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# **WS\_FTP Professional**

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## **User's Guide**

Software Version 4.12

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**Ipswitch, Inc.**

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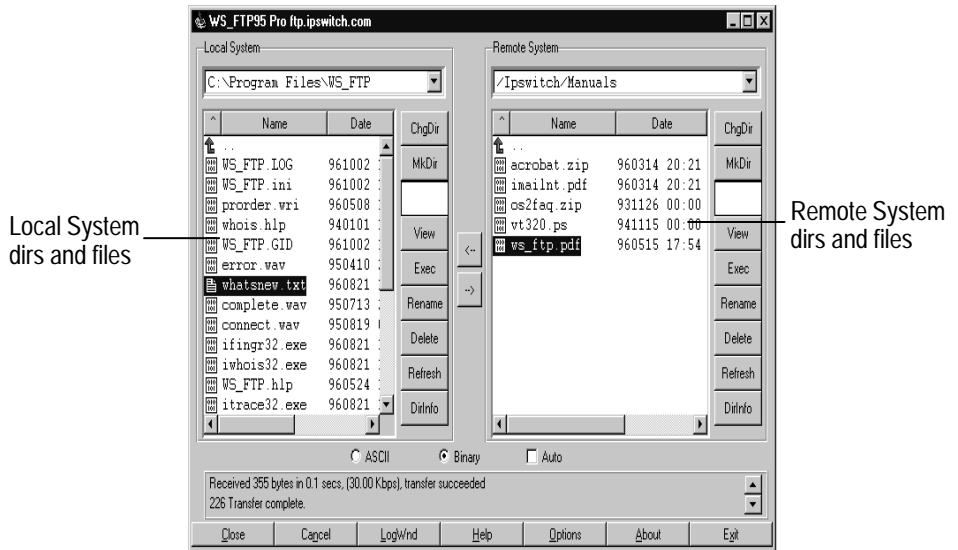
# Chapter 1: Introduction

When you are working with large files or collections of files, you may want to copy files from one computer to another rather than sending them via e-mail. In addition, you may want to access a collection of files stored on another computer system. WS\_FTP Professional (WS\_FTP Pro) lets you connect to another system (also called a remote system) from your local PC and transfer files between the two systems. This chapter introduces WS\_FTP Pro and describes its features.

Refer also to the WS\_FTP Pro online help for information about the application and specific features.

## What is WS\_FTP Pro?

WS\_FTP Pro is a Windows-based application for transferring files between your PC (the local system) and a remote system. With WS\_FTP Pro's easy-to-use interface, you can "upload" files (meaning copy files from your PC to another system) or "download" files (copy files from another system to your PC).



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**Note:**

In networking terms, your PC is known as the “local system.” A “remote system” is any other computer that you connect to via a modem and telephone lines or a local-area network.

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When you have connected from your PC to a remote system, the WS\_FTP Pro window displays the directories and files for your PC in the Local System list box (on the left) and the directories and files for the remote system in the Remote System list box (on the right). With both file systems displayed, you can easily locate files on one system and copy them to a directory on the other system.

Using the buttons on the WS\_FTP Pro window, you can connect to a remote system, browse directories and files, and transfer directories and files.

## **WS\_FTP Pro Configurations**

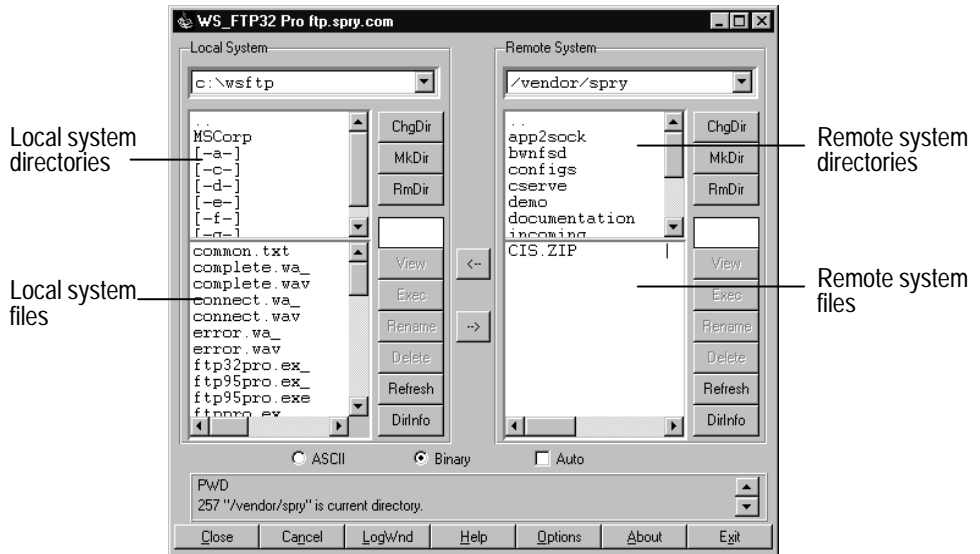
WS\_FTP Pro is an FTP client application that complies with the Windows sockets (Winsock) standard. WS\_FTP Pro can connect to any system that has a valid Internet address and contains an FTP server program, allowing you to transfer files between a wide variety of systems, including Windows, OS/2, and UNIX systems.

WS\_FTP Pro is available in the following configurations:

- 32-bit, 2-window version for Windows 95 and NT only
- 32-bit, 4-window version for Win32s, Windows 95 and NT
- 16-bit, 4-window version for Windows 3.x

The 2-window version, shown on the previous page, uses icons to identify directories and files.

The 4-window versions show directories in a directories list box and files in a files list box, as shown below. These versions do not use icons to indicate directories and files.



## WS\_FTP Pro Features

You can use WS\_FTP Pro to:

- Create a connection between a local system and a remote host system and display and browse directories and files on both systems
- Transfer one or more files between the local and remote systems (in either direction) using Window's point-and-click capabilities
- Create and retain session profiles to automate the logon and connection to frequently used remote systems
- Access the vast store of information on **anonymous FTP** sites (see the following section "File Transfer Concepts" for more information)
- Drag-and-drop file transfer between a remote and local system

- Drag-and-drop file transfer from Window's File Manager or Windows 95 Explorer to the local or remote system
- Resume interrupted transfers

If a file transfer is interrupted by a lost connection, WS\_FTP Pro asks if you want to continue the transfer when you re-connect to the remote host.

- Transfer files using WS\_FTP Pro commands from a DOS prompt
  - Preserve file date/time on transfer (2-window version only)
  - Prevent overwrite of newer files (2-window version only)
  - Bonus Pack includes Network tools — Ping, Trace, Finger, Whois, and Lookup
- 

## New in Version 4.12

Version 4.12 of WS\_FTP Pro offers many new capabilities, including the following:

- New directory/file sorting capabilities (2-window version only)

The directory/file listing for both the local and remote systems now contain three column headings: Name, Date, and Size. You can click on these headings to sort the listing by Name, Date, or Size in ascending order. Click on the heading a second time to reverse the listing order.

To resize the column headings click in between headings, drag the mouse left or right, and release the mouse button.

By default, directories are shown at the top of each directory/file listing. The Up Arrow button to the left of the Name heading toggles the listing between mixed directories and files, directories on top, and directories on bottom.

- The View and Edit commands now honor the Extensions (Extensions properties in the Options) setting if Auto transfer mode is enabled (2-window version only)



- Prompt for viewer or application on file View, Execute, and Edit (2–window version only)

You can enter **Ctrl+View**, **Ctrl+Exec**, or **Ctrl+Edit** to display a prompt for the viewer or application in which you want to open the file. (Edit is on the right–mouse pop–up.)

- Support for new host types

New host types include: PRIMOS, IBM OS/2 Warp, VMS\_UCX, Stratus VOS, and the IBM MVS FTP server year 2000 change.

- New command line capabilities

The \* and ? wildcards can be used in file names. Also, you can now specify a directory name as the file transfer destination.

- File transfer errors are now displayed in red in the Message area (2–window version only)
- Support for multiple initialization commands (in Session Profile properties). Use a semicolon (;) to separate each command.
- The password encryption has been improved.
- Accounts in Session Profile properties are hidden, like passwords.
- Time offset property in Session Profile properties accounts for differences between the local and remote systems' time zones.
- New tabbed dialog boxes for the Session Profile properties and Options properties. (2–window version only)

The 4–window versions use the same Session Profile and Options dialog boxes as the previous version, and they will not be updated to include new properties.

- New Sounds and Sort properties for Options.

The Sounds properties let you change the default settings for the audio files used to notify you of FTP session events. In the Properties dialog box, click the **Options** button, then click the **Sounds** tab to access the Sounds properties.

The Sort properties let you change the default settings used to sort directories and files on the local and remote systems. Click the **Options** button, then click **Sort** tab to access Sort properties.

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## File Transfer Concepts

If transferring files using FTP is new to you, some basic concepts will help you get started.

### The File Transfer Protocol (FTP)

The File Transfer Protocol (FTP) provides the ability to transfer files between computers by defining how the local system communicates with the remote system. FTP is a client/server based protocol, whereby a client program on one system (the local system) sends requests to a server program on another system (the remote system) and receives replies from the server.

FTP servers are used by many companies, universities, and other organizations to provide access to collections of files. WS\_FTP Pro is a client program that can communicate with any FTP server program.

### Connecting to an FTP Site

To create an FTP connection with a remote system, you need:

- A LAN or dial-up Internet connection.
- The remote system must have a valid Internet address and must be running an FTP server program.
- To log on to the remote system using a userid and password. This requires that you either have an account on the remote system or can access the system through an anonymous FTP guest account.

### Anonymous FTP

Anonymous FTP lets you connect to a remote host and download files without requiring you to have an account on the host. An anonymous FTP site lets you log on using “anonymous” as the userid and your e-mail address as the password. Normally, when you log on “anonymously,” you are placed in a public directory on the remote system (usually the /pub or /apps directory) that contains information and software that can be “downloaded,” meaning transferred to your local system. Access to other directories on the system is usually restricted.

Through anonymous FTP you can access a vast library of software and information. Many companies maintain an “FTP site” where you can download evaluation versions of software and obtain product information.

WS\_FTP Pro provides a number of predefined profiles that let you quickly access popular anonymous FTP sites. For example, you can select “Games” from the Profile Name drop-down list in the Session Profile dialog box to access an FTP site that contains free distributions of various computer games.

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**Note:**

When you log on to an anonymous FTP site, look for a file called *readme*, *readme.txt*, *index*, or *00index*. Many sites use this file to provide a description of the information available on the site and other information such as restricted hours for using the site.

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For more information on **FTP** (File Transfer Protocol) and FTP sites, refer to the network newsgroups or one of the recent books on the Internet.

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## System Requirements

WS\_FTP Pro requires the following system resources:

- An Intel 386, 486, or Pentium processor; a PowerPC processor; or a Digital Alpha processor
- Windows 95, Windows NT, Windows 3.1, Windows 3.11, or Windows for Workgroups 3.11 operating system
- A TCP/IP protocol stack. Supported stacks include those from Microsoft (Windows 95 and NT) and Ipswitch (Windows 95 and Windows 3.x).

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## Installation

1. Install a Windows TCP/IP stack on your system. Microsoft provides a TCP/IP stack with Windows 95 and Windows NT. Ipswitch also offers Acadia/VxD and CyberSuite that run on Windows 95 and Windows 3.x.
2. Insert the WS\_FTP Pro disk into a floppy disk drive.
3. Do one of the following:
  - For Windows 95, click the **Start** button, select **Run**, and then enter the diskette path followed by *install.exe*. For example:

`a:install.exe`

- For Windows NT and Windows 3.x, select **Run** from the File menu, and then enter the diskette path followed by *install.exe*. For example:

`a:install.exe`

Follow the on-screen instructions to install WS\_FTP Pro.

