWORD:   your_email_address
DIRECTORY: /pub/msdos/winsock.files
```

INSTALLATION

Place WS_FTP.EXE, WS_FTP.HLP and WS_FTP.INI in your Windows directory or in any directory you choose.

The easiest way to add WS_FTP to your Program Manager is to drag the program name out of the File Manager into the desired Program Manager window.

-OR-

In the Windows Program Manager, select the File New menu option and create a new program item.
Enter a command line with the full path to ws_ftp.exe and set the working directory as desired.
Click on OK.

Note that you currently must have WS_FTP.HLP and WS_FTP.INI in your working directory OR in the Windows directory.

ANONYMOUS

Most FTP sites support **anonymous** logins where you do not have to have an actual account on the system in order to access the system to transfer files.   Normally the userid is the word **anonymous** and the password is your full e-mail address.   Usually, you can place a minus (-) sign as the first character of your e-mail address to reduce the number of messages that come from the host FTP process.

FIREWALLS

Some organizations have chosen to separate their networks from the rest of the world while still allowing certain users the ability to access resources outside of that organization's network.   This access is provided through a "gateway" or "firewall" host system and is generally uni-directional.   There is another kind of firewall, which is not specifically configured.   A router-based firewall is one which allows connections to be established in one direction only.   The router itself is invisible to the user.   To work with a router-based firewall requires using the PASV Mode of FTP.

FTP

FTP stands for File Transfer Protocol.   This is one of the standard protocols defined for use on a TCP/IP network.

WINSOCK

WinSock is a specification that network software providers use as a guideline for the standard application programming interface to their network software.

UPLOAD

Transferring a file **FROM** your local workstation **TO** a remote host or workstation.

DOWNLOAD

Transferring a file **TO** your local workstation **FROM** a remote host or workstation.