#### How to become a beta tester

It's very easy, really - simply register the program (oh, yes, that's important), and report any bugs that occur in your normal use of the program. I choose my beta testers from those whose bug reports have shown more use to me than any others. If I'm worried about a particular area that seems to be within your area of expertise, you might become a beta tester for a while.

Previous beta testers report that inclusion in the beta test program has led to them becoming internationally famous, and dating super-models.

**How to Win Any Argument About A.I.**If people argue that machines will never be cleverer than humans, simply ask them if their VCR still flashes "12:00".

## **WFTPD Contents** (Version 2.20 6/22/1996)



# <u>How Do I Register?</u> What's New in this version?

Quick Setup - how to start quickly

<u>Common Questions</u> - what people keep asking me - your answer may be here.

#### How To:

Fix what broke in the quick setup

Work with Log files and screen logging

Secure your system

Play the Flute

Win Most Arguments About Artificial Intelligence

Become one of my beta testers for future versions

#### Menus:

Use the File Menu to deal with log files.

Use the Edit Menu for nothing much, yet!

Use the <u>View Menu</u> to turn off or on the status bar, which displays useful status information.

Use the Logging Menu to control what information is saved to the log, or on screen

Use the Messages Menu to give messages to users on connection, logout and change of directories.

Use the <u>Security Menu</u> to limit the number of users, who can log in, and where they may log in from.

#### **Command Line Options:**

Run invisibly with the 'h' option, run minimised with the 'm' option, or select which address and/or port to listen at.

#### Miscellaneous:

**Upload Announcement** 

Changes made in version 2.0x

Changes made in version 2.0x

Changes made in version 1.96

Changes made in version 1.95

Changes made in version 1.9 (and minor version changes)

Look for these features soon...

Acknowledgements

About The Author

**Interesting Email** 

#### **Quick Setup**

The important part of a quick setup is to note what WFTPD has as its defaults:

No Log File

No logging to screen or disk

A blank <u>Greeting and Farewell message</u> (the unregistered version informs users in these messages that you have not registered)

No display of the MESSAGE.FTP file on a CD command

User/password security enabled - but no users defined

Anonymous user disabled, and restricted to the C:\ directory and beneath, should you re-enable this user.

<u>Users may upload</u>, unless they are anonymous.

All users have full rights to all areas of all disk drives.

Host/Net security allows all hosts/networks to access WFTPD

No limit on the maximum number of simultaneous users.

No time-out of idle connections

This means that what you will need to do on first starting up WFTPD is either to enable the Anonymous user, or add users and passwords, or a combination of both. Or, if you don't need password protection, simply disable user/password security and allow anyone access to your system.

I would recommend enabling the time-out too, since this may save you from hangs on your server (and it also prevents people from hogging your server).

Also, timing out on held-open sockets may be instrumental in protecting your site from being involved in IP 'spoofing' attacks on other systems that trust yours.

#### The Log File

The Log File is a simple text file with the following format: [X nnnn] mm/dd/yy hh:mm:ss <Message text> X is a single character, one of:

- L login
- C command
- G get (RETR)
- P put (STOR/STOU)
- A anonymous login
- ? debug information
- ! warning / helpful information
- # information only sent to the display.

nnnn is a four digit number for the connection number that this message applies to - connections are numbered from 0001 from the time the program is first started. When the program is exited and restarted, the count restarts where it left off last time. After 9999 connections, the counter loops back around to the start again.

mm/dd/yy is the date, and hh:mm:ss is the time of the message being written to the log file. Dates are currently written in American format.

This same information is written to the screen.

You can select the types of messages that will be listed through the <u>Logging menu</u> options.

#### **Greeting And Farewell Messages**

These messages are currently a maximum of 20 lines long, and are entered through a very simple multi-line edit control. Any text can be entered here, although it would be advisable to limit yourself to only those characters that are most prevalent amongst the internet community - i.e. 7-bit ASCII.

The Greeting message is displayed to each new connection before they get the prompt for the user name, and the Farewell message is displayed after the FTP daemon receives a QUIT command from the client. In addition, I add one line to each of these messages as a kind of 'promotion', to remind users who wrote the marvelous server that they are connected to.

The default messages are blank in the registered version. In the unregistered version, you cannot edit these messages, and they bear messages enticing your users to tease you about being unable to scrounge up \$15 for a registration fee. If you feel these messages are a problem, <u>please read this</u>.

#### The MESSAGE.FTP File

When this option is ticked in the Messages menu, any time a user changes directory (including when they first log in), the new directory is checked for a file called MESSAGE.FTP. If this file exists, it is printed as part of the success message informing the user of his change of directory.

This file may be as long as you can type, but bear in mind that many people have twenty odd lines of screen and no scrollback - if it can't fit on one screenful, you stand the chance that it will not be read in its entirety.

This feature was inspired by wuarchive's facility to display a .message file on certain commands.

You may want to make the MESSAGE.FTP file hidden (use the DOS command "ATTRIB +H MESSAGE.FTP", or select MESSAGE.FTP in the File Manager, then choose the "Properties" option under the "File" menu, and check the "Hidden" box), so that users do not try to delete it, or change its contents - this is especially important since rights are implemented on a directory - by - directory basis, rather than down to the individual file. You can also make it read-only ("ATTRIB +R MESSAGE.FTP", or check the "Read Only" box under the Properties dialog in File Mangler), so that people are not tempted to overwrite it if they suspect that it is there.

## The User/Password Security Dialog

This dialog allows you to grant different users access to different parts of your disk(s).

#### Done

The **Done** button simply exits the dialog - entries are written to the configuration file as you enter them - this explains why there is no "Cancel". This allows you to quickly change someone's rights if you happen to notice them visiting a directory you'd rather they weren't able to.

#### User Name, New User, Delete

The "User Name" field is a simple drop-down list, and shows you the users currently defined - to add a new user, you must click the "New User..." button. To delete a user, select their name in the "User Name" field, and click the "Delete" button. The "New User" and "Delete" buttons are in the box labeled "User..." - when a user name is selected, e.g. Fred, the box will be labeled "User Fred". Users "anonymous" and "default" are defined - anonymous may be easily disabled from the General Security dialog, and the default user is simply a place holder for directory rights.

#### Also in the "User..." box:

#### Change Pass...

You may change any user's password by clicking the "Change Pass..." button - this pulls up a new dialog with two entries - "Password" and "Verify". The Password/Verify boxes will always display '\*' for each character entered. This is a standard protection scheme to ensure that people in the next town with high-powered binoculars can't log in to your prized system. You will not be able to press "OK" until the Password and Verify fields are the same (this avoids typing mistakes, since you can't see what you type). A user may have a blank password, but it is not advisable.

The passwords are stored in encrypted fashion on the WFTPD.INI file. If you wish to retain your password from a UNIX system, you may copy the password entry from the /etc/passwd file into the WFTPD.INI file - e.g. if my /etc/passwd entry is:

alun:hajibabaomars:194:958:Alun Jones:/home/home/on/the/range:/bin/bash

I would put an entry in the [passwd] section of the WFTPD.INI file a line that reads: alun=hajibabaomars

Because the encryption used is the UNIX standard, only the first eight characters of the password are accepted and encrypted.

#### **Home Directory**

The "Home Directory" is the directory that the user first sees when he logs in. Because of several tech-support emails, this version of WFTPD requires that you enter a valid directory name in this box. It is also advisable when creating a new user account to try and access the system as that user - this way, you will avoid having to debug the connection over the telephone. Most ftp clients will be able to connect to the special site name "localhost" for test purposes. The "Browse" button will pull up a directory selection box for the home directory.

#### **Restrict To Home**

If you select the option "**Restrict to Home**", the user will not be able to change directory to any directory that does not contain the home directory as an initial substring, effectively limiting his access to his home directory and below. Starting with version 2.1, the user will be shown prompts that indicate that his home directory is the top of the tree this is a feature commonly seen on UNIX ftp servers, and will also make it easier to use WFTPD with Web servers.

#### Outside of the "User..." box:

#### Help

The "**Help**" button will display this help page to help you use this dialog. Pressing F1 while this dialog is uppermost will also open this help screen.

#### Rights>>

When you click on the "**Rights** >>" button, it will unfold the section of this dialog to deal with user / directory rights - each user may have different rights in each directory.

#### The "Rights for user ..." box:

When a user's name has been chosen, the box will bear the user's name, e.g. "Rights for user Fred"

#### Directory

The "Directory" entry is for you to specify a particular directory where this user has particular rights. Remember that you are also implicitly defining access rights for each child directory that this directory has, since rights are inherited. Naturally, you may override this behaviour by defining specific rights for that child directory. The special directory "\*" allows you to specify rights for the currently selected user on all directories on all drives. You may also enter a full directory path (including drive letter). The "Browse" button will pull up a directory selection box for the home directory.

To change the rights on a directory that already has specific rights defined for it, you may choose that directory by pressing the down-arrow button, to drop down the list of previously selected directories, or you may type the directory in full

#### Remove

Once a directory's specific rights are no longer necessary (e.g. the directory has been deleted, or a parent directory has the rights that this user needs for this directory), you may press the "**Remove**" button - this does **not** delete the directory or its contents - it merely removes its entry from the list of directories with specific access requirements.