4. The installation program asks where you want to install WS\_FTP Pro. Enter a directory in which to install the WS\_FTP Pro executables, release notes, and help file.
5. The installation program asks you for the preferred local directory for file transfers. Enter the name of a directory that you want to be the default when transferring files to the local system. You can override the default at any time by selecting another directory on the local system.
6. The installation program asks you to select the appropriate version of WS\_FTP Pro for your system. The recommended version for your system is preselected.
7. The installation program asks you to select which Bonus Pack tools you want to install. The recommended versions for your system are preselected.

8. The installation asks you to enter a name for the Windows program group that it will create. The default name is WS\_FTP Pro.
9. If you are installing over an existing version of WS\_FTP Pro, the installation program asks if you want to retain the existing *ws\_ftp.ini* file. This file contains your saved session profiles, so you will likely want to retain it.
10. The installation program asks you to enter your e-mail address. You should enter your full e-mail address. Many anonymous FTP sites require your e-mail address as the password. When you connect to an anonymous FTP site, WS\_FTP Pro will automatically enter your e-mail address as the password. If necessary, you can later change the e-mail address in the General Properties (click **Options**, then click the **General** tab).

When you have completed the on-screen instructions, the installation program installs the files and creates a shortcut for WS\_FTP Pro in Windows 95 systems or a program group in Windows 3.x and Windows NT systems.

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## Read Me First Information

Please refer to the release notes included with this product for information regarding any enhancements or changes made to the software since this manual was printed.

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## Please Send Us Your Feedback

We welcome your feedback on this product. Please send the results of your evaluation and your comments and suggestions to the following e-mail address: *feedback@ipswitch.com*

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## Files Installed

The WS\_FTP Pro installation places the following files on your system:

<i>complete.wav</i>	The sound file that indicates a file transfer has completed.
<i>connect.wav</i>	Sound file that indicates that your local system has successfully connected to a remote system.
<i>error.wav</i>	Sound file that indicates an error has occurred on connection or file transfer.
<i>ftppro.exe</i>	Executable program for WS_FTP Pro — 16-bit, 4-window version for Windows 3.x.
<i>ftp32pro.exe</i>	Executable program for WS_FTP Pro — 32-bit, 4-window version for Win32s, Windows 95, NT.
<i>ftp95pro.exe</i>	The WS_FTP Pro executable program — 32-bit, 2-window version for Windows 95 or NT only.
<i>whatsnew.txt</i>	Release notes for this version of WS_FTP Pro.
<i>iping32.exe</i> , <i>iping.exe</i>	The 32-bit and 16-bit executable files for the Ping tool.
<i>ifinger32.exe</i> , <i>ifinger.exe</i>	The 32-bit and 16-bit executable files for the Finger tool.
<i>iwhois32.exe</i> , <i>iwhois.exe</i>	The 32-bit and 16-bit executable files for the Whois tool.
<i>itrace32.exe</i> , <i>itrace.exe</i>	The 32-bit and 16-bit executable files for the Traceroute tool.
<i>ilook32.exe</i> , <i>ilookup.exe</i>	The 32-bit and 16-bit executable files for the NSLookup tool.
<i>ws_ftp.hlp</i>	Help file.
<i>ws_ftp.ini</i>	Initialization file (stores session profiles).

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## Troubleshooting

This section lists some of the common FTP connection and file transfer problems.

### Connect Problems

Problem: You cannot connect to a remote host.

Solution: Make sure you have an active dial-up or direct Internet connection. WS\_FTP is not a dialer. It calls the Winsock DLL and uses the dialer or direct connection specified there.

Problem: You installed the 32-bit or Windows 95 version of WS\_FTP Pro on Windows 95, then you start WS\_FTP Pro but cannot connect to another system.

Solution: Check to see if you are running the Windows 95 TCP/IP stack. If not, install the 16-bit version of WS\_FTP Pro, start WS\_FTP Pro and try to make the connection. (If this works, you are running a 16-bit TCP/IP stack.)

Problem: You can connect to another host, but the directory and file display is not readable.

Solution: Select another host type while connected. Try looking in the message log (click the **LogWnd** button) to see if the host type of the remote system is identified, then select that host type.

Problem: Connection closes after  $n$  minutes of inactivity.

Solution: The FTP server determines the connection timeout. Most FTP servers will close the connection after a few minutes of inactivity. You can change this setting only on the FTP server, not from WS\_FTP Pro.

### File Transfer Problems

Problem: You receive one or more “Blocking call cancelled” messages and the file transfer is incomplete.

Solution: If you are using the Microsoft TCP/IP stack (which is part of the Windows 95 and NT operating systems), try setting the Maximum Transfer Unit (MTU) to 576.

**Problem:** You cannot open a directory on the remote host or transfer a file.

**Solution:** Check that you have a valid login name and password. If you do not, try selecting the **Anonymous** check box in the session profile; or, contact the system administrator of the FTP server to which you are trying to connect.

**Problem:** You cannot log on to the remote host.

**Solution:** Check your directory and file access permissions on the remote host. These permissions may be set by a system administrator and cannot be changed by WS\_FTP Pro.

See our WS\_FTP Pro FAQ on our Web site for answers to frequently asked questions. Go to <http://www.ipswitch.com> and select the FAQ from the WS\_FTP product directory or the support page.

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## Downloading WS\_FTP Pro Software Patches

On occasion, Ipswitch will provide a software patch to fix a bug in the currently shipping version of WS\_FTP Pro. You can check our download FTP directory or our download directory on our Web site for current software patches.

To access download software on the Ipswitch FTP site:

1. In the WS\_FTP Pro window, click the **Connect** button. The Session Profile dialog box appears.
2. In the Session Profile dialog box, select **WS\_FTP Pro Patches** from the Profile Name drop-down list, and then click **OK**.

WS\_FTP Pro connects to the download directory.

3. Select the patch file for your platform type: Intel = x86; DEC Alpha = AXP; PowerPC = PPC. (For example, *x86\_404.exe* is the patch file for the Intel platform. 404 indicates version 4.04.)
4. Transfer the patch file and place it in your WS\_FTP Pro directory. Run the patch file to update the software.



To access download software on the Ipswitch Web site:

1. In your Web browser, go to: **<http://www.ipswitch.com>**
2. Click on the **download directory** link.
3. Under WS\_FTP Pro Patch Files, click on the link for your platform type: Intel, DEC Alpha, PowerPC.
4. Select to **Save** the patch file in your WS\_FTP Pro directory. Run the patch file to update the software.



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## Chapter 2: Using WS\_FTP Pro

This chapter describes how you can use WS\_FTP Pro to process a typical FTP file transfer. A typical file transfer includes the following steps:

1. Connect to a remote system using a session profile.
2. Locate directories and files on the local and remote systems and perform any directory and file operations.
3. Transfer files from one system to another.
4. Disconnect from the remote system.

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### Starting and Configuring WS\_FTP Pro

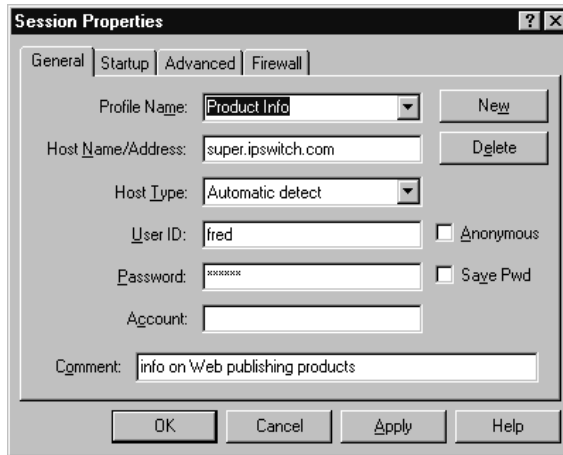
This section describes how to start WS\_FTP Pro and how to create an FTP connection to a remote system.

#### Starting WS\_FTP Pro

To start WS\_FTP Pro:

- In Windows 95, click the **Start** button and select **Programs→WS\_FTP Pro→WS\_FTP Pro** (or **WS\_FTP95 Pro** or **WS\_FTP32 Pro**, depending on which version you installed).
- In Windows 3.x and NT, open the **WS\_FTP Pro** folder and double-click the **WS\_FTP Pro** icon (or the **WS\_FTP95 Pro** or **WS\_FTP32 Pro** icon, depending on which version you installed).

The WS\_FTP Pro main window and Session Profile dialog box (shown below) appear.



## Session Profile

To create an FTP connection to a remote system, you either enter the information to create a session profile or invoke an existing session profile. The session profile tells WS\_FTP Pro the name of the remote system, its platform or host type, and the login account information — User ID and password.

## Creating a New Session Profile

You can create a new session profile to log on to a remote system as follows:

1. Click the **New** button to clear the entry fields in the dialog box.
2. In the Profile Name text box, enter a name to identify the FTP session you are creating.

This can be any name you want to use to identify the session.

3. In the Host Name/Address text box, enter the name of the remote host to which you want to connect. This must be either a fully qualified Internet host name or an IP address.
4. Click on the Host Type drop-down list box and select a host type for the remote host.

If you know the host type, select it from the listbox. If you don't know, select "Automatic detect" from the listbox. Automatic detect will work for most host systems.

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**Note:**

When you connect to a remote host, if you cannot read the directory and file lists for the host (or nothing is displayed), check the log messages (click **LogWnd** to display messages) to determine the actual host type and then select it from the list box.

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5. In the User ID text box, enter your userid for your account on the remote system.

To log on to an anonymous FTP site, you can select the **Anonymous** option to automatically enter “anonymous” as the User ID. See the section “Anonymous FTP” in this chapter for more information.

6. In the Password text box, enter the password for your account on the remote system.

If this is an anonymous 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 logons.

If you select the Anonymous option, and you entered your e-mail address in the General properties of the Options dialog box, your e-mail address will be entered as the password.

7. Optionally, select the **Save Pwd** option to save your password with the session profile. If you do not enter a password, WS\_FTP Pro will prompt you for one when it connects to the remote system.

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**Note:**

The password is stored in the *ws\_ftp.ini* file in an encrypted form.

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8. Optionally, in the Account text box, enter information that may be required by your account on the remote system. (In most cases this field will be left blank because most hosts do not use an “account” for authentication.)

An account is used on some systems for the initial password to the user's default directory. For example, when you change directory (ChgDir) on a VM/CMS host you are prompted each time for the password to connect to that directory. You can enter this password in the Account field so WS\_FTP can log on to your account.

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**Note:**

A session profile is automatically saved when you click **OK** or **Apply**. There is no imposed limit on the number of configurations that you can have.

---

9. Optionally, in the Comment text box, enter any text comments you want to include with this session profile.
10. Click **OK** to connect to the remote system.

When you have successfully connected to the remote host, the message window at the bottom of the WS\_FTP Pro window displays messages similar to the following:

```
150 Opening ASCII mode data connection for dir
Received 2046 bytes in 1.0 secs.
226 Transfer complete.
```

WS\_FTP Pro then displays the directories and files for the remote system. See the section “The WS\_FTP Pro Window” in this chapter for more information.

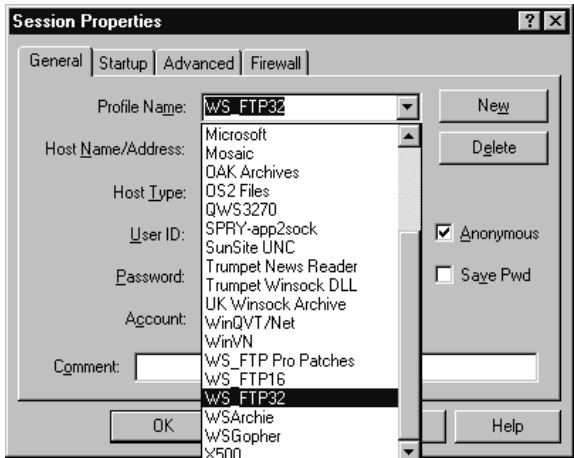
## **Saving and Deleting Session Profiles**

A session profile is saved when you click on **OK** or **Apply** in the Session Properties dialog box. Use the **Apply** button to save an entry without trying to actually connect to the host. Use the **Delete** button to remove unwanted entries. The **Cancel** button exits the dialog box without saving any changes to the current configuration.

## **Using an Existing Session Profile**

WS\_FTP Pro lets you save the information in a session profile and give it a profile name. The next time you want to connect to the same system, you can click on the Profile Name list box (at the top of the Session Properties dialog) and select the profile name.

You can select from a number of preconfigured session profiles for some of the popular FTP sites. Click on the Profile Name list box to show the choices.



**Advanced Capabilities for Session Profile**

If you need to further specify how the FTP session operates, you can use the Startup, Advanced, and Firewall session properties.

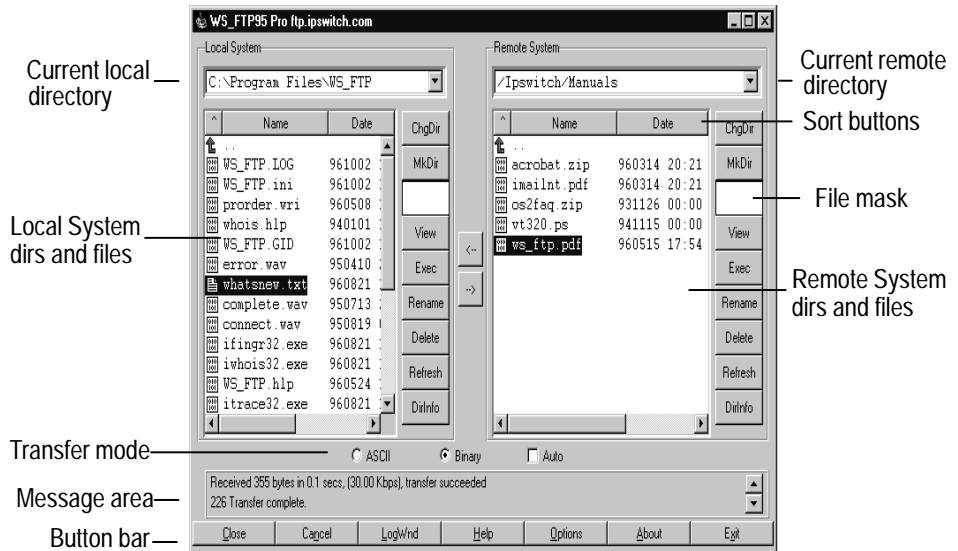
If you want to:	See:
Specify initial directories in which to start on the local and/or remote hosts	Startup properties
Send a command after connecting (such as an additional password)	Startup properties
Set a file mask to determine which files are displayed on the local or remote host	Startup properties
Set the number of retry attempts when a connection fails	Advanced properties
Set the timeout after which WS_FTP cancels a connection attempt	Advanced properties
Change the default FTP port for the remote host	Advanced properties
Enable passive transfers	Advanced properties
Specify firewall information for a host	Firewall properties

See Chapter 4, “Customizing WS\_FTP Pro,” for more information on these Session properties.

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## The WS\_FTP Pro Window

If you have successfully connected to the remote host, the WS\_FTP Pro Window displays two lists of directories and files in the WS\_FTP Pro main window, shown below.



The column on the right, labeled Remote System, lists the directories and files on the remote system to which you have just connected. The column on the left, labeled Local System, lists the directories and files on the local system.

The current directory is shown at the top of each column. The list box below the current directory shows all directories and files within the current directory. Directories are listed first (identified by a folder icon). Files are identified by one of several file type icons. Below the directories and files, any disk drives that you can access are listed.

You can change the sort order of the directories and files by clicking the column headings at the top of each listbox. You can sort by Name, Date, or Size. Clicking a second time reverses the sort order. To resize the column headings, click in between headings, drag the mouse left or right, and release the mouse button.



You can click the button to the left of the Name column to toggle the display between showing directories on top (before all files), on bottom, or mixed with files.

The buttons to the right of each column provide file and directory operations for that column.

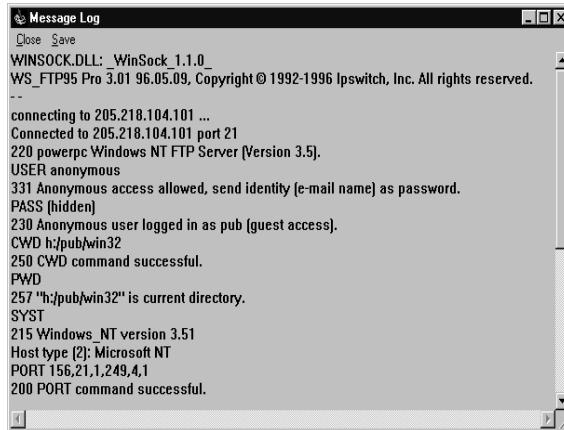
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### Note:

In the 4-window versions of WS\_FTP Pro, each column contains two list boxes: the top list box shows the available directories; the bottom list box shows the files in the currently selected directory.

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A message area at the bottom of the main window displays all messages generated by the FTP session. You can view these messages to confirm whether a command executed successfully and to determine the cause of a failure or a disconnect. To view the messages in a log window, click the **LogWnd** button.



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### Note:

Some FTP sites also display messages about the site in the FTP log. For example, the message may describe the site's hours of operation, an e-mail contact, or list other sites that contain the same information (called "mirror" sites).

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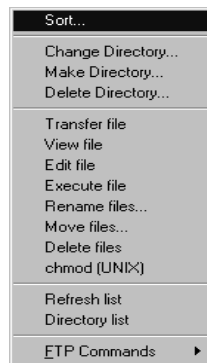
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## Working with Directories and Files

After connecting to a remote host, you can use the directory and file commands to browse file systems on both the local and remote systems.

Just to the right of the each list box is a column of buttons that represents the commands you can use to perform directory and file operations. See the WS\_FTP Pro window in the previous section.

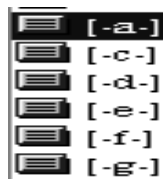
You can also access these commands from the pop-up menu that appears when you click the right mouse button in the list box that contains directories and files.



### Changing Disk Drives

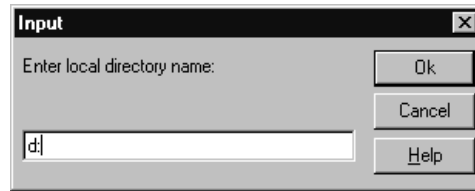
The current directory shown at the top of the local and remote systems' list boxes also indicates the disk drive on which the directory is located. To change the disk drive setting:

- Scroll down the listbox and double-click on the appropriate drive listing. On the Windows 95 version, disk drives are indicated by a drive letter (for example, a:, c:, d:) and a disk icon. The default color is blue.



Or,

- With nothing selected in the listbox, click the **ChgDir** button. you are prompted for a directory to change to.



Enter the drive letter followed by a semicolon (for example, d:), and then click **OK**. Do not enter a trailing slash (\).

## Directory Functions

In both the local or remote systems' list boxes, you can use the directory commands to locate files and directories, set the directories you want to use for file transfer, and perform other directory operations.

### To change directories:

- Scroll down the listbox and double-click the directory you want to display. On the Windows 95 version, directories are indicated by a folder icon. The default color is yellow.



Or,

- Click the **ChgDir** button. If a name is selected in the directory list box, the system will change directories to that name. If no name is selected, you are prompted for a directory to change to. Not all systems have the concept of directories, so your remote system may not accept this command.

You can also click on the Up (green arrow) button, located at the top of the listbox, to move up one directory in the directory hierarchy.

---

**Note:**

To unselect a directory or file, click the **Refresh** button.

---

**To create a directory:**

Click the **MkDir** button. You are prompted for a directory name and must supply a name that is valid for the current system.



Not all systems allow you to make and delete directories remotely.

**To remove a directory:**

On the 2-window versions:

- Select the directory and click the **Delete** button. Or, you can click the **Delete** button with nothing selected and enter a directory name when prompted.

On the 4-window versions:

- Select the directory and click the **RmDir** button. Or, you can click the **RmDir** button with nothing selected and enter a directory name when prompted.

Not all systems allow you to make and delete directories remotely.

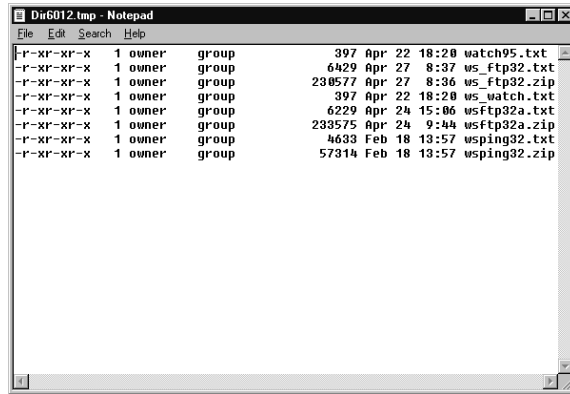
**To refresh the directory display:**

Click the **Refresh** button. After performing directory or file operations outside of WS\_FTP Pro, you can refresh the directory and file list box to display any recent changes to the current directory.

You can also use **Refresh** to unselect any selected files or directories.

## To display directory and file information:

Click the **DirInfo** button. The Windows Notepad appears and lists the directories and files in the current directory. The size, creation date and time, and protections for directories and files are also provided.



You can save or print the directory listing.

You can specify a different editor (Notepad is the default) by using the **Text Viewer** option in the General properties of the Options dialog box (see Chapter 4, “Customizing WS\_FTP Pro”).

## Sorting Directories and Files

You can sort the directories and files in either the local or remote system’s list box by using the column headings (Name, Date, Size) above each list or the Sort options available from the pop-up menu.

Click on a column heading to sort the directories and files as follows (this feature is available only on the 2-window version):

- **Name** — Sort alphabetically by the directory or file name in ascending order; click **Name** again to sort in the reverse order. Click **Ctrl+Name** to sort the file names by file extension.
- **Date** — Sort by the directory or file date, from newest to oldest; click **Date** again to sort in the reverse order.
- **Size** — Sort by the directory or file size, from smallest to largest; click **Size** again to sort in the reverse order.
- **^** — the button to the left of the Name column toggles the display between showing directories on top (before all files), on the bottom, or intermixed with files.

On both the 2–window and 4–window versions, you can access the Sort options in the pop–up menu as follows:

1. Click the right mouse button in either list box. The pop–up menu appears.
2. Select **Sort** from the pop–up menu. The Sort dialog box appears.



3. Select the Sort options you want to use and click **OK**.

## Displaying Directories and Files

If a directory contains a large number of directories and files, you can limit the directories and files displayed in either the local or remote system's list box by using the **File Mask** filter, which is located below the **MkDir** button on the WS\_FTP Pro window. There are two **File Mask** filters, one for the local system and one for the remote system.

In the **File Mask** text box enter a filter that is valid for the system that you are on, and then press Return.

\*.txt

For example, to display only files with the extension *.txt*, enter *\*.txt* as the File Mask and press Return. The listbox is refreshed to display only the files with the extension *.txt*.

If you are connected to a UNIX host, you can use “-al” in the remote side to view hidden (.) files. Or, you can use “-altr” in the remote side to receive file names in date sequence (in the 4 window versions of WS\_FTP Pro only). You can use any argument string that is valid on the remote system at the end of an “ls” command in a command line FTP client.

## File Functions

In both the local and remote systems’ list boxes, you can use the file commands to view a file’s contents, open (execute) a file in its associated application, rename, move, and delete a file. On the remote system, you can also edit a file.

Note that when you view, execute, or edit a file that is on the remote system, WS\_FTP Pro will transfer the file to the Windows temporary directory on your local system, then open the file in the associated application. The file is transferred as follows, depending on the transfer mode that is currently selected:

- Auto mode selected — Checks to see if file extension is registered (in Extensions properties of the Options dialog box). If the extension is registered, the file is transferred in ASCII format. If it is not registered or no file extension is found, the file is transferred in binary format.
- Auto mode off — Transfers the file in the selected mode, either binary or ASCII.

If ASCII mode is selected and the file is clearly not in ASCII format, WS\_FTP Pro prompts for confirmation that you want to transfer the file in ASCII format. This provides a verification step to ensure that you do not transfer a binary file in ASCII format, which could damage the file.