#### Read, Overwrite, Create, List - access rights

To set access rights, check or uncheck the options for "Read", "Overwrite", "Create" and "List Directories" - if a box is checked, then this user may perform that action in the specified directory. Read allows the user to read a file in that directory - in other words, to get the file. Overwrite allows the user to do any action which alters a file already on the disk - such as deleting, renaming, overwriting, or appending. Create allows a user only to add files to the system, i.e. putting a new file, or making a directory. List Directories allows the user to display directory listings in this directory, and subdirectories. If a user is not given any rights to a directory, that user will not even be allowed into that directory (or subdirectories).

Clicking on the "**Rights** <<" button again will fold the dialog back up. Remember that any rights granted (or refused) to a user on a particular directory will apply on any subdirectory, unless otherwise specified.

#### A note on how access is granted:

When an access request for a file is received, the directory in which the file resides is checked for rights entries in the WFTPD.INI file. If this directory is not associated with this user in the INI file, the parent directory is checked, repeatedly, until we reach the root directory of the current disk. If there is no entry for this user with the root directory, we check to see if this user has a default ("\*") entry. If so, we use that, otherwise we repeat this whole process for the default user. If the default user has no default directory entry, we allow all accesses that are not specifically guarded against. (*This is to allow a usable system without having to specify any initial parameters*)

## **Host/Net Security**

This dialog allows you to deny or allow access to your site based on the internet address of the host trying to connect. There is a pair of radio buttons indicating what the default action is - whether you want to generally deny all incoming connections, or whether you wish to allow all connections by default.

#### **Specific Action**

Underneath these buttons is a box labeled "Specific action", which contains a list box labeled "Host address". Any hosts listed in this box (and you can type extra hosts in) may be changed from the default action. Please note that to add or change a host's entry, you MUST click on the Add/Update button. To remove an entry, simply select it in the list, and click on the Delete button. Note also that the Add/Update button is the only way to change the default action.

**The Host Address must be a numerical IP address** - four numbers from 0 to 255 separated from one another by dots (the "." character). To specify several hosts in a range, remember that a "\*" represents the range 0-255.

Once any address or address range has been set to 'deny', no connections from that site can be made. Once an address or range has been set to 'allow', all connections from that site can proceed. If a connecting site qualifies under both 'deny' and 'allow', it will take the opposite action from the default. This sounds bizarre, but it makes a certain amount of logical sense. If you think it's wrong, try and come up with a situation where you might want a different action performed - I couldn't.

The **Close** button will exit this dialog box - it will not in itself save any alterations that you have made to the host tables - this is done only through the **Add/Update** and **Delete** buttons.

**The Security Menu**This menu contains four options that allow you to tailor the security of your site:

<u>General</u> - for miscellaneous settings <u>Users / Rights</u> - to add users, edit their passwords, set home (login) directories, and to assign access based on directories.

<u>Host/Net</u> - to accept or deny connections based on what machine they come from

# **The Message Menu**

This menu contains three options. The <u>Greeting and Farewell messages</u> allow you to design messages that are printed when a user logs in or out, respectively. The <u>MESSAGE.FTP</u> option is a checkable option, that, when enabled, allows a message to be printed out which can change for each directory the connecting user enters. Don't forget, when entering these messages, that many people are still accessing the Internet through UNIX systems, or similar, and have a 20-line display of 80 characters or less. It's a good idea to restrict your messages to fit on such a display.

## The Log Options Dialog

The Log Options Dialog has the following check boxes:

Enable - turns logging to screen and log file (if opened) on/off.

Gets - starts/stops logging all Get (RETR) commands

Puts - starts/stops logging all Put (STOR/STOU/APPE) commands

Logins - starts/stops logging all successful user logins

Anonymous - starts/stops logging all successful anonymous logins

**Commands** - starts/stops logging of all ftp commands received.

**Warnings** - starts/stops logging of all warnings from WFTPD - it is recommended that you leave this enabled, since the warnings are usually signs of things that you may need to fix.

**Winsock Calls** - this option is **only** to be used for debugging purposes - many of the items reported are of little consequence, and despite some bizarre numbers appearing when this option is enabled, most are simply status reports. If this is enabled, it may cause WFTPD to use more memory, to slow down, and maybe even to appear to hang. It is **not recommended** unless you are trying to solve a problem in conjunction with the author, Alun Jones.

Note that if the **Enable** box is not checked, none of the other options can be altered. It makes no sense to alter the log options if logging is not occurring!

Whenever winsock call logging is turned on, and the dialog box closed, or if the application is started with winsock call logging turned on, a dialog box will come up warning you that it's not usually a good idea to run with winsock call logging. Clicking **OK** will disable winsock call logging, and **Cancel** will leave it enabled. This is deliberately counter-intuitive so that winsock call logging will only be used when strictly necessary.

# The Logging Menu This menu has the following options:

**Log Options** - brings up the "Log Options" dialog **Clear Screen** - clears the log on screen.

#### The View Menu

Currently this menu only enables you to turn on or off the status bar. The status bar displays first a text string describing the currently selected menu item, or "Ready", if none is selected. After this, the bar displays a count of the current number of sockets in use, and then the current number of connected users. This allows you to make an easy decision as to whether to close the ftp daemon - if the number of users is zero, then it's safe to close WFTPD. It is especially worthwhile closing and restarting WFTPD if the number of users is zero, and the number of sockets is any number other than one. The number of sockets in use is a function of the following:

- Number of users each user requires one socket
- Number of transfers in progress each transfer or directory listing requires one additional socket.
- The socket that listens for new users one socket.

Hence, if less than one socket is displayed, the ftp daemon just isn't listening any more!

# **The Edit Menu**

In some later version of the software, this will allow you to copy sections of the screen log into the clipboard, for pasting into other programs. Currently, there is no method to copy and paste from the log screen.

# The File Menu

This contains commands to open or close the current <u>Log File</u>, and the exit command.

Previous versions also contained the option to enable/disable the Greedy Option, but this feature has been removed due to its obsolescence.

**How To Play The Flute**Well, basically, Jackie, you blow in one end, and move your hands up and down it.

Next week we'll be teaching you how to rid the world of all known diseases and how to make black and white people live in harmony.

I have received the occasional comment about this section - it's a light relief piece, and is a quote from an old Monty Python sketch - not that there are that many new ones.

# **How To Secure the system**

In this version, user rights have been added - to assign individual users with different rights, you will need to use the <u>Rights Security Dialog</u>.

It is thus possible to allow (or restrict) a user to only download, or only upload, from specific directories.

WFTPD can also be made into a download-only server by options in the General Security dialog

Full Security is probably best achieved by assigning rights, but still providing each user with a separate directory, and restricting them to that directory and below. All this can be achieved through the <u>Users / Rights</u> Security dialog.

If users persist in being naughty, you can deny them access to your machine through use of the <u>Host/Net</u> Security dialog.

#### How To Work with Log Files and Screen Logging.

When you first fire up WFTPD, no log file will be defined, and all logging will be disabled. You will probably want to use a <u>Log File</u>, so that you can find out what happened during your unattended hours, and so that you can have a record of what is going on in your system.

To create a log file, simply open it from the <u>File Menu's</u> Open Log option. From now until you close the file, all log messages will be stored into this file. If you close the software, it will re-open this file when it is restarted.

Logging to the screen is automatically enabled whenever logging is on. This is selected from the <u>Logging Menu</u>. Through this menu, you can also select what actions are logged, and you can also clear the log on screen. There is no way to log to file, but not to screen, short of running the program <u>hidden</u>.

How To Fix What Broke in the Quick Setup
I'm not sure what you mean - nothing broke in the quick setup. :-)
Maybe you should email me at "alun@texis.com", and we'll find out what went wrong.

#### **New and Innovative Uses for WFTPD**

The following uses have been reported to me:

As a standard FTP daemon - this is obvious.

For remote system administration - simply install it with the <u>'h' option</u>, and run it on all of your systems - this allows you to update software, and retrieve configuration files for local editing, allowing you to remotely administer windows machines anywhere on your network.

As a poor man's WWW server - place your HTML files in a directory that the 'anonymous' user can get to, using the extension ".htm", and point people to the URL "file://yoursite.domain/yourdirectory/yourfile.htm" - this was new to version 1.95, and works better in version 1.96. This current version works even more like a regular UNIX FTP server, in that you can ask for "file://yoursite.domain/yourfile.htm" and it will fetch the file from the anonymous user's login directory.

I used to have a feature where you could print by putting a file to LPT1, but because I couldn't get it to work right, and because it was a potentially dangerous use, I have disabled this permanently. If you wish to print to a system through winsock, please use one of the many good lpr daemons that are around.

#### **Upload Announcement for WFTPD 2.20**

WFTPD220.ZIP Windows FTP server 2.20 for Winsock 1.1 / 2 32WFD220.ZIP Windows FTP server 2.20 for Winsock 1.1 / 2

Uploaded by the author (ideally).

WFTPD - the all round useful Windows FTP Daemon.