### To view text files (ASCII format):

Select the file and click the **View** button. The file is opened in the viewer you have defined in the **Text Viewer** option in the General properties of the Options dialog box. The default text viewer is the Windows Notepad.

Select **Ctrl+View** to display a prompt where you can enter the executable file name for another viewer program.

If you select the **View** button for the remote system list box, the file is downloaded to the Windows temporary directory (defined with the DOS TMP environment variable). If it is a large file, it may take some time for the file to transfer from the remote system. Do not try to view a binary file.

### **To open (execute) a file in its associated application:**

Select the file and then click the **Exec** button. WS\_FTP Pro executes the file according to its file extension. You can associate any file extensions with an application (executable program) in the Associations properties. For example, you can specify that any files with the extension *.pdf* will be opened by the Adobe™ Acrobat™ Reader. See Chapter 4, “Customizing WS\_FTP Pro,” for information on specifying associations.

Select **Ctrl+Exec** to display a prompt where you can enter the executable file name for the application.

If you select the **Exec** button for the remote system list box, the file is downloaded to the Windows temporary directory (defined with the DOS TMP environment variable). If an association does not exist, you can provide that association at execution time. This association is saved in the *win.ini* file in the Extensions section and will also be valid for the File Manager. Files are automatically downloaded in binary mode.

### **To edit a file on a remote system:**

If you associate a file extension with an editor program (see the Associations options), you can open a remote file and edit it, provided you have write permission to the remote file and directory. Select the file, then click the right mouse button and select **Edit** from the popup menu.



### To rename one or more files:

Select one or more files, and then click the **Rename** button. You are prompted for the new name.



Enter the new name for the item and click **OK**. If you selected multiple files, you are prompted to rename the next file.

Not all systems allow you to rename files and directories remotely. You may be able to move a file from one directory to another directory by specifying a full or relative path (and the filename).

You can also use the **Rename on transfer** option to copy a file from one system to a new name on the other system. See “Transferring Files” in this chapter for more information.

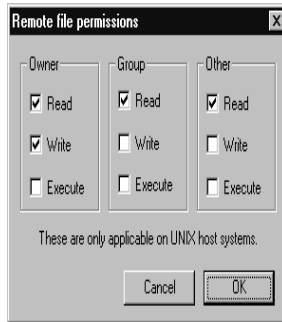
### To move one or more files to a new directory:

You can move files from one directory to another directory on the same system.

Select one or more files, then click the right mouse button and select **Move** from the popup menu. You are prompted for the directory to which you want to move the files. Enter the directory path and click **OK**. The selected files are moved to the new location.

### To change the mode (or permissions) for a UNIX file:

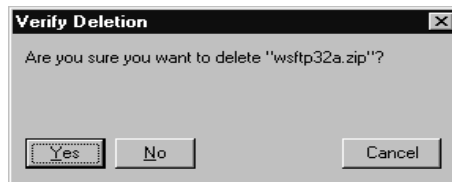
You can change modes for a UNIX file on a remote system, provided you have file access permission. Select the file, then click the right mouse button and select **chmod** from the popup menu. The Remote File Permissions dialog box appears.



Select any of the options and click **OK**.

### To delete a file:

Select the file and then click the **Delete** button. You are prompted for confirmation.



Click **Yes** to delete the item or **No** to cancel. Not all systems allow you to delete files remotely.

---

## Transferring Files

Before you transfer a file or files, you should display the files in the list box of the source system and you should display the directory to which you will transfer files on the destination system. See the previous section, "Working with Directories and Files," for information on using the directory and file functions to display the files.

## Downloading Files

To transfer files from the remote system to the local system (referred to as a download):

1. Select one or more files on the remote system.

To select a single file for transfer, click its file name to highlight it. To select multiple files for transfer, hold down the Ctrl key and click on each of the file names.

2. Select the file transfer type.

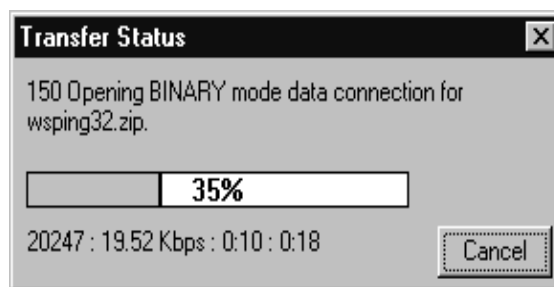
Click on the check box next to a file transfer type (at the bottom of the WS\_FTP Pro window) to determine how FTP will transfer the files. Use **ASCII** for plain text files. Use **Binary** for any images or executable files or if you are unsure of the file type. (Word processing documents, databases, spreadsheets, graphics files, and sound files should be transferred in binary mode.) If you select **Auto**, all files will be transferred in binary mode unless the extension is defined in the Extensions properties, in which case the file will be transferred in ASCII mode. (To display the Extensions properties, click the **Options** button, and then click the **Extensions** tab.)

3. Transfer the files.



To transfer the selected file(s) click on the **left arrow** button (located between the Local System and Remote System columns).

WS\_FTP Pro transfers the files to the current directory on the local system. A dialog box appears and shows the transfer status.



You can click **Cancel** at any time to cancel the file transfer.

When the transfer is complete, the filenames of the transferred files appear in the local system's list box.

## Uploading Files

To transfer files from the local system to a remote system (referred to as an upload):

1. Select one or more files on the local system.

To select a single file for transfer, click its file name to highlight it. To select multiple files for transfer, hold down the Ctrl key and click on each of the file names.

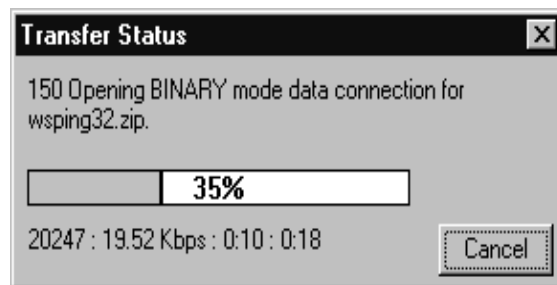
2. Select the file transfer type.

Click on the check box next to a file transfer type (at the bottom of the WS\_FTP Pro window) to determine how FTP will transfer the files. Use **ASCII** for text files. Use **Binary** for any images or executable files or if you are unsure of the file type. (Word processing documents, databases, spreadsheets, graphics files, and sound files should be transferred in binary mode.) If you select **Auto**, all files will be transferred in binary mode unless the extension is defined in the Extensions properties, in which case the file will be transferred in ASCII mode. (To display the Extensions properties, click the **Options** button, and then click the **Extensions** tab.)

3. Click the **right arrow** button to transfer the files.



WS\_FTP Pro transfers the files to the current directory on the remote system. A dialog box appears and shows the transfer status.



You can click **Cancel** at any time to cancel the file transfer.

When the transfer is complete, the file names of the transferred files appear in the remote system's list box.

## Using Drag and Drop to Transfer Files

You can use the mouse button to drag-and-drop directories and files between the local and remote systems.

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### Note:

In the 2-window version of WS\_FTP Pro, you can drag-and-drop directories and files. In the 4-window version, you can drag-and-drop files only.

---

Click and hold the mouse button on a directory or file icon, drag it to the local or remote list box, and then release the mouse button. As you drag the directory or file, an FTP icon shows its current location on the WS\_FTP Pro window. The Transfer Status dialog box appears and shows the status of each file as it is transferred.

To transfer multiple directories or files, use the Ctrl and Shift keys to select them, press and hold the mouse button, move to the destination system's list box, and then release the mouse button.

The drag-and-drop feature is enabled by default. You can disable this feature by toggling off the check box for the **Enable drag and drop between windows** option in the Pro properties in the Options dialog box.

## Resuming a File Transfer After Failure

When a file transfer is interrupted while in progress because of a lost connection or because it was cancelled, WS\_FTP Pro can resume the transfer when you reconnect to the remote system. When you reconnect, WS\_FTP Pro asks if you want to resume the transfer; for example:



Click **Yes** to resume the transfer. The transfer will begin where it was interrupted. Click **No** to cancel the transfer.

---

**Note:**

If you choose not to resume the transfer, you will be left with a partial file (from the interrupted transfer) in the destination directory. You should delete this file.

---

The resume transfer feature is enabled by default. You can disable this feature by toggling off the check box for the **Enable auto reget of failed transfers** option in the Pro properties of the Options dialog box.

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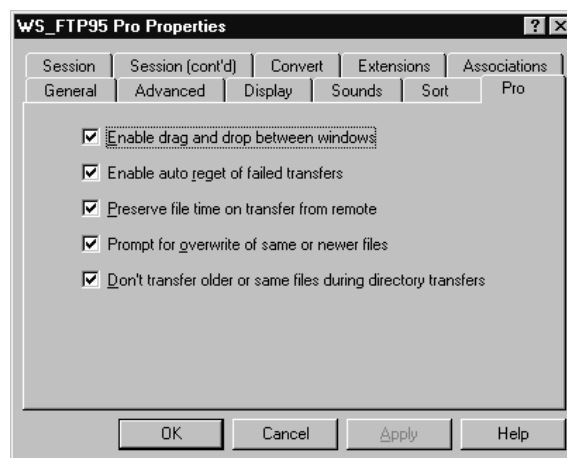
**Note:**

Not all FTP servers will allow the auto reget option, although most servers do.

---

## File Transfer Options

The following options will affect how files are transferred between local and remote systems. To set these options, select the **Options** button from the button bar, and then select the **Pro** tab.



### **Enable drag and drop between window**

When enabled, you can transfer directories and files between systems by dragging them with the mouse from one listbox to the other.

### **Enable auto reget of failed transfers**

When enabled, if a file transfer is interrupted while in progress because of lost connection or because it was cancelled, WS\_FTP Pro will ask if you want to resume the transfer when you reconnect to the remote system.

### **Preserve file time on transfer from remote**

When enabled, and when you transfer a file from a remote system, the file will maintain its original creation date and time. If disabled, a transferred file is given the current date and time. (This does not work when transferring files to the remote system.) (This option is available on the 2-window version of WS\_FTP Pro only.)

### **Prompt for overwrite of same or newer files**

When enabled, if you transfer a directory or file for which there is the same or a newer version (by date and time) in the destination directory, WS\_FTP Pro will ask if you want to overwrite the file. Note that this feature will not work with some FTP servers. (This option is available on the 2-window version of WS\_FTP Pro only.)

### **Don't transfer older or same files during directory transfers**

When enabled, if you transfer a directory, WS\_FTP Pro transfers those files for which there are not the same or newer versions (by date and time) in the destination directory. (This option is available on the 2-window version of WS\_FTP Pro only.)

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## **Disconnecting**

To disconnect from an FTP site, click the **Close** button on the WS\_FTP Pro window. The button toggles to **Connect** and WS\_FTP Pro is ready to begin another session. To exit WS\_FTP Pro, click the **Exit** button.





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## Chapter 3: Customizing WS\_FTP Pro

You can change the settings on a variety of WS\_FTP Pro options to customize its display, operation, and the manner in which files are transferred or executed.

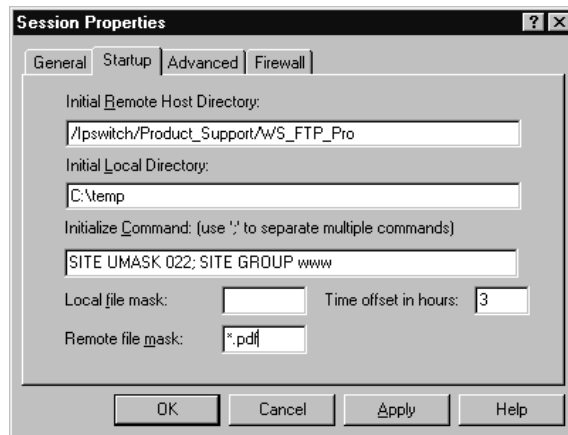
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### Advanced Properties for Session Profile

If you need to further specify how a specific FTP session operates, you can use the Startup, Advanced, and Firewall properties to customize the session profile. For example, if your network uses a **firewall** for security, you need to specify information about the firewall to enable FTP access.