(As used by id Software, makers of Doom, Heretic, Wolfenstein etc.; also by Office Depot. Also used at many other institutions - not counting site licences, I have over 2550 registrations)

WFTPD is a Windows program that allows you to set up your machine as an FTP site. It runs under Windows 3.1, Windows 95, and Windows NT, and users consistently inform me that it is the fastest server available on these platforms. It is easy to configure through Windows dialogs, and requires no direct editing of INI files or of Registry databases.

Version 2.20 adds capabilities for resuming interrupted transfers, and also the ability to pull up a directory selection dialog whenever a directory is required to be entered.

WFTPD has the following useful features:

- o 32-bit and 16-bit versions available, to allow use on all Intel x86 Windows platforms
- o RFC compliance to 959 & 1123 (in other words, it's a real FTP server)
- o Support for the majority of documented FTP commands, and some of the undocumented ones (it doesn't support the obscure ones for mail, etc.)
- o Multiple logins and simultaneous transfers allowed
- o Works with Mosaic / NetScape / Cello / Internet Explorer / etc.
- o Runs (as tested by real users) over most Winsock compliant drivers
- o Site can be made read-only, or read-only to anonymous users, at the click of a button.
- o User-configurable time-out on hung/idle connections.
- o Secured access by means of password authentication, address-based host authentication, and the ability to restrict users to named subtrees of your directory structure
- o Further security by means of user rights which may be set easily on any directories in your system including those that don't yet exist
- o Remote access to ALL drives on your system is possible
- o Windows friendly does not flash cursors while it is transferring, or hold up processing
- o Can run 'invisible' with no user access to the program
- o Logs logins, anonymous logins, gets, puts, commands, warnings what's logged is configurable
- o Logs to file that can be read by other applications, including session number, time and date stamp. This information is also logged to the screen. Other Windows applications can read this log while it is open, and it can be transferred through WFTPD.
- o Most strings can be edited in the resource information for customization, or translation
- o Small around 230K
- o Status bar display of count of users, and number of sockets in use
- o Cute little icon

In addition, for the low price of \$20 (\$5 extra for disks), you get these features:

- o Easily configurable greeting the unregistered one tells people that you can't afford \$20
- o As many transfers per login as required only 5 are allowed in the unregistered version before you have to relogin. (Directory listings don't count towards this 5) (And only 15 PASV transfers are allowed before having to restart the server in the unregistered version)
- o Greater say in future features
- o Peace of mind can you sleep at nights knowing that your \$20 may be the only thing standing between me and an overdraft/green card/new computer?

#### **Changes Introduced in Version 1.9**

(Minor version changes are at the bottom of this page) The following features have been moved in this version:

- o File|Security dialog is now under Security|User/Password
- o Logging|Logfile dialog is now under File|Open Log
- o File|Greeting dialog is now under Messages|Greeting

#### New items on the menu include:

- o File|Close log stops logging transactions to file, but carries on logging to screen.
- o The Messages menu now contains Greeting (formerly under File), Farewell (for the logout message) and MESSAGE.FTP when this toggle is turned on, any CWD operation will look for the file MESSAGE.FTP in the new directory, and if it exists, will display it to the user.
- o The Security menu now contains User/Password (formerly File|Security), Host/Net (for restricting which hosts may log in to your server), and Rights (for assigning each user a different set of rights in each directory. Rights will be activated when I write the code to do it, probably in version 2.0.
- o On-screen logging is now supported this has been the most requested feature since the FTP daemon was first released! Since my internet connection is often flaky, I figured I'd cut down on my incoming mail and actually put the feature in!
- o RMD will not accept a parameter with ':', '\' or '/' in it this way you have to CWD to a directory's parent in order to delete it. This may seem cumbersome, but is a valuable security feature. MKD has a similar restriction. o CDUP and XCUP are supported, as is STOU, SYST, REIN.
- o The title bar will display the log file when it is opened from the .INI file.
- o If the backlog of stuff to send is bigger than the socket buffer, it's now expanded continually, and eventually when the information gets sent the buffer will reduce. It'll do this in steps of 4K.
- o I am still finding it difficult to open a file sharable by other processes, so the log file is still locked.

#### Minor version changes

- 1.9a fixed a bug in the asynchronous message handling for trumpet users.
- 1.9b fixed a really bad security bug that allowed unprotected access.
- 1.9c fixed a tiny bug in the directory listing, that made it list times wrongly. Also made the help file prettier!

## **Acknowledgements**

I would like to acknowledge the following people for their help in producing this product. They are listed in more or less random order.

- o The developers of the Winsock specification.
- o The developers of QVTNet for producing an FTP server that was so awkward to configure, and which had so many bugs in, that I was prompted to write this program. Also, for not fixing many of these problems, so many users seek out my program to replace QVT/Net.
- o Peter Tattam, for producing a damn good Winsock implementation.
- o Fred Whiteside (of Beame & Whiteside) for helping me find a version of the crypt function. And Carl Beame for being friendly and helpful.
- o Those first few registrations that made all the difference, and kept me going
- o Chip Sparling, Bob Quinn, and all at FTP Software for sending me a PC/TCP Developers Kit in such a short time. Unfortunately, it reached me too late for me to work on fixes to WFTPD to work better with PC/TCP. For the moment, just keep increasing those buffers! (Or upgrade they have a new version out that I haven't been able to look at yet)
- o Bob Quinn for changing the way PC/TCP worked so that developers like myself have an easier time of it, and for producing the winsock spec clarification document, which helped me realise all the mistakes I had made. (And some of the ones winsock stack developers have made!) If you want to write good solid Winsock code, read Bob's book (and see http://www.sockets.com)!
- o Steve McCarthy and everyone at SunSoft, for helping me find out how to deal with problems caused by old versions of PC-NFS. (The trick is to UPGRADE!)
- o All of my 2550+ registered users, and those using my program under site licences! Without you, I would have stopped work on this program long ago (it's far exceeded what I personally needed it to do)
- o Ben Edlund and New England Comics for producing The Tick, Paul The Samurai and The Man-Eating Cow. It's great to see them (well, the Tick at least) on Fox every Saturday!
- o Count Lazlo Stroganoff, Digby Spode and Hubert Carstairs (what are they doing now?)
- o Mikes Flex, Channel, Stand and Hunt, and Anna Daptor
- o The beta testers those mentioned here, and those unmentioned (for various reasons, including but not limited to secrecy and forgetting who they were) Bob Jaques, Chad Solomon (of many names), Adam Glick, and Ryan Simmons. Also Bob Mackey, Jason DeStefano and Michael Grenier for testing the 32-bit version.
- o And, much importance and a significant drum roll to my wife, for putting up with the amount of time I spend on this program, and for helping me to keep the business side working.
- o My current employers, TEAM Development, who are pleased to have me working on this program on my own time, and who would be glad to contract out my time at work for any winsock development you would like me to do.
- o SHARP, for their AN-200SC video converter \$500 to allow me to watch all my English videos over here.

# What is FTP?

FTP is the Internet standard File Transfer Protocol. The WFTPD program attempts to provide the most useful and most often used elements of the daemon (server) side of this protocol, as described in RFC # 959, and amended in RFC # 1123. I believe that I'm compliant with both RFCs.

#### What is a daemon?

A Daemon, also referred to as a server, is a program which will run in the background carrying out certain tasks while the main work of the processor carries on in the foreground. The daemon is connected to by a client program, usually on a different computer.

The term derives from a word meaning a 'helpful servant', and unlike "demon", has no intrinsic connection to either good or evil. The word is supposed to be pronounced "day-mon".

Doctor Who and the Damons is a completely different story.

Look at the How To Register section in this file. Please be sure to use the order forms provided in this section.

Generally I ask for \$700 for each block of 100 licences, of whatever version. This does not include the cost of source code. If you want to buy source code, please send me email, or contact me at the address in the <a href="How To Register">How To Register</a> section in this file.

Firstly, you lose the limit on the number of files that can be transferred in a single session. Also, you can transfer as many PASV connected files as you want (there is a per-instance limit of 20). You can also modify the greeting and farewell messages. If you have sent me an Internet-reachable e-mail address, you will be added to a mailing list, and kept informed of all new versions. On the more esoteric side, you get a good feeling, and you encourage me to work on new versions and fix bugs.

Things mostly paid for by WFTPD: Last year's tax bill My wedding and honeymoon A new computer (so I can develop faster, and so I can make Win32 versions)

Things I hope (perhaps unrealistically) to be paid for by WFTPD: Some of the expenses naturally incurred by having a baby (Colin Lester Jones, born May 17, 1996) A living wage, since I work full time on WFTPD starting August 1996. Registered users with current maintenance are informed of updates and bug fixes whenever they are made, and these new versions can be downloaded free - there is a charge of \$5 imposed for delivery through regular mail. Users registered before July 1996 will have their "first" year's maintenance start at the end of July 1996; users registered after that date will have a free year from the end of the month in which we ship the software to them. The unregistered shareware version should always be available from ftp.coast.net in directory /SimTel/win3/winsock, or /SimTel/win95/winsock. I also try to put the file onto ftp.winsite.com, ftp.demon.co.uk and sunsite.unc.edu - all standard winsock sites. Oh, and I shouldn't forget Adam Glick's useful winsock site, b61563.student.cwru.edu (you may even recognise the server when you log in!).

You've fetched down the winsock.dll file from ftp.ftp.com, which only works alongside the full TCP/IP package produced by FTP Software, called PC/TCP. This winsock is *NOT* free - either find one that is, or buy one of the commercial stacks that support winsock programs. Heaven knows - maybe you could even buy FTP Software's PC/TCP!

You are using an old version of PC-NFS. I believe that this is a problem with version 5.0, but it certainly is a problem with previous versions. Please contact your dealer, and get the new version, or whatever patches might exist.

If you are using FTP Software's PC/TCP, this is something they are working on (as of 5/24/94), but they are extremely close to getting a good working version, so I hear. You might want to check the ftp site ftp.ftp.com to see if a new version of winsock.dll is there that fixes your problem. Note that this winsock.dll will <u>only</u> work with FTP Software's PC/TCP stack.

A similar bug is apparently inherent in the winsock supplied with Spry's Internet In A Box package. I hear rumours that they have a patch that fixes the problem, but I've not yet received a reply from their technical support email address.

Not necessarily - it's entirely possible, since the winsock specification is at times a little vague, it's likely that there may be some parts of the spec that I read in a different way from the people who developed your winsock stack. Winsock developers are working hard to make their stacks work with the most frequent of the disagreements, and I am also ready to change my program to work wherever it turns out I have a misconception.

If you think there may be a problem with your winsock stack, please email me, or technical support for the manufacturers of your stack. Please note that I will not allow bug reports to degenerate into each side blaming the other - if your winsock stack providers will not work with my software, I will attempt to work with them, and produce incontrovertible evidence one way or another. In an argument with a winsock stack provider, if we both blame each other, one of us loses a customer. I'd like for us both to keep the customer, and to get more through word-of-mouth advertising (which is cheap and efficient)

This is a common misconception - my program is designed to work with any winsock stack that implements version 1.1 of the winsock specification (it has a slight alteration to work more efficiently with version 2.0). Most winsock stacks on the market implement version 1.1 of the spec, but to differentiate between different versions of their own stack, they give different version numbers to each copy of the stack. Hence, PC-NFS is at version 5.1, PC/TCP is at version 2.31, and Trumpet Winsock is at version 2.0 rev. B. All of these stacks implement an interface that is compatible with version 1.1 of the winsock specification. Note that this information may be out of date by the time you read it - winsock stacks are constantly being updated.

Not unless you are willing to spend some money - I've made sales of the source code to a couple of companies, and it's a little unfair on these people if I offer the code free to anyone else, or if I sell it for significantly less. Feel free to contact me if you wish to discuss buying the source code. Bear in mind that the cost of the source code represents partly the amount of time put into developing it, and partly the possible loss of income from you selling derivative copies.

Two small points here - first, the unregistered version is generally designed for testing, before you register. I'd feel very embarrassed if I was using an unregistered version of shareware to deal with customers, especially the influential ones - what kind of impression does it give to your customers when they find you are using them as a test case? The second point is that you probably spent enough time complaining to me that you've already cost yourself (or your company) at least \$20.

As another interesting point, I've had many people tell me that they registered specifically because they found the message amusing.

The message stays!

I'm not really sure what's going to be the big thing in the next version - it all depends on how much time I am able to devote to it. Also, <u>Look Here!</u>

Well, this is a tough one. I've generally put out one release every six months, often coinciding with a change of address. However, in August, I shall be moving (again!), to San Antonio this time, and I will be spending my time divided between looking after Colin, my new son, and developing and supporting WFTPD. Keep an eye out for news at my web site, which will eventually sit at http://www.texis.com, but is currently at http://www.eden.com/~alun.

### My current (and final) mail address is alun@texis.com.

I know this is all confusing, but now that I have my own domain, this shouldn't ever happen again. Mail sent to my old addresses should be forwarded to my current address - the only exception to this is WST, who seem to resent me for some reason. Probably because they owe me several thousand dollars and seem disinclined to pay it.

I used to use the Trumpet winsock under Windows 3.1at home - this can be fetched from many public ftp sites. It costs \$20 to register, and seems to be pretty robust. The canonical site is ftp.trumpet.com.au, but it is very difficult to log onto, because of its high traffic.

Most often, though, I use Windows 95 and its own support.

At one time, I used the Microsoft VxD TCP/IP stack, code-named Wolverine, which is available for free from the ftp site ftp.microsoft.com - it should be in directory /peropsys/windows/public/tcpip. This is a fairly solid stack, and promises to be the basis of TCP/IP support in future versions of Windows. Currently, this VxD stack works only on Windows for Workgroups 3.11. The Windows '95 TCP/IP implementation is very good, and with the addition of a scripting package for dial-in SLIP/PPP connections, is the program I'll be using when I finally go to Windows '95. Also available is the PC/TCP stack, from FTP Software, PC-NFS from Sun, Chameleon from NetManage, and several others. Check in computer magazines for more details - look under network software. If the advert doesn't explicitly say that it's winsock compliant, call the company before buying it. WFTPD will only work on winsock compliant stacks. Also, you could try reading the newsgroup "alt.winsock", which regularly has discussions on the various winsock implementations. As with all newsgroups, it is helpful to just read the newsgroup quietly (known as "lurking"), since there is often a posting of answers to Frequently Asked Questions (FAQ), and some people get pretty annoyed if you ask a question that's already answered in such a document.

This is much easier in version 2.1 and later of the software - as an example, the URL "ftp://your.host.com/file.htm" refers to the file "file.htm" in the anonymous user's home directory. Anyone who had URLs pointing to earlier versions of WFTPD will need to rewrite their links.

This is usually due to a blank user entered in a previous version of the software (the current version will not accept a blank user name). To fix this, you will need to edit your WFTPD.INI file, and in the [passwd] section, you should find an entry beginning with an '=' sign. Remove this line - it's not connected to any user - and your problem should go away. The current version of WFTPD will automatically remove these entries if it finds them.

I've written one other winsock program so far - "cooksock", which was a cookie server. This reads in a file of "fortune cookie" type quotes, and for each connection received on port 17 (the well-known port for quotes), it sends out one of these quotes and then disconnects.

I don't think that a telnet server would be worth the effort it would require, since there are a lot of awkward decisions to be made as to how best to represent the DOS screen over a terminal line, especially when you cannot guarantee what type of terminal is at the other end.

There are other mail servers out there, and I'd be at quite a disadvantage trying to beat any of those.

I've been giving some consideration to writing a news server, but there's just no way it could happen with my current time constraints - maybe later this year, when I start work for myself, I shall have more time to start on this.

#### **Frequently Asked Questions**

Select the question you would like to ask, and the answer should pop up.

(Don't feel embarrassed if you have to ask any of these questions - if lots of other people hadn't already had to ask them, they wouldn't be here. And please email me at "alun@texis.com" if you don't understand the answers, or if you have a question that doesn't seem to be represented here. Who knows, it may be a question that I forgot to put here, or one that will be in a future list?)

#### **Registration and contact information:**

- Q. How Do I Register?
- Q. What Does Registration Get Me?
- Q. What e-mail address can I reach you at?
- Q. How do I get a new version of WFTPD?
- Q. What do you offer in the way of site licences?
- Q. I'm interested in learning winsock programming, or using your program commercially can I get a copy of your source code?
- Q. What winsock stacks do you know of that I might fetch?
- Q. Have you written other servers? Can you write a [telnet, news, mail] server?
- Q. How do I find your current email address, or the current version of your program?

#### **Shareware concerns:**

- Q. Why is WFTPD 'crippleware'?
- Q. Why do you have such a rude message in the unregistered version? ("My customers don't appreciate seeing this when they log in, and some of them are very influential people!")

#### Bugs or Bug-like behaviour:

- Q. When I run your program, a dialog says I am missing PCTCPAPI.DLL why?
- Q. My server only allows one connection, before I have to restart it why?
- Q. Why can I only transfer about the first 32k of all files, or not transfer anything at all?
- Q. Is my winsock stack faulty, since it won't work with your software?
- Q. You say you require winsock version 1.1 compliance, but my stack is version 1.0. Where can I get the updated version?
- Q. Why do I get "WSANODATA no service record" warnings on starting WFTPD?
- Q. How do I set my ftp server up for Mosaic / Netscape / Cello?
- Q. I tried to pull down the list of users, but I don't get some of the users I know I've added why?

## An eye to the future:

- Q. What's going to be in the next version?
- Q. When are you going to ship the next version?
- Q. How do I make WFTPD run as a service under NT?
- Q. How do I make WFTPD run as a service under Windows 95?

#### Look for these features soon...

Please note that none of these features have yet been written or designed, and some of them may not yet make it into WFTPD. Please tell me which features you'd like to see. If there are other features you would like to see, please email me, and I will either add them to the wish-list, or explain why I don't think I want to implement them (sometimes people suggest things that surprise them in their consequences - one user suggested a feature that his system administrators told him would enhance the system security. I was able to prove to him that implementing the suggestion would actually lead to a decrease in system security. I wonder if those system administrators still work there?)