#### Startup Properties

In the Session Properties dialog box, click the **Startup** tab to access the Startup properties.



Each property is described below. For check box properties, the description states what happens when the property is selected, or checked.

### **Initial Remote Host Directory, Initial Local Directory**

You can specify the directories you want to display when the FTP session starts. In the Initial Remote Host Directory text box, specify a directory on the remote system. In the Initial Local Directory text box, specify a directory on the local system.

### **Initialize Command**

Enter any commands that need to be issued to the remote system at the beginning of the session. For example, the command `SITE UMASK 022` changes the UMASK used when creating files (on a UNIX system). Use a semicolon (;) to separate multiple commands. You can enter a maximum of 250 characters in this text box.

### **Local file mask**

Enter a filter that is valid for the local system. For example, if you enter `*.txt`, only files with the `.txt` extension will be displayed in the local system listbox in the WS\_FTP Pro window. The filter entered here also appears in the File Mask filter for the local system. If left blank, all files are displayed.

### **Remote file mask**

Enter a filter that is valid for the remote system. For example, if you enter `*.txt`, only files with the `.txt` extension will be displayed in the remote system listbox in the WS\_FTP Pro window. The filter entered here also appears in the File Mask filter for the remote system. If left blank, all files are displayed. (Note: on UNIX systems, enter `-a1` to display all files).

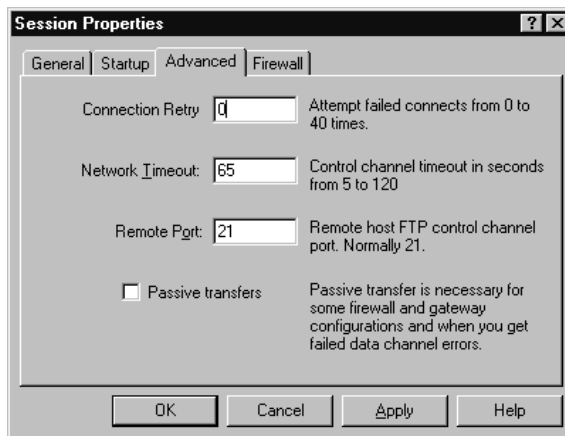
### **Time offset in hours (2–window version only)**

Use this property to account for differences between the local and remote system's time zones. Enter the number of hours to add to or subtract from the remote system's file date and time to convert to the local date and time. Use a positive number to add, or a negative number to subtract.

No standard exists for specification of date and time, but it is often displayed in GMT.

## Advanced Properties

In the Session Properties dialog box, click the **Advanced** tab to access the Advanced properties.



Each property is described below. For check box properties, the description states what happens when the property is selected, or checked.

### Connection Retry

If the initial connection fails, try to connect again after this number of seconds. The maximum number of retries is 40.

### Network Timeout

The number of seconds before WS\_FTP Pro times out waiting for a host response to a command. The available range is 5 to 120 seconds.

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 time out 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.

### Remote Port

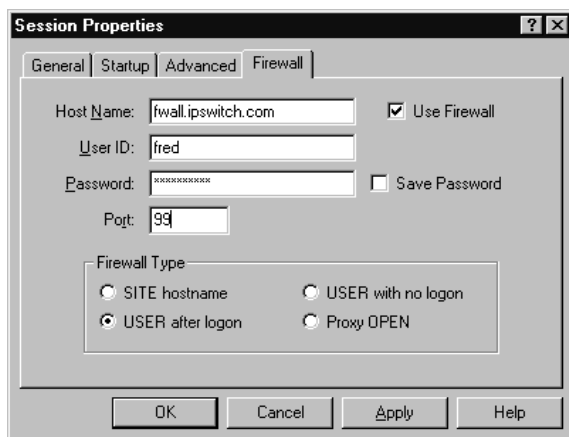
The control channel port number to connect to on the remote host. This is normally 21; however, it may be something different if you are going through a firewall.

## Passive Transfers

Forces data connections to be established by the client, rather than the server (which is the default). This is necessary for some firewall and gateway configurations and can be used when you get failed data channel errors.

## Firewall Properties

If your network uses a firewall for security purposes, you can specify Firewall properties for the session profile. In the Session Properties dialog box, click the **Firewall** tab to access the Firewall properties.

The screenshot shows the 'Session Properties' dialog box with the 'Firewall' tab selected. The dialog has four tabs: 'General', 'Startup', 'Advanced', and 'Firewall'. The 'Firewall' tab contains the following fields and options: 'Host Name' with the value 'fwall.tpswitch.com', 'User ID' with the value 'fred', 'Password' with masked characters 'xxxxxxxx', and 'Port' with the value '99'. There are two checkboxes: 'Use Firewall' (checked) and 'Save Password' (unchecked). Below these is a 'Firewall Type' section with four radio button options: 'SITE hostname', 'USER after logon' (selected), 'USER with no logon', and 'Proxy OPEN'. At the bottom are four buttons: 'OK', 'Cancel', 'Apply', and 'Help'.

Each property is described below. For check box properties, the description states what happens when the property is selected, or checked.

### Use Firewall

If you are behind a firewall host, select this option and enter the firewall information required by your firewall type. You can uncheck this option to disable the firewall properties.

### Host Name

Enter the name of the firewall host to which you want to connect. This must be either a fully qualified Internet host name or an IP address.

### User ID

Enter your userid for your account on the firewall system.

### **Password**

Enter the password for your account on the firewall system.

### **Save Password**

Saves your firewall password with the session profile.

### **Port**

The port number for the firewall service.

### **Firewall Type**

WS\_FTP Pro supports the following four types of firewall; choose the setup that meets your needs:

SITE hostname requires a firewall Host Name, User ID, and Password. User is logged on the firewall and the remote connection is established using the command: `SITE remote_host`

USER after logon requires a firewall Host Name, User ID, and Password. User is logged on the firewall and the remote connection is established using the command: `USER remote_userid@remote_host`

USER with no logon requires a firewall Host Name only; the User ID and Password are ignored. `USER remote_userid@remote_host` is sent to firewall.

Proxy OPEN requires a firewall Host Name; the User ID and Password are ignored. `OPEN remote_host` is sent to firewall upon initial connection.

### **Save Password**

Saves the firewall password to a file.

---

## **Program and Session Options**

In the WS\_FTP Pro window, click the **Options** button. The Properties dialog box appears.

---

### **Note:**

The 2–window version (*wsftp95pro.exe*) now uses a tabbed Properties dialog box. The 4–window versions use the same Options dialog box as the previous version, and they will not be updated to include new properties.

---

The Properties dialog contains tabbed sections for the following categories:

### **General properties**

Lets you change the settings for basic operations of WS\_FTP Pro.

### **Advanced properties**

Lets you change the settings for advanced operations of WS\_FTP Pro.

### **Display properties**

Lets you change the settings for the layout of the WS\_FTP Pro window.

### **Sounds properties**

Lets you change the settings for the sounds used to notify you of particular events during an FTP session.

### **Session properties**

Lets you change the settings for the current session and session defaults.

### **Pro properties**

Lets you change the settings for features available only in WS\_FTP Pro. See the “Transferring Files” section in Chapter 2 for more information.

### **Sort properties**

Lets you change settings for the default method of sorting the file and directory display. See the “Sorting Directories and Files” section in Chapter 2 for more information.

### **Convert properties**

Lets you convert file extensions on transfer. For example, you can convert files with the *.html* extension to *.htm*.

### **Extensions properties**

Lets you specify the extensions that are used for Auto Mode file transfers, which automatically detects whether a file should be transferred in binary or ASCII mode.

## Associations properties

Lets you specify the settings that determine the executable program to invoke when you select a file and click the **Exec** button.

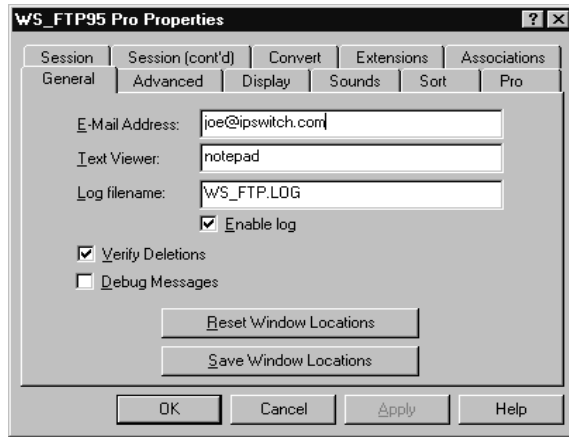
The following table describes some of the properties available as options.

If you want to:	See:
Change default settings for WS_FTP operation, such as e-mail address, text viewer, and log file name	General properties, Advanced properties
Save the WS_FTP Pro main window location or reset the location.	General properties
Change the layout of the WS_FTP window or the fonts used in list boxes	Display properties
Change the sounds used to notify you of events, such as a successful connection	Sounds properties
Change the default sort settings for the files and directories in list boxes	Sort properties
Change the settings (such as host type and transfer mode) for the current FTP session or change the defaults for all sessions	Session properties
Convert file extensions on transfer. For example, you can convert files with the <i>.html</i> extension to <i>.htm</i> .	Convert properties
Change the extensions that are used for Auto Mode, which automatically detects whether a file should be transferred in binary or ASCII mode	Extensions properties
Change the settings that affect execution by the <b>Exec</b> functions.	Associations properties

The following sections describe each of the properties.

## Setting General Properties

The General Properties are used to change the default settings for WS\_FTP Pro operations. In the Properties dialog box, click the **General** tab to access the General properties.



Each property is described below. For check box properties, the description states what happens when the property is selected, or checked.

### E-Mail Address

Used as the default password for anonymous logins, as required by most anonymous FTP sites. It is recommended that you place a minus sign (-) as the first character of your e-mail address to turn off descriptive messages on the remote host.

### Text Viewer

Identifies the program invoked by **DirInfo** and **View** buttons. The default value is Windows Notepad.

### Log filename

When the **Enable Log** option is enabled, WS\_FTP Pro will write the information in the message log to this file. The log records all requests from WS\_FTP Pro and all responses from the FTP server. This should be a full pathname if you want each session's log file placed in the same directory.

### Enable Log

When enabled, WS\_FTP Pro writes the message log to the file specified in the **Log filename** option.



## Verify Deletions

WS\_FTP Pro will prompt you for confirmation when you delete files.

## Debug Messages

Enables extra debug messages in the message log window at the bottom of the main window and in the log file (if enabled)

## Reset Window Locations

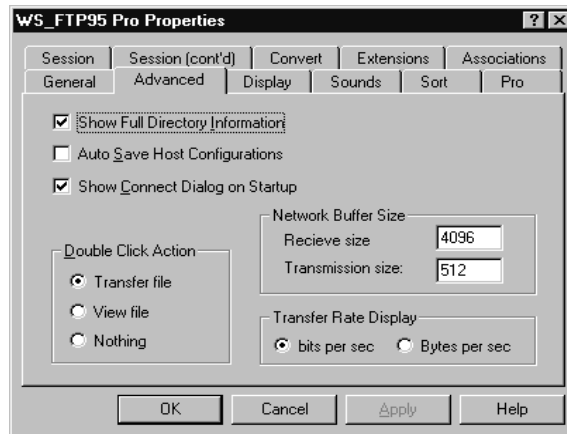
Resets the current main window size and location to the original settings.

## Save Window Locations

Saves the current main window size and location. In order to save column and internal sizes, the main window must not be maximized.

## Setting Advanced Properties

The Advanced properties are used to change the default settings for advanced WS\_FTP Pro operations. In the Properties dialog box, click the **Advanced** tab to access the Advanced properties.



Each property is described below. For check box properties, the description states what happens when the property is selected, or checked.

### Show Full Directory Information

Displays additional file information when possible. Not all host types are supported for this option. The client does not attempt to decipher or interpret this information.

## Auto Save Host Configurations

WS\_FTP Pro will automatically save the session profile when you click **OK** in the Session Properties dialog box. Though this option also appears in the Session Properties dialog box, its state is only saved in the Advanced Properties dialog box.