(The ordering is most definitely not indicative of preference)

## Suggested Features (the "Wish-List") If there are other features you'd like to see, email them to me at "alun@texis.com":

- o Access limited at various times to different numbers of users
- o Different limit on number of Anonymous users
- o User configurable limit on number of transfers per login or user.
- o Tidy up on-screen log handling perhaps allow access to the full log file?
- o View Current connection status (using a button or a set of slider bars?).
- o MESSAGE.FTP's name should perhaps be changeable, and it should not be PUTtable.
- o Check back on host address->name->address mapping for security's sake.
- o Output the Winsock description string in the log file, and in response to the STAT command
- o Verify authenticity of Zip files on upload (tricky, but who knows?)
- o Host/Net restriction based on host name as well as IP address
- o User count displayed on iconised description
- o Safe close disable all future logins, and close once all users have exited, or a time limit has expired.
- o Socket flush for use when you know there's no-one logged in, and you want to flush any remaining idle sockets (theoretically unnecessary, but there will always be bugs)
- o Greeting/Farewell message box should use a fixed-width font, to allow better design of greeting screens.
- o Code an NT service version, perhaps configurable through the control panel (coming in the near future, but look here)
- o Redo the host/net security dialog to make it as easy to use as the User/Rights security
- o User-configurable sound on login, or some other operations.
- o Command line option to 'hide' the icon, but still allow it to be found later (?)
- o Make the "getservbyname" warning a little less frightening.
- o Use NT's user name and password information (could cause security nightmares!)
- o Include time, date, etc. in greeting messages
- o Use Windows 95 shortcuts properly.
- o Dock into the Win95 system tray.
- o Provide support for separate parameters on multi-homed hosts.
- o Output statistics into the log file (time for transfers, amount transferred, etc)
- o "Professional" version to allow several simultaneous servers.
- o Ignore MACB (MacBinary) requests in the log file
- o Accept, and maybe understand, some of the UNIX arguments in LIST and NLST.
- o Have an option to require anonymous users to enter valid email addresses, or perhaps a user-specified format of password.
- o Play a WAV file, or indicate in some other way when users log in.
- o Use a B-Tree based database file for users and rights, instead of the INI file this will allow for many thousands of user IDs.

#### Bugs (or mis-features) to (try and) fix:

I have sporadic reports that WFTPD can keep files open a little too long, but I have so far been unable to verify this.

## The "Rude" Greeting Message

The message that we are talking about, in case you forget, is:

This FTP site is running a copy of WFTPD that is NOT REGISTERED

Shareware can only improve if supported by its users.
The easiest way to support shareware is to register it.
WFTPD costs only \$20 to register.

To register this program, or receive new details on it, send email to alun@texis.com (Alun Jones), or snail-mail to Texas Imperial Software, 1602 Harvest Moon Place, Cedar Park TX 78613-1419 USA

As added incentive for the site owner to register, you will be restricted to five (5) transfers - to get more transfers, please re-login.

Please note - Alun Jones is only responsible for the software that this site runs, and is not responsible in any way for either the content of this site, nor its location on the Internet.

The only complaint I treat as valid is the complaint that you have not yet had time to send me the money, or that I have not yet responded to your registration.

The basic point is that WFTPD is **NOT** free software - it is shareware, which means you are welcome to distribute the unregistered version, and you are welcome to try the unregistered version out to see if the registered version is likely to fulfill your needs. I would hope that you are either not likely to test unregistered shareware on any business clients, or that you keep them fully informed that they are participating in a test of unregistered shareware. I doubt that you will find any test users that will protest at the simple message above.

#### What's new in release 1.95

I think I've fixed the following problems:

- o ABORting a transfer should work properly now.
- o Leading spaces are not stripped from messages stored in the INI file
- o MESSAGE.FTP is now displayed on all logins.
- o "GET \*.EXE" (NOT MGET) no longer produces "Internal Application Error".
- o The scrollbar always shows up, even if WFTPD is started minimised.
- o Memory leaks on closing WFTPD should be (mostly) fixed.
- o Memory hogging is reduced, and logging is much improved, because I stopped fighting the system!

#### I also enabled these new options:

- o Use the port address in the services file (if present), otherwise default to 21.
- o PASV mode support (for Mosaic).
- o Fetching files with full path names while maintaining security (for Mosaic).
- o The Security options "Enable Security" and "Allow Anonymous" have moved to underneath the "Security; General" dialog from the "Security; User Security" dialog.
- o The "Security; General" dialog has an option to limit the number of users that can connect. (Setting the limit to 0 makes it unlimited. If you want to disable logins, simply close the ftp daemon!)
- o All "Add/Alter" buttons now read "Update" so novice users can understand.
- o I have tightened up the "PUT" functionality, so that hopefully it'll cause fewer problems.
- o Directories don't show up any more in NLST results only regular files.
- o LIST and NLST results are now sorted before being output.
- o LIST commands can no longer list directories you don't have access to (part one of beefier security)
- o If users are added with no password, they get placed properly into the [passwd] section.

I have completely written the networking subsystem, so PUTting has sped up, and the greedy option now has no effect. GET commands no longer tie up the machine, either!

This version seems to work well with Beta 14 and above of the Trumpet Winsock - Peter Tattam has fixed some messaging problems that were causing me trouble.

#### About the author

News Flash - a baby boy was born to Alun and Deborah, on May 17th, 1996.

Alun Jones is an English programmer, who married an American PC specialist in October 1994. He's very pleased that there have been some site licences that allowed him to get married and go on honeymoon without going too deeply into debt. The last source licence allowed him to buy a new machine, a new compiler, and a new operating system, so that he could produce both a Windows 3.1 version and an NT/Windows 95 version.

Alun appreciates all user feedback, and is smart enough to know that if he can fix a bug, it'll help him make more money because it's easier to sell a better program. What he doesn't appreciate is people who complain about his program (especially in public forums), without first checking with him as to whether he might have already fixed the problem. This is especially annoying when the bug referred to was fixed several months before - you have been warned! :-)

Alun is nearing the end of his time working for TEAM Development, an Austin-based consulting firm - if you'd like them to work on programs for you, you might want to talk to Paula Johnston at TEAM Development. The address of TEAM Development is 5408 Highway 290 West, Austin TX 78735. The phone number is (512) 892 6035, and the fax number is (512) 892 1097. **Please do not call either of these numbers expecting WFTPD support, help or sales**. Texas Imperial Software (and this product, WFTPD) are quite separate from TEAM Development, and when I am at TEAM Development, I will not do anything for Texas Imperial Software.

Beginning in August 1996, Alun will be working full time on WFTPD and similar quality networking programs. This means he <u>will</u> be able to undertake customization work, and possibly some consulting, when he isn't watching after the baby.

What Alun *really* <u>hates</u> is Barney - the bloated purple Styrofoam dinosaur. Kids should be encouraged to imagine, yes, but they should lead their own imagining, not have it led by some overweight Jurassic remnant with an apparent IQ lower than the average speed limit in this country.

#### About the author's wife

The author's wife, Debbie, is a native Texan who used to work for an unspecified Microsoft Support Partner on the Windows 95 Launch Team and has waited impatiently for Alun's 32-bit Windows 95 long file name aware, cool GUI version of this awesome software. When the new version finally arrived, she managed to persuade several of her colleagues into using it, and has spread WFTPD's pernicious influence even unto Microsoft themselves. Currently she is a Microsoft Certified Trainer, in Windows NT (workstation and server), and Windows 95, and is one exam away from becoming a Microsoft Certified Systems Engineer. In addition, she is certified in Microsoft TCP/IP.

Just so that you, the savvy user knows, Alun's company is owned by his wife. For you federal and state government organizations, this means **minority owned**!!! (Get the picture?:-))

Debbie *really* hates Information Super Highway metaphors. If the computer people of America rise up together, we can beat this thing !!! Please don't perpetuate these silly, ignorant sounding analogies.

Debbie would like to thank y'all for all of your registrations; they helped to pay for the Pentium she is using to type this with. This gives Debbie half a chance at getting to use at least one of the two computers in the Jones's household. Of course, since she's going to deliver our first baby around June 8, 1996, there is doubt as to just how much time she'll get on either machine!

#### **General Security Dialog**

The General Security dialog is accessible from the Security menu, and has five items of interest, besides the usual **OK** and **Cancel** buttons:

"Enable Security" - when checked, WFTPD will ensure that nobody logs in without entering a valid user name, and its associated password. If not checked, users may log in with any name and password whatsoever, with full access to all areas of your disk.

"Allow Anonymous" - Anonymous ftp is the term for logging in to an ftp daemon as "anonymous", or "ftp", at which point you are asked to enter your email address as your password. Hence, anyone can log in to your machine when this option is checked - they do not need to know a password, but they will be restricted by your choices in the Users / Rights Security dialog.

"Allow Uploads" - when checked, all users will be allowed to upload files to your machine. When unchecked, WFTPD will make your site "read-only".

"Allow Anonymous Uploads" - When checked, anonymous users will be allowed to upload files (so long as "Allow Uploads" is also checked, and obviously, they can't log in if "Allow Anonymous" isn't checked. Also, rights assigned on the <a href="Users / Rights Security dialog">Users / Rights Security dialog</a> are taken into consideration). When unchecked, anonymous users will only be able to download files.

"Maximum number of users" - this is the largest number of users that may be logged into your server at any one time. Each user requires one socket for his command and output connection, and each time they transfer a file, or do a directory listing, they will take up another socket for the duration of that transfer/listing. By restricting the number of users that log in, you will make sure that your machine runs smoothly (it has less to do!), and that users will not face messages telling them that they cannot transfer a file because of a network error, when there are several users on at once.

Entering 0 as the maximum number of users sets the ftp server to accepting any and all incoming connections. (If you want to set it to not allow any logins, simply close it down!)

"Time-out for inactive connections" - if a user stays logged in to your server, but does nothing, he's wasting one of your sockets, and hogging system resources. You might want to put a value in here - often about 5 minutes (which is 300 seconds) should be sufficient for most users. Once this period of time has gone by on any connection with no activity, the connection will be broken, and the user informed that he has been disconnected due to inactivity. If you put a 0 here, then noone will be disconnected for being idle for too long. Try not to put something like 15 seconds, since that doesn't leave anyone time to type their commands in! Try it out yourself from a command line ftp client, to check that things work.

Note that time-outs also catch connections that have died in unusual circumstances, and clears them up, too. This can make things a little easier on your file system, and your server.

### **Registration Information**

#### Order forms must accompany all registrations.

Order forms can be reached from the bottom of this page. Please read the entire page before proceeding to the order forms. If you are ordering through a purchasing department, please attach written instructions to the order form, so that they know to pass the order form on with the payment. Many purchasing departments simply throw the order form away, and send on just the purchase order / payment. **This page is not an order form**.

#### Purchase orders must be for a minimum of \$50

There are so many unpaid purchase orders we are trying to collect on that we must make this restriction. Any purchase orders unpaid over 60 days automatically lose the first year's free maintenance, and purchase orders unpaid over 90 days may be considered as a loss, and the user will be required to remove the software from their machines. We will not take further purchase orders from any company with outstanding purchase orders.

#### Our "bounced cheque" fee is \$25

#### Payment must be made in US dollars, or British Pounds (also known as "Sterling").

I am only able to accept payments in these two currencies.

#### Payment is accepted in cheques, cash, or Postal Money Orders.

That means **no credit cards**. Purchase orders for \$50 and more are accepted by mail or fax to me in the US (see below for details), but must be accompanied by the relevant order forms, and final payment must be made in terms defined here.

# <u>Cheques in dollars must be drawn on US bank branches, made payable to "Texas Imperial Software".</u>

Basically, if your cheque doesn't have a USA address on it somewhere, it cannot be cashed here without a significant payment.

# Cheques in sterling must be drawn on UK bank branches (or be Eurocheques), made payable to "Alun Jones"

Texas Imperial Software is an American company only, and has not been established yet in the UK. Since I cannot cash sterling cheques made out to Texas Imperial Software, they have to be returned.

#### Money orders come with a receipt - keep the receipt in case the money order gets lost!

Credit card payments are, for the moment, cost prohibitive to me, and cannot be accepted.

#### Texas Residents must add 8.25% sales tax

#### Please allow adequate time to process your order

We aren't currently equipped to deal with "urgent" orders. Registered mail has to wait at the post office until we can get out to collect it (usually at the weekend), and FedEx/DHL/UPS/Airborne Express has to sit all day at our front door, and occasionally gets blown around the neighborhood. Mail may take a week or two to reach us. It's also worth considering that when we move, mail gets forwarded automatically, FedEx/DHL/UPS/etc. don't - they sit in the warehouse for a few weeks before someone gets the idea to call you and ask what you want done with the order.

Price for WFTPD:

By Email/FTP By Regular 'Snail' Mail US\$20 / GB £20 US\$25 / GB £25

The cost in pounds is slightly more expensive, but usually cheaper than getting a money order in dollars, apparently. Please, if neither of these is your currency, make sure that your purchasing department knows the price of the software is based on one of these two currencies - occasionally, the value seems to have been converted to and fro in the purchasing process, and the total is not adequate to cover the cost of the software.

Software is sent through your suggested delivery method soon after receiving either a cheque, cash, money order (for US dollars or English pounds), or a purchase order. If you use a purchase order, make sure it clearly states that the order is for "WFTPD - Windows FTP Daemon" - I am not sufficiently trusting to assume that an order for "General Lab Supplies" covers my software (Yes, I've been sent one of those)

#### Addresses & Fax Numbers

The regular mail address for sending order forms, payments or purchase orders in **US dollars** only is:

Texas Imperial Software 1602 Harvest Moon Place Cedar Park TX 78613-1419 USA Fax number +1 (512) 257 2579

Or, if your payment is in **pounds sterling**:

Alun Jones (WFTPD) 47 Sugden Road Long Ditton Surrey KT7 0AD UK

There is no phone number for Texas Imperial Software yet, since we're not currently available during business hours. This situation will change after August 1996.

Order forms and purchase orders can also be faxed to me at the number above. E-mail correspondence for comments and suggestions should be sent to "alun@texis.com". Note this is a change from my previous e-mail address. (Why? Click here)

It often helps me if you can tell me how you use the software - I have found some <u>New and Innovative Uses</u> for an FTP daemon out there. This will allow me to determine whether all the features of the software are useful, or whether they need to be rewritten.

Click here for pricing on site licences.

The order forms are separately listed for:

Delivery by email or ftp

Delivery by 'regular' mail - this costs \$5 or £5 extra, and frequently takes me longer to arrange.

Either of these order forms may be printed from Windows Help. If you do not have a printer, please make sure that all the items listed on the order form are present in whatever you send to me to register.

## Order Form for Delivery by FTP or Email (version 2.20)

## Texas Imperial Software

1602 Harvest Moon Place, Cedar Park, TX 78613-1419

Name:			
Company Name:			
Address:			
Phone Number:			
Delivery Method:	e-mail	FTP	(mark at least one)
E-Mail Delivery by: E-mail Address: (Always fill in your email a	MIME ddress, so that I can contact you	UUencod u if I have any questions regardi	
	ase remember to be careful		WFTPD to an anonymous account under nctions, or I may not be able to send your
FTP User Name:			
FTP Password:			
Quantity	Description	Price Each	Total
V	VFTPD - current version	US \$20.00 / UK £20.00	

If payment is made in pounds sterling, such payment should be payable to Alun Jones.

Only checks drawn on US and UK bank branches, or International Postal Money

Orders will be accepted; credit cards will not.

#### Texas residents must add 8.25% Sales Tax

For dollar payments, send this order form along with your check to Texas Imperial Software, at the address at the top of this form.

For sterling payments, send this order form along with your check to: Alun Jones (WFTPD), 47 Sugden Road, Long Ditton, Surrey, KT7 0AD, UK.

Please contact Alun Jones at the above address or e-mail alun@texis.com for site licenses, comments or suggestions.

As this software is shareware, there is no warranty implied or otherwise, nor is support guaranteed. However, if you discover any bugs or problems please contact the developer at the above e-mail address.

## Order Form for Delivery by 'Regular' Mail (version 2.20)

## Texas Imperial Software

1602 Harvest Moon Place, Cedar Park, TX 78613-1419

Name:			
Company	Name:		
Address:			
Phone Nui	mber:		
The E-mail	address is required if you wish to	be kept informed of new versions.)	
E-mail Ad	dress:		
		(If not Internet, please specify.)	
Quantity	Description	Price Each	Total
	WFTPD - current version	US \$25.00 / UK £25.00	
	**		

If payment is made in pounds sterling, such payment should be payable to Alun Jones. Only checks drawn on US and UK bank branches, or International Postal Money Orders will be accepted; credit cards will not.

Texas residents must add 8.25% Sales tax.

For dollar payments, send this order form along with your check to Texas Imperial Software, at the address at the top of this form.

For sterling payments, send this order form along with your check to: Alun Jones (WFTPD), 47 Sugden Road, Long Ditton, Surrey, KT7 0AD, UK.

Please contact Alun Jones at the above address or e-mail alun@texis.com for site licenses, comments or suggestions.

As this software is shareware, there is no warranty implied or otherwise, nor is support guaranteed. However, if you discover any bugs or problems please contact the developer at the above e-mail address.

Many people use the term 'crippleware' to refer to software that is restricted in some way in its unregistered form, and some people feel that 'crippleware' should not be encouraged. I also feel that this *should* be unnecessary, but for reasons explained below, I have decided that I have to restrict the shareware version.

About five years ago, I wrote an HPGL to Postscript translator, HP2PS for short. It apparently served its purpose rather well, and I decided to release it and ask that people simply send me some portion of the money they believed it was worth to them. Over three or four years of answering email, fixing bugs, etc., still noone had sent me a penny. The final straw came with Rxxxx Bxxxxx and Sxxxxx Mxxxxx of Nxxxxxxx Research Laboratories phoned me to discuss a couple of bugs and suggested features. They offered to pay me once I had fixed the bugs and added their features, and so I set to work. After finally fixing their bugs, and sending the new version off to them, they now don't return my phone calls. What a surprise.