## Show Connect Dialog on Startup

WS\_FTP Pro displays the connect dialog box (Session Properties) when WS\_FTP Pro first starts.

## Double Click

*Transfer* means when you double-click on a filename, the file is transferred to the other system. *View* means when you double-click on a filename, the file is displayed using the text viewer. If the file is on a remote system, it will be transferred in ASCII mode to the Windows temporary directory and then displayed. *Nothing* means when you double-click on the filename, no action is taken.

## Network Buffer Size

Receive Size — Controls how many bytes are read from the network in each read (recv). This option can have a value from 80 to 4096, with best results from 4096. On slow connections, try lower values and work your way up until you find the optimum rate. Note that the actual number of bytes read in each read is determined by the TCP/IP stack and the amount of information available.

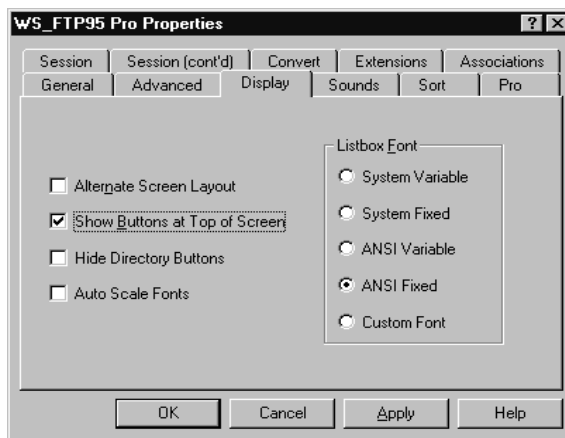
Transmission Size — Controls how many bytes are written to the network in each send. This option can have a value from 80 to 4096, with the optimum dependent on your TCP/IP stack. If you have a direct connection, 4096 is best. If you have a SLIP or PPP connection, you probably want to set it to the MTU size. On slow connections try lower values and work your way up until you find the optimum rate.

## Transfer Rates

Set to the desired transfer rate in bits per second (*bits/sec*) or bytes per second (*Bytes/sec*). The transfer rate is shown in the Transfer Status dialog box.

## Setting Display Properties

The Display properties are used to change the default settings for the WS\_FTP Pro window layout. In the Properties dialog box, click the **Display** tab to access the Display properties.



Each property is described below. For check box properties, the description states what happens when the property is selected, or checked.

### Alternate Screen Layout

Controls the main window display layout. The alternative layout splits the window horizontally, with the local directory and file list on top and the remote directory and file list on bottom.

### Show Buttons at Top of Screen

Controls the placement of the buttons that are normally across the bottom of the window.

### Hide Directory Buttons

Hides the column of buttons (ChgDir, Mkdir, etc.) used for directory and file operations. These operations will then be available only from the right-mouse pop-up window. (For 2-window version of WS\_FTP Pro only)

### Auto Scale Fonts

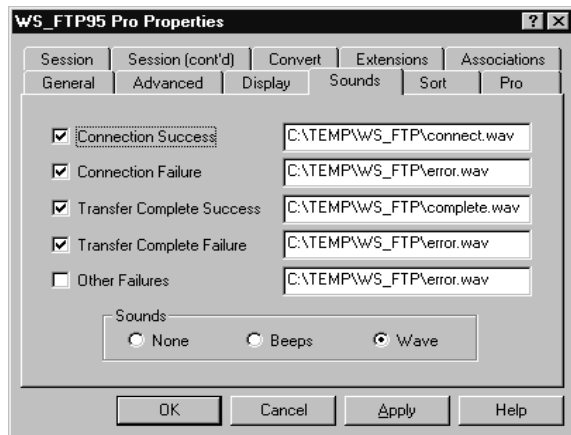
This property reduces the size of fonts that are outside the list boxes when you reduce the window size. The font used will always be the ANSI Variable font.

## Listbox Font

Changes the font used in the list boxes. *System Variable*, which is a variable font, is the default. *System Fixed* is a fixed font and will improve the alignment of columns in the boxes. *ANSI Variable* and *ANSI Fixed* are narrower than the System fonts. Selecting *Custom Font* displays the Windows Font dialog box from which you can select a specific font family, style, and size.

## Setting Sounds Properties

The Sounds properties are used to change the default settings for the audio files used to notify you of FTP session events. In the Properties dialog box, click the **Sounds** tab to access the Sounds properties.



Each property is described below. For check box properties, the description states what happens when the property is selected, or checked.

### Connection Success

Plays the specified wave file (or sounds a beep) when a connection succeeds.

### Connection Failure

Plays the specified wave file (or sounds a beep) when a connection fails.

### Transfer Complete Success

Plays the specified wave file (or sounds a beep) when a file transfer succeeds.

## Transfer Complete Failure

Plays the specified wave file (or sounds a beep) when a file transfer fails.

## Other Failures

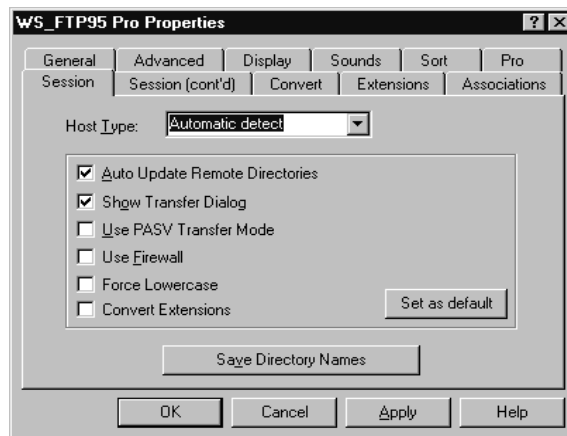
Plays the specified wave file (or sounds a beep) when an error occurs during the retrieval of directories, renaming or deleting files or directories, or at other times. To have the same sounds as earlier versions of WS\_FTP, turn off this option.

## Sounds

Specifies sounds to use on connection, completion of file transfer, or on an error. *None* means no sound is played. *Beeps* means the system “beep” sounds will be used. *Wave* means play the specified .wav files.

## Setting Session Properties

The Session properties are used to change the default settings for the current FTP session. In the Properties dialog box, click the **Session** tab to access the Session properties.



Each property is described below. For check box properties, the description states what happens when the property is selected or checked.

---

**Note:**

If you want to make the selected properties be the default for all sessions, click the **Set As Default** button. Sessions can still have unique properties if you change the Session properties for the session and click **Apply**.

---

**Host Type**

Select the host type of the remote system to which you will connect. Click to show the supported types in the drop-down list.

**Auto Update Remote Directories**

When this option is not checked, the remote directory list will not be refreshed after uploading a file, deleting a file or directory, or creating a directory. This can be accomplished manually by clicking on the remote side **Refresh** button when the option is turned off.

**Show Transfer Dialog**

Displays a Transfer Status dialog box during file transfers. This dialog box displays the status of the transfer (shown as the percent done) and provides a **Cancel** button that lets you cancel the transfer at any time. Note that the percent done bar is only displayed if the file size is sent from the remote host on receives.

**Use PASV Transfer Mode**

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 who are behind a router-based firewall.

**Use Firewall**

Check this box and click the **Save As Default** button to make it the default value for all session profiles. You can also set this property on a per profile basis in the Firewall properties of the session profile.

**Force Lowercase**

Forces all local to remote file transfers to use lower case versions of the local file names.

**Convert Extensions**

Enables the automatic conversion of the file extensions set up in the Convert options.

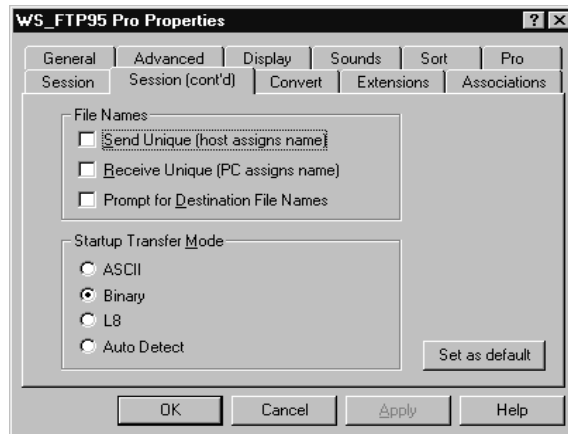
## Set As Default

Click this button to save the current settings as the default settings for all sessions. Sessions can still have unique properties other than the default if you change Session properties for the session and click **Apply**.

## Save Directory Names

Saves the local and remote directory names in the current session profile.

In the Properties dialog box, click the **Session (continued)** tab to access more Session properties.



Each property is described below. For check box properties, the description states what happens when the property is selected or checked.

### Send Unique (host assigns name)

Causes the transmitted file names to not conflict with existing files if the remote host supports the STOU FTP command. The new filename is determined by the remote host.

### Receive Unique (PC assigns name)

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

### **Prompt for Destination File Names**

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 want.

### **Startup Transfer Mode**

ASCII is used to transfer text files. The end-of-line character is different on different types 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 is used to transfer non-text files. Executable programs, word processing documents, spreadsheets, databases, graphics files, and sound files 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 is used to transfer VMS non-text files.

Auto When this option is selected, WS\_FTP Pro transfers in binary mode unless it finds the file extension in the `C:\Windows\ws_ftp.ext` file. In that case it transfers the file in ASCII mode. Note that extensions can be up to 10 characters long and can contain periods. These are not DOS extensions, but the ending characters of a file name. If you expect it to match on a period, you must specify a period. Some example extensions are: `.lst .txt .me readme` See the following section on “Setting Extensions” for information.

### **View links**

Set to view links (for example, UNIX symbolic links) on the remote system *as directories* or *as files*. This option does not appear in the 2-window version of WS\_FTP Pro because links are handled automatically.

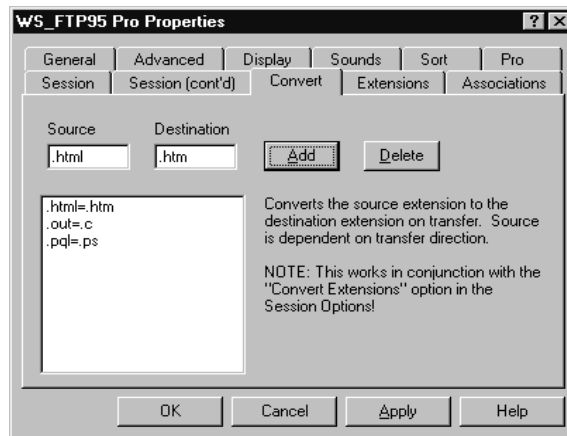
### **Set As Default**

Click this button to save the current settings as the default settings for all sessions. Sessions can still have unique properties other than the default if you change Session properties for the session and click **Apply**.



## Setting Convert Properties

The Convert properties are used to convert file extensions of transferred files to a new extension. For example, if the remote system uses *.html* for HTML files and your system uses *.htm*, you can specify that all files with the extension *.html* are converted to *.htm* on transfer. In the Properties dialog box, click the **Convert** tab to access the Convert properties.



To convert file extensions automatically, you need to enter the source and destination extensions in this dialog box and enable the **Convert Extensions** option in the Session properties.

---

### Note:

The source and destination are dependent on the file transfer direction. For example, when transferring from the remote to the local system, the source will be on the remote system.

---

To add an extension conversion:

1. In the Source text box, enter the file extension of the source file.
2. In the Destination text box, enter the file extension to convert to (the destination file).
3. Click the **Add** button.

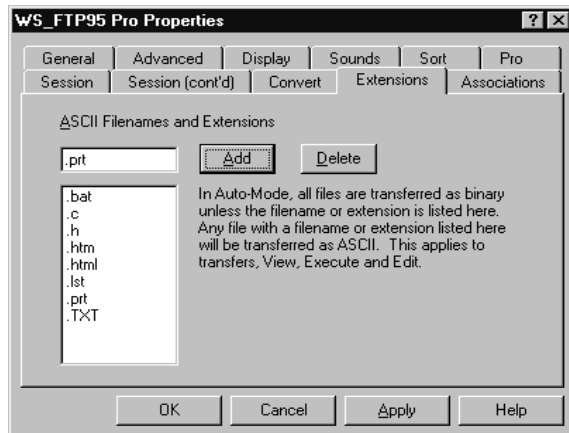
The extension conversion appears in the list box. The list box shows all the defined extension conversions.