Then came WFTPD - in October 1993, I had something that I thought other people could use, so I put it out on the net, with no restrictions, and a registration fee of \$20. In the two months that followed, during which I added many features, two users registered. I then decided to restrict the program as you see it now, and since then I have had on the order of more than one new registration every day - each site licence is counted as one registration here.

My point here is that if I had not restricted the software, I would have received so few registrations that I would have given up working on it, and there would not be a WFTPD program today. And if Nxxxxxxx Research want to register WFTPD, they can pay in advance this time, please.

#### What's New in Release 1.96

Netscape & Mosaic compatibility checked - everything seems to work okay now.

RFCs 1123 and 959 are now complied with - this should mean your client can talk to me quite happily. If not, there's a chance your client software may not have full compliance with these RFCs!

The NLST command lists directories as well as files, so all your Mac users will be happy.

Each new connection results in a log message (If you log Logins), detailing the IP address of the client connecting to WFTPD.

3D Controls are added - you'll need to have a copy of CTL3DV2.DLL in your WINDOWS\SYSTEM directory and nowhere else!

My address has changed once again - now, I live in Austin.

Two new options on the General Security dialog - "Allow Uploads" and "Allow Anonymous Uploads" - these should be self explanatory, but are explained in more detail under the topic for the General Security Dialog.

MESSAGE.FTP bug fixed - there are now no spurious blank lines, or extra numbers sent in the message.

The CWD command now accepts strings ending in slashes. (DOS doesn't!)

The bug whereby the user count was often exceeded with no users logged in has been fixed.

The occasional hanging of the ftp daemon has been traced, and fixed. Hopefully this can be left running for weeks without causing trouble.

A time-out facility has been added. The server is only fully RFC 1123 compliant when the time-out value is set to a non-zero value (setting it to zero simply disables the time-out). Please use this feature, since it means that people will not be able to clog your server, nor will crashed connections keep hanging around.

Most of the response messages have been put into the resource portion of the executable, so that you can modify them with a resource editor. If you edit these strings, please bear in mind that sequences beginning with a '%' character are special to C, and they should not be altered or transposed. If you do this, the program will crash.

The Logging options have been moved to their own separate dialog - now, you can enable/disable several options without having to keep opening the Logging menu.

The log file itself is now sharable while the program is running, so you can read it in other programs while WFTPD runs!

On closing WFTPD down, all transfers are interrupted properly, and all control connections are closed safely.

Entering a command "dir c:\dos" is now the same as "dir c:\dos\\*.\*" (assuming the directory c:\dos exists, that is!)

Above all, this version should be much more stable than 1.95, which I admit was put out in a bit of a hurry.

Prior to version 1.95, I simply used port 21 in TCP to listen for incoming ftp connections. Many people asked to be able to start the ftp server listening on alternate ports - for example, to get around some firewall restrictions. So, I figured, if I ask winsock what port it's been told "ftp" is, then users can easily change that value (usually in the "services" file). It now turns out that many of you do not have this file, or have not got it in the right directory. Each winsock is different, but the Trumpet Winsock (which I get more of these reports on) requires the "services" file to be in the same directory as "winsock.dll". It may also benefit you to know that the protocol and hosts files should be in this directory too, on Trumpet Winsock. If this information makes no sense, please read the instructions that are supplied with your winsock stack, and if that does not help, please contact your winsock supplier, since I don't know anything more than this.

#### What's New in Version 2.02

2.02 adds more stability to version 2.01, fixing a number of small problems that users had noticed (mainly with Netscape, who won't answer my emails). It also fixes a few problems that were noted while porting to 32 bits, and which were mostly to do with making sure the program could run longer without hitches. Hopefully now, all "WSAENOTSOCK" messages in Trumpet will have disappeared (although generally, they are little to worry about), and all unused sockets will be closed, allowing the server to run for longer periods of time. Also fixed in this release is the whole host/net security thing, which now works fully as documented.

#### 2.02 is the first release of the 32-bit version of WFTPD.

2.01 is a security update to 2.00 - 2.00 had a bug in it that allowed users to log in without entering passwords. 2.01 does not have this flaw. Below is a description of the 2.00 new features.

Well, quite obviously, the <u>Rights Security dialog</u>, along with its attendant increase in security is the new item that's in right now.

I've worked on the PUT procedures - now it only logs a PUT once, instead of three times. There's a little more work in this area still to be done, but that may fix most problems.

Context sensitive help should now exist for all dialogs - try it with either F1, or the Help button on each dialog. The About box should work properly now, too.

The scroll bars now work properly, and text output should be cleaner.

More work on putting - STOU now works as it should (ignore file name, and generate a random one) Users now cannot log in if their home directory does not exist.

The status bar now displays the current count of connected users and open sockets, so that administrators may decide whether the system needs to be rebooted.

#### Why Shouldn't I Log Winsock Calls?

The main reason that you shouldn't enable Winsock Call logging is that it takes up an awful lot of space with messages that basically say "Status OK at some line or other", and because these messages can occur very frequently indeed, you will rapidly fill your log file with messages that make no sense to you if you don't have the source code. Also, because it now has to spend time logging calls that were previously finished very quickly, you will slow your server down to a crawl, and also the machine that it runs on!

The only reason this option is here is to assist the author in tracking down specific problems that you are experiencing - even then, many problems can be traced without even having to try the Winsock Call logging.

### Interesting Email I have received:

This is reserved for interesting emails I have received, obviously from people who haven't quite grasped the concept behind WFTPD - the names have been changed to protect the ... well, the names have been removed.

#### Alun:

I really liked your gifs you had on line. The young ones where the best. I'm assuming your FTP site will not be up for very long... I'd like to some more of these. I only got a 1/2 dozen or so. Do you know where I can get any videos of the young ones?

**Sure - BBC Enterprises...:-)** 

And another one:

*Is there a UNIX version of WFTPD?* 

Yes, but they're all very derivative :0)

My most common email?

How do I register WFTPD?

#### Look here

The most surprising?

*How do I register FETCH?* 

(Fetch is a Mac FTP client!)

How do I get up to date information on you and WFTPD?

The simplest way is to register and include an email address with your registration - then, I'll send you email announcing each release, and how to get your copy.

To find the newest shareware copy, you should look in the SimTel archives, whose main mirror site is ftp://ftp.coast.net/SimTel/win3/winsock - this is where you'll find WFTPD.

To find my current email address (which should always be **alun@texis.com**), and my mailing address, simply use a 'whois' program (accessible from most UNIX shell prompts, and also available as a winsock program at SimTel), and ask it for **AJ11** - that's me. (note that's the letters "AJ" followed by the number eleven) Or, you could just ask it "whois texis.com" or "whois 'Texas Imperial Software'".

This is from an email from one of my users:

"Anyway, I found a little utility called srvany.exe (something like that :-) that allows you to make any application a service - I tried it out with WFTPD and it works like a charm! The utility is included with Microsoft's NT Resource Kit, if you want to play around with it."

The following is taken from one of my users' emails:

Also, FYI, here's how to install WFTPD so that it runs at startup under Win 95 machines (if they require a network login, like mine, then simply putting them in the Startup group means that it won't be run if the machine is rebooted -- the Startup group isn't processed until after a person logs in!):

- 1. Run the policy editor (poledit)
- 2. Select the File Open Registry menu item
- 3. Double click on Local Computer
- 4. Go to Local Computer/System/Run Services and make sure the check box next to it is enabled
- 5. Click on Show
- 6. Click on Add
- 7. Supply a name (typically WFTPD) and a filename (e.g. d:\network\wftpd) in the spaces provided
- 8. Click on OK, click on OK, click on OK (should now be back at the System Policy Editor window)
- 9. Select the File|Save menu item
- 10. Close the policy editor

This works pretty well; if my computer ever freezes and I'm away and need access to it, I can just have someone go into my office and hit the reset button.

If the user wants to run WFTPD in hidden mode, they can specify "d:\network\wftpd h" in the filename box. (And now, they can use the "m" option to run it minimised)

#### What's New in Version 2.1

(What's new in version 2.11 appears towards the bottom of this page)

From the wish-list:

All users restricted to their home directory should see that as root, so as not to tempt them Note the current IP address and/or host name on startup Accept 'SIZE' command, if anyone can find me documentation for it. Command line option to run minimized Restrict passwords to eight characters in the entry dialog.

**Right Write Rights, Right?** - The "Write" right has been split into two rights - "Create" and "Overwrite". "Create" allows you to make new directories and put new files. "Overwrite" allows you to put files with the same name as existing ones, append to existing files, delete existing files, rename existing files, or remove directories. Think of "Overwrite" as being the ability to affect existing files in any way, and "Create" as a polite upload capability. Previous rights entries of "Write" are taken to mean "Create" and "Overwrite", and when edited, will be re-written to the INI file as such. If you want to do this for all entries at once, simply edit the [rights.xxx] section (for each user 'xxx'), and change all the "W"s to combinations of "O" and "C", as appropriate. 'Overwrite' does not imply 'Create'.

Off The Beaten Path - Any user that is restricted to within their home directory will no longer be able to see the directory structure above their home directory, nor will they have to enter that directory structure when passing an absolute path. This allows URLs on Web browsers to work more as people expect them to. If you previously had references to WFTPD through URLs, you will either have to change them to match the way things currently are. You may do this simply by removing the path to the restricted user's home directory from the URL.