WS\_FTP Pro will automatically convert these extensions on transfer when the **Convert Extensions** option in the Session properties is enabled.

To delete an extension conversion, select it in the list box and click the **Delete** button.

## Setting Extensions

The Extensions properties are used to specify the transfer mode for different file extensions. When Auto Detect is selected for the transfer mode, WS\_FTP Pro will transfer all files in binary mode, unless the extension is entered in this dialog box (which stores entries in the *ws\_ftp.ext* file). The specified extensions will use the specified transfer mode. In the Properties dialog box, click the **Extensions** tab to access the Extensions properties.



To add a file extension to the Auto Detect list:

1. In the ASCII Mode text box, enter the file extension. The extension can be up to 10 characters long and can contain periods.
2. Click the **Add** button.

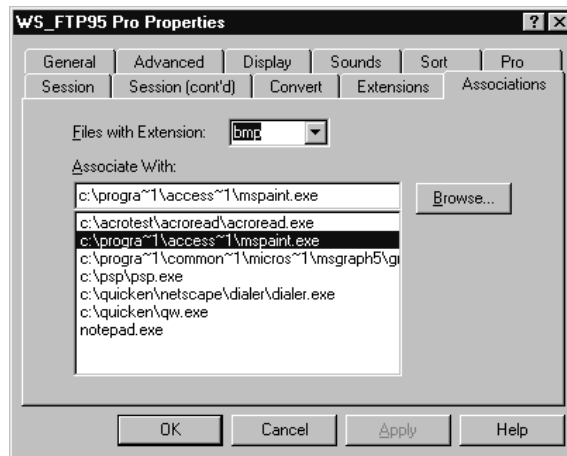
The extension appears in the listbox. The listbox lists all file extensions that WS\_FTP Pro will transfer in ASCII mode when using Auto Detect transfer mode.

To delete a file extension from the listbox, select the extension and click the **Delete** button.

Click the **Apply** button to apply your changes. Click the **OK** button to exit the dialog box. Click the **Help** button to display help for this dialog box.

## Setting Associations

The Associations properties are used to associate files of a particular extension with an executable file. In this way, you can map file types to an application (executable file) that can run that type of file. On a remote system, when you choose the **Exec** button, the file is transferred and executed by the File Manager. The Associations tell the File Manager how to execute files of a particular extension. In the Properties dialog box, click the **Associations** tab to access the Associations properties.



To set up an association:

1. In the Files with Extension text box, enter the file extension to be associated with the executable program.
2. In the Associate With text box, enter the executable program to run when the **Exec** button is clicked.

You can use the **Browse** button to browse your directories and files to locate the executable program.

3. Click **Apply** to save your changes, or **Ok** to save your changes and exit the dialog box.

You can click the **Help** button to display help for this dialog box.

---

**Note:**

On Windows 95 and NT, the 2-window version of WS\_FTP PRO calls ShellExecute to execute the file through the shell. If this fails, then the associations specified in the Associations properties are used. These associations are unique to WS\_FTP in this environment.

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## Chapter 4: Using WS\_FTP Pro from the Command Line

You can use WS\_FTP Pro from the DOS command line or create an icon for Windows that calls WS\_FTP Pro. This chapter describes the command syntax, and arguments.

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### WS\_FTP Pro Command

The command for using WS\_FTP Pro from the command line differs depending on which version you installed. The command for each version is shown below:

- **ftp95pro** — 32-bit, 2-window version for Windows 95 and NT
- **ftp32pro** — 32-bit, 4-window version for Win32s, Windows 95 and NT
- **ftp pro** — 16-bit, 4-window version for Windows 3.x

### Syntax

Use the following syntax to transfer a file from the command line. Use the `-m` argument for transferring multiple files.

Items enclosed in brackets, for example `[args]`, are optional. Italics indicate a variable, for example *hostname*. The bar character “|” indicates OR, for example *hostname* | `local` means enter either a *hostname* or the word `local`.

**To transfer a file from the remote system to the local system:**

**ftp95pro** `[args]` *hostname* | *profilename:pathname/filename*  
`[local:pathname/filename]`

In `[args]` you can specify any of the arguments described in the “Arguments” section of this chapter.

*hostname*: or *profilename*:

*hostname* must be the full domain name or the IP address of a remote host. The *userid* will be anonymous and the password will be the specified e-mail address. *hostname* must be followed by a colon.

*profilename* must be the name of a session profile created in the Session Properties dialog box. If the profile contains your username and password (and you checked the Save Password box), these are used. If the profile is not in the default *.ini* file, use the *-i* argument to specify another *.ini* file. *profilename* must be followed by a colon.

*pathname/filename* You enter the pathname, including the drive letter, and the filename for the file on the remote system. (For example, *c:\docs\report.txt*)

*local:pathname/filename*

You enter the pathname, including the drive letter, and the filename for the file on the local system. (The *pathname/filename* is preceded by the word *local* followed by a colon, *local :*)

### **To transfer a file from the local system to the remote system:**

**ftp95pro** [*args*] *local:pathname/filename*

*hostname* / *profilename:pathname/[filename]*

In [*args*] you can specify any of the arguments described in the “Arguments” section of this chapter.

*local:pathname/filename*

You enter the pathname, including the drive letter, and the filename for the file on the local system. (The *pathname/filename* is preceded by the word *local* followed by a colon, *local :*)

*hostname* or *profilename*:

*hostname* must be the full domain name or the IP address of a remote host. The *userid* will be anonymous and the password will be the specified e-mail address. *hostname* must be followed by a colon.

*profilename* must be the name of a session profile created in the Session Properties dialog box. If the profile contains your username and password (and you checked the Save Password box), these are used. If the profile is not in the default *.ini* file, use the *-i* argument to specify another *.ini* file. *profilename* must be followed by a colon.

*pathname[/filename]*

Enter a *pathname*, and optionally a *filename*, to which you want to copy the file on the remote system. If you do not specify a *filename*, the local (original) *filename* is used.

## File Transfer Notes

Please note the following:

- If the *hostname* or *profilename* does not specify an anonymous FTP session and the host requires a password, but it is not specified in the session profile, you will be prompted for the password (and account if applicable).
- The \* and ? wildcards can be used in file names to transfer multiple files.
- The Preserve Date (Pro option) and Convert Extensions (Session option) options do not work with command line transfers.
- During transfer of files, a dialog box displays the transfer status. You can click the **Cancel** button to cancel the transfer. The partial file is not deleted automatically.
- You can use the following construction to make WS\_FTP Pro prompt for the command line.

**ftp95pro** [args] -ask

## Arguments

You can use the following arguments with the **ftp95pro** command. Note that the **-i** argument must precede the **-p** argument when both are used, and both of these arguments must precede any other arguments used.

<b>-i</b> <i>infile</i>	Forces WS_FTP Pro to use the specified <i>.ini</i> file, where <i>infile</i> is the name of the <i>.ini</i> file. Use this option if the path is not known to your system or when you want to specify a particular <i>.ini</i> file that contains the profile you want to use. This argument must precede all other arguments.
<b>-p</b> <i>profilename</i>	Run the profile to connect to a remote system, where <i>profilename</i> is the name of a session profile (created in the Session Properties dialog box). If the profile contains your username and password (and you checked the Save Password box), these are used. The profile must be in the default <i>.ini</i> file or in an <i>.ini</i> file specified with the <b>-i</b> argument. This argument must precede all other arguments, except <b>-i</b> .
<b>-u</b> <i>userid</i>	Specifies the <i>userid</i> for your logon account on the remote system.
<b>-w</b> <i>password</i>	Specifies the <i>password</i> for your logon account on the remote system. (Using a profile is more secure as the password is encrypted.)
<b>-c</b> <i>account</i>	Specifies an account for those systems that require an account to log on or access partitions.
<b>-ascii</b>	Specifies the file transfer mode. Use this argument when transferring text files.
<b>-binary</b>	Specifies the file transfer mode. Use this argument when transferring non-text files, such as executable programs, word processing documents, spreadsheets, databases, graphics files and sound files.



**-quiet** Overrides the normal behavior of displaying a message box if an error occurs. Useful for automated transfers when you do not want WS\_FTP Pro to prompt for user input when no one is there to press a key.

**-lower** Forces all local to remote file transfers to use lower case versions of the local file names.

**-s *hostname* / local:pathname/filename**

Specifies the directory path and name of the file to be transferred (source file). For example:

**-s *profilename*:c:/pathname/filename**  
(Remote source)

**-s *hostname*:c:/pathname/filename**  
(Remote source)

**-s remote:c:/pathname/filename**  
(Remote source)

**-s local:c:\pathname\filename** (Local source)

**-d *hostname* / local:pathname/filename**

Specifies the directory path and filename to which the source file is copied (destination file). For example:

**-d *profilename*:c:/pathname/filename**  
(Remote destination)

**-d *hostname*:c:/pathname/filename**  
(Remote destination)

**-d remote:c:/pathname/filename**  
(Remote destination)

**-d local:c:\pathname\filename**  
(Local destination)

**-m *filename\_of\_file\_containing\_args***

Transfers multiple files. See the following section for more information.

## Transferring Multiple Files

There are two ways to transfer multiple files:

- Use the \* or ? wildcards in the file name.
- Use the *-m* argument and place the transfer commands in a file.

### Using Wildcard Characters to Transfer Multiple Files

You can use the \* and ? characters in file names to specify multiple files. The following command downloads all zip files in the download directory on ftp.ipswitch.com to a local directory:

```
ftp95pro ftp.ipswitch.com:/download/*.zip local:/download/
```

### Using the *-m* Argument

```
-m filename_of_file_containing_args
```

where *file* is a file that contains the file transfer commands specified using the syntax shown above. Note that you do not enter the command itself (**ftp95pro**) in this file. For example, you can specify the command as:

```
ftp95pro -m transfer.txt
```

where transfer.txt contains the following lines:

```
ftp.wicket.com:/etc/hosts local:/vmunix  
ftp.wicket.com:/etc/hosts local:/vmunix2
```

Each text line must contain only one command line. You can use any of the command line arguments in the transfer file. Multiple lines will be treated as a connect/transfer/disconnect for each line. If a directory transfer is specified, it will complete in one connection.

## Invoking a URL with WS\_FTP Pro

You can start WS\_FTP Pro and invoke an FTP URL (Uniform Resource Locator) to access an FTP site. For example, you can use the following construction:

```
ftp95pro [args] ftp://hostname | profilename/pathname
```

where you enter the *hostname* of the remote system or a *profilename*, and the *pathname* of the directory on the remote system where you want to start.

You can use the following constructions to download a file defined by a URL.

```
ftp95pro [args] ftp://hostname | profilename:pathname/filename  
[local:pathname[/filename]]
```

```
ftp95pro [args] file://hostname | profilename:pathname/filename  
[local:pathname[/filename]]
```

where you enter the *hostname* of the remote system or a *profilename*, the directory *pathname* and *filename* on the remote system, and the directory *pathname* and *filename* on the local system.

## Examples

The following examples show how you can use WS\_FTP Pro from the command line.

The following command uploads a file to a remote file:

```
ftp95pro local:\upload\file.zip ftp.ipswitch.com:\upload\file.zip
```

The following command downloads a file to a local file:

```
ftp95pro ftp.ipswitch.com:\upload\file.zip  
local:\download\file.zip
```

The following command downloads all zip files in the `download` directory on `ftp.ipswitch.com` to a local directory:

```
ftp95pro ftp.ipswitch.com:\download\*.zip local:\download\
```

The following example invokes the Session Profile dialog box with the profile named *download*: (You can use this command to create an icon that launches a profile, and then connect to the system by clicking the **Connect** button.)

```
ftp95pro -p download
```

The following example displays a dialog box that prompts for the command line:

```
ftp95pro -ask
```

The following commands download a URL file to a local file. Use the `file` or `ftp` parameters depending on the type of URL:

```
ftp95pro file://www.ipswitch.com/download/file.zip  
local:/download/file.zip
```

```
ftp95pro ftp://www.ipswitch.com/download/file.zip  
local:/download/file.zip
```

---

## Chapter 5: Using Network Tools

WS\_FTP Pro includes a versatile set of tools that let you search for and display information about organizations, networks, computers, or people on a network.