Who Am I? - To help you in setting up WFTPD, and in telling your friends what address to connect to, WFTPD will now display on start up your numerical IP address. This is the string of four numbers with dots separating them, and is the address that your users should be able to use, to guarantee connecting to you. I don't try to print out the name of your system, since that requires Domain Name Service calls, which may take some considerable time to complete. Besides, the numbers will provide a guaranteed route through, whereas the name may not even exist.

**Time And Relative Dimensions In Space** - A small bug with WFTPD's communication with WS\_FTP has been fixed - when WS\_FTP was <u>not</u> set to host type of WFTPD, it would list bad file sizes and dates. This has been fixed in WFTPD, by printing two digits for the hours, even when the hours are less than 10. John Junod, author of WS\_FTP, has been most helpful in sorting out this, and other incompatibilities between our two programs. This is why WS\_FTP will work very nicely with WFTPD. I recommend that your users run WS\_FTP as their client of choice.

**Space - The Final Frontier** - I corrected the response to the seldom-used "ALLOcate" command, so that Frontier Technology's FTP client would work properly. I guess the "be generous in what you accept" rule should be applied to Frontier Technology's client, but instead I decided to adopt the "be strict in what you send" part of the same quote :-) ALLOcate is used in reserving space for a file about to be put, and makes little sense in our scenario. A later version might use the parameter on this command to approve PUTs that are below the size remaining on the disk.

**Just In Case** - The case sensitivity of long file names in the 32-bit version of WFTPD is now preserved - previous versions forced lower case. Case, however, <u>is</u> ignored when sorting file names in directory listings. FTP-Serv U apparently alters case in file listings - I don't agree with this idea, since there is no point destroying case in a case-preserving system! Note that, since case is only important when creating the name of a file/folder, WFTPD is not case sensitive when retrieving files - only when putting them.

**Size IS Important** - the MDTM and SIZE commands have been implemented, so that hopefully Netscape will be a little better behaved. It would have been nice if I could have gotten this information from Netscape themselves, but they seem to be unable to respond to my email. Has anyone noticed just how much NCSA Mosaic has improved since Marc Andreesen left NCSA for Netscape? I think it merits close scrutiny:-).

**More Speed, Less Haste** - yes, another change to make WFTPD even faster - this time, to make directory listings come out faster - many of you have remarked that in directories with a thousand or so files, the ftp client would often time out. This should not happen any more, since I have dramatically sped up the sorting. This should also be a boon to those of you that weren't timing out, but were growing old while waiting for directory listings.

**Service With A Smile** - for those of you running WFTPD as a service in NT (using servany) or 95 (using instructions in other parts of this help file), try using the 'm' command-line option. It runs the program minimised. This is, of course, totally exclusive of the 'h' command-line option. You cannot use the two together - it makes absolutely no sense at all.

**Thanks for the Memories** - No more temporary files when listing directories - it's all done in memory now. This should help speed and reliability, not to mention not leaving tmp files around if the machine crashes.

**Share and Share Alike** - The sharing is now specifically set to allow reading, but no writing when a file is being transferred - I'd be grateful if you could test this thoroughly for me.

You can stop typing now... - Since encryption on the passwords is limited to eight characters, the entry in the dialog is limited to eight characters, also.

**There's No Place Like Home** - or at least, if there's no place such as your user's home directory, when you enter it into the User Security (Rights) dialog, you won't be allowed to leave. This should reduce the load on my email.

**Help, I Need Somebody!** - the help file has been substantially altered to make it easier to find those items that I am most often quizzed about. The FAQ section has been reorganised, as has the section on how to register.

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#### What's new in version 2.11?

The fixing of these bugs made me decide to produce version 2.11, a bug-fix release:

**Reading Allowed** - on the 32-bit version, the structure used for storing the deny/allow flag was being read into only the bottom 16 bits of a boolean flag, meaning that, under most circumstances, any host referenced in the Host/Net section was denied access.

"This is London Calling" - due to some bad Microsoft documentation in my copy of Visual C++, the 32-bit version doesn't know what time it is - unless you work entirely in Greenwich Mean Time, or the more romantically named "UTC". Later versions of the Visual C++ help files seem to get this point across, which is why I'm at a mystery as to why my copy of the help files are wrong! To be fair, the current Microsoft documentation gives examples to help avoid this error. However, it still gets the file size wrong, stating that the file size is achieved as follows:

nFileSizeHigh

Specifies the high-order DWORD value of the file size, in bytes. This value is zero unless the file size is greater than MAXDWORD. The size of the file is equal to (nFileSizeHigh \* MAXDWORD) + nFileSizeLow.

Since my code didn't work this way, but worked when I used nFileSizeHigh + nFileSizeLow, I can only assume something is still up.

**To err is human** - I guess I count myself as human - I missed a couple of return values on file status routines, which meant that putting a file that didn't already exist on to a server would occasionally (or often, depending on what's in memory on your PC) produce the error "550 Error: xxx is a volume or a directory." A similarly screwed up coding error meant that putting files to, or fetching files from, an absolute path would result in a bad path being generated, which then made for a file error. Both of these bugs should have been fixed by this release, but the very intermittent nature of the first meant that I could not reliably determine whether it was fixed or not.

#### What's New in Version 2.2

What's new in version 2.20?

Here's the additions that prompted me to produce version 2.20:

**Let's try that again** - The "resume" capability offered by CuteFTP, or "reget" in ncFTP and many Unix ftp clients is now supported - if you are getting a file, and the transfer fails, or is aborted, you may continue fetching the file from the point that you stopped, rather than having to re-transfer everything that you already have.

**Focus, Pinky, Focus!** - when changing focus away from the home directory field to other applications, the warning dialog that appears could cause problems, including making the computer unusable. This has now been fixed.

**Just Browsing** - the directory entry fields are now equipped with a "Browse" button, that will open up a directory browse dialog, to make it easier to find the directory you're looking for.

**Up against the wall** - Because many firewalls expect me to bind the local end of the socket to a port before opening a connection to a client on the other side of the firewall, I now do this specifically. I am told this may break SOCKS support, but I suspect this to be more due to a bug in SOCKS - you may even find, if you use SOCKS, that everything works just fine.

Wage Slave - Due to bizarre circumstances, I am finally able to quit my current job, and work full time on development of WFTPD and other related projects. To smooth this transition, we are making a few changes in the price structure of WFTPD - mainly, that I now don't care whether you want the 16-bit or 32-bit version, the price is the same, and the zip file that will be sent to you has both versions. Also, I will be charging a yearly maintenance fee. Everyone with valid, paid registrations by the end of July will receive one free year's maintenance from that date, and will be entitled to download the latest version of WFTPD, whether it be a bug-fix or just a feature update. A new product, tentatively to be called "WFTPD Professional" is in the works, and will provide many features that Internet Service Providers, and other larger sites will find extremely useful. This version will be priced higher, and will be developed on a parallel track with the regular version of WFTPD. Starting at the beginning of August, Texas Imperial Software will also be available for consulting services.

# Command Line Arguments The 'h' Option, The 'm' Option, and changing the listening address or port.

If you run WFTPD with a command line argument of 'h' or '-h' (case is unimportant), then the program will run without an icon, and will not show up in the task switcher. This means that WFTPD cannot be closed without exiting windows, and its options cannot be altered. This is probably only useful for remote system administration, where (to quote an existing user) "you don't want bozos deciding they know how to rewire their systems".

There is currently no way to prevent users of Windows 95 from using CTRL-ALT-DEL to kill WFTPD.

If you run WFTPD with a command line argument of 'm' or '-m' (case is unimportant), then the program will start up minimised. This is designed for people who either want to start WFTPD from the load= or run= lines of the WIN.INI file in Windows 3.1x, or who want to use the program as a <u>Windows 95 service</u>.

You can also tell WFTPD to listen to a different port and/or address. The command line syntax for this is to include an option of the form [IP-Address][:port], where IP-Address is the address that you want WFTPD to listen to -normally, this is 0.0.0.0, and this is what is defaulted to when you leave out the IP-Address. The IP-Address will usually be numeric, but if a name is passed in, and can be resolved, it will be accepted. A different port is specified by putting the port's number or name after a colon. The default behavior is to look at the port for "ftp", which is usually 21 - if this is not found, then it defaults to 21, after warning you.

Here are some sample command lines - note that the port numbers and IP addresses are made up ones - if you don't know what IP address and port number you should be assigning here, you really have no need to supply them:

WFTPD Run standard size, listening for all incoming connections, on the

"ftp" port, usually 21.

WFTPD m Run minimised.
WFTPD h Run hidden.

WFTPD m 10.21.15.7 Run minimised, listening for incoming connections to address

10.21.15.7, on the "ftp" port, usually 21.

WFTPD h : qotd Run hidden, listening for all incoming connections, on the "gotd"

port, usually 17.

WFTPD myhost.mysite.com: 80 Run normal size, listening for connections to the IP address

represented by myhost.mysite.com, on port 80 (usually the HTTP

port)