- **Finger** — Use Finger to display information about users on a particular host.
- **Whois** — Use Whois to search an Internet database for information about users or organizations.
- **Ping** — Use Ping to verify connectivity to a particular system on your network.
- **Lookup** — Use Lookup to query Internet domain name servers for information about hosts and name servers.
- **Traceroute** — Use Traceroute to trace and view the route an IP packet follows to an Internet host.

The following sections describe each tool.

---

### Finger

#### What is Finger?

Finger is a tool that identifies and displays information about all users on a network host. This information includes a display of current users (their userids and usernames) and related information, including the home directory, login time, idle times, office locations, and the last time the user received mail and read their mail.

A Finger request will also display any information that the user enters in the *.plan* or *.project* files in their home directory. These files are generally used by individuals to provide information about themselves and their work.

A Finger request connects to a Finger server running on the specified host. If the specified host does not have a Finger server, the Finger client will display the message: `Connection not made`

## Using Finger

To start the Finger tool, do one of the following:

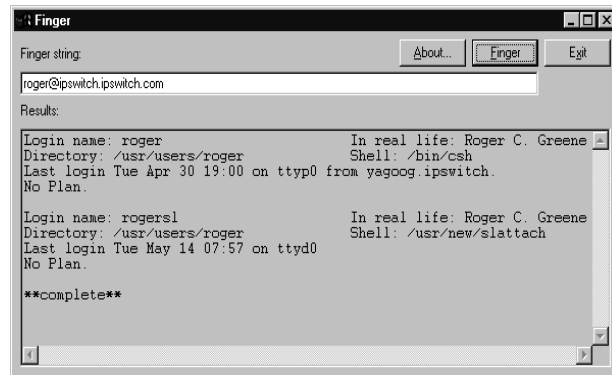
- From Windows 95, click **Start**→**Programs**→**WS\_FTP Pro** (or **WS\_FTP95 Pro** or **WSFTP32 Pro**, depending on which version you installed) and select **Finger**.
- From Windows 3.1, select the **Finger** icon from the WS\_FTP Pro program group.

The Finger window appears.

To show Finger information for a specific user on a host:

4. In the Finger String text box, enter a hostname and any part of the user's full name.
5. Click the **Finger** button.

The Finger client contacts the host's Finger server. The following example shows the Finger window with the results of the query.



To show information for all users logged on to the host, enter the hostname, then click the **Finger** button.

---

## Whois

### What is Whois?

Whois is an Internet username directory service that, like Finger, provides information about users or hosts on a network. The Whois information includes the user's full name, mailing address, telephone number, and network mailbox for all users and organizations who are registered with the Internet Network Information Center (InterNIC) database.

---

#### Note:

The host server for InterNIC is: RS.INTERNIC.NET  
This database is not a complete list of Internet hosts and users. Typically, only one person per Internet site is listed, usually the network administrator.

---

### Using Whois

To start the Whois tool, do one of the following:

- From Windows 95, click **Start**→**Programs**→**WS\_FTP Pro** (or **WS\_FTP95 Pro** or **WSFTP32 Pro**, depending on which version you installed) and select **Whois**.
- From Windows 3.1, select the **Whois** icon from the WS\_FTP Pro program group.

The Whois window appears.

To show Whois information for a user or an organization:

1. In the Query text box, enter a user or organization name.

You can also enter a "handle." A handle is a unique identifier that is assigned to each entry in the Whois database. Handles consist of a combination of letters and numbers, such as "ABC45" based on the user or organization name. The handle is displayed in parentheses next to the user or organization name in Whois output.

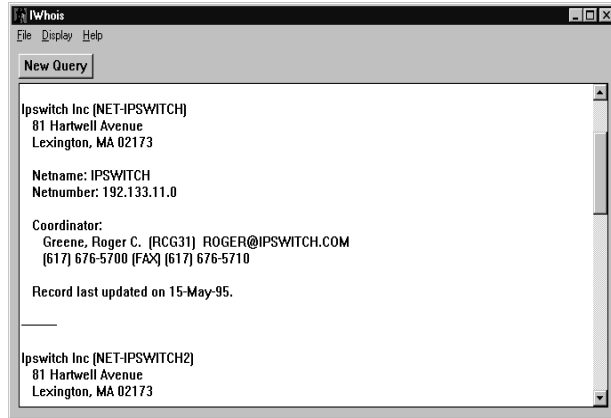
2. In the Host text box, select either of the databases.

The *rs.internic.net* database contains information on all users who have registered with the InterNIC.

The *nic.ddn.mil* database contains information on users registered with the network information center of the United States Department of Defense.

3. Select any options you want to use, and then click **OK**.

The following example shows the Whois window with the results of the query.



---

## Ping

### What is Ping?

Ping is a network diagnostic tool that verifies connectivity to a particular system on the network. Ping sends an ICMP “echo request” in the form of a data packet to a remote host and displays the results for each “echo reply.” In essence, Ping asks, “Hello host, are you there?,” and waits for a response. Ping is often the first TCP/IP application run on a new network host.

Ping sends one packet per second and prints one line of output for every response returned. No output is produced if there is no response from the host. When Ping terminates, it displays a brief summary of round-trip times and packet loss statistics.

Ping can also be used to track hardware and software problems. When using Ping to isolate hardware or software problems, first ‘ping localhost’ to verify that the local network interface is up and running. Then, ping hosts and gateways farther and farther away.



## Accessing Ping

To start the Ping tool, do one of the following:

- From Windows 95, click **Start**→**Programs**→**WS\_FTP Pro** (or **WS\_FTP95 Pro** or **WSFTP32 Pro**, depending on which version you installed) and select **Ping**.
- From Windows 3.1, select the **Ping** icon from the WS\_FTP Pro program group.

The Ping window appears.

## Ping Options

Ping options are set by default. To change Ping options:

1. Click the **Options** button. The Ping Options dialog box appears.
2. Set any options. A description of each option follows this procedure.
3. Click **OK** to confirm the new settings.

### Packet Count

The number of packets sent to the remote host.

### Packet Size

The size (in bytes) of the packets sent.

### Delay (sec)

The amount of time (in seconds) that Ping will wait between sending packets.

### Send Text

The text shown as the send message in the graphic on the Ping window. The default is “Hey.”

### Receive Text

The text shown as the reply message in the graphic on the Ping window. The default is “What.”

### Decode Packet

Displays decode information for the packets.

## No Graphic

Disables the graphic on the Ping window.

## Flood Ping

Ignores the delay and sends packets as fast as the network will allow.

## Pinging a Host

To ping a host:

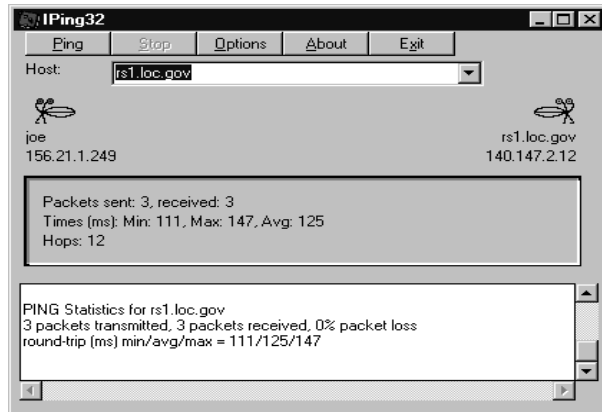
1. In the Host text box enter a hostname. For example: morphin

If the host is not on your network, you must include the domain portion of the address. For example: morphin.mass.edu

You can use the drop-down list box to select a hostname saved from previous Ping sessions.

2. Click the **Ping** button.

The Ping window displays the results of the ping operation.



---

## Lookup

### What is Lookup?

Lookup is a tool that lets you query Internet domain name servers for information about hosts and name servers. You can use Lookup to query the name server for information about various hosts and domains or print a list of the hosts in a domain. Non-interactive mode prints just the name and Internet address of a host or domain.

### Starting Lookup

To start the Lookup tool, do one of the following:

- From Windows 95, click **Start**→**Programs**→**WS\_FTP Pro** (or **WS\_FTP95 Pro** or **WSFTP32 Pro**, depending on which version you installed) and select **Lookup**.
- From Windows 3.1, select the **Lookup** icon from the WS\_FTP Pro program group.

The Lookup window appears.

### Lookup Options

To set Lookup options:

1. Click the **Options** button. The Lookup Options dialog appears.
2. Set the **Display Full Response** option to see all Lookup information for the host. Use the **Lookup Timeout** option to change the amount of time (in seconds) Lookup waits for a reply before stopping the request. The default timeout is 5 seconds.
3. Click **OK** to confirm the new settings.

### Lookup Query Types

The Query Type determines the type of information that the Lookup request will return. You can enter a Query Type to access specific information in a nameserver database, or you can choose the type All to see all information.

In the Query Type drop-down list box, you can select from the following types:

Type	Returns the following information:
A	The host's Internet address
NS	The nameserver for the named zone
MD	MD has been replaced with MX
MF	MF has been replaced with MF
CNAME	The canonical or primary name for the owner. The owner is an alias.
SOA	The domain's "start of authority" information
MB	A host that has the specified mailbox
MG	A mailbox that is a member of the mail group specified by the domain name
MR	A mailbox that is the proper rename of the specified mailbox
ALL	All information
WKS	The supported well-known services
PTR	The hostname, if the query is an Internet address, otherwise a pointer to other information
HINFO	The CPU type and operating system type of the host
MINFO	The mailbox or mail list information
MX	The host that acts as the mail exchanger
TXT	Any text information entered (comments)

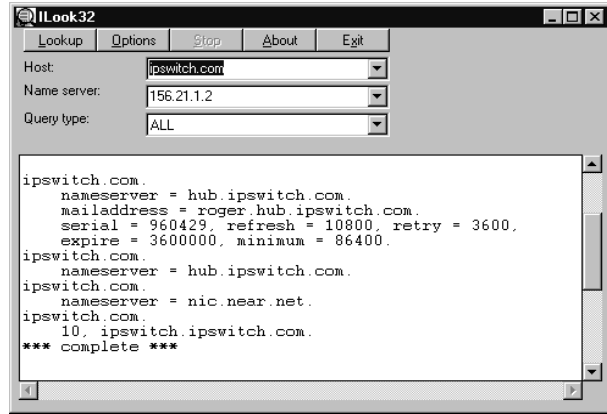
## Using Lookup

To look up information about a host or domain:

1. In the Host text box, enter an IP address or hostname that represents the host or domain that you want to look up.
2. In the Name Server text box, enter the IP address or hostname of the Domain Name Server that Lookup will use to initiate the request.
3. In the Query Type text box, select a type from the drop-down list. See the table above for a description of each query type.

4. Click the **Lookup** button.

The results of your query appear in the Lookup window.



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## Trace

### What is Trace?

Trace is a network diagnostic tool that lets you trace and view the actual route an IP packet follows to an Internet host. It also displays response times (in milliseconds), which identify the amount of time it takes the packet to travel the route. Response times will vary depending on the network load. Trace is useful for finding potential trouble spots on large and complex networks that are connected together by routers.

### Starting Trace

To start the Trace tool, do one of the following:

- From Windows 95, click **Start**→**Programs**→**WS\_FTP Pro** (or **WS\_FTP95 Pro** or **WSFTP32 Pro**, depending on which version you installed) and select **Trace Route**.
- From Windows 3.1, select the **Trace Route** icon from the **WS\_FTP Pro** program group.

The Trace window appears.

## Trace Options

To set Trace options:

1. Click the **Options** button. The Lookup Options dialog box appears.
2. Set the **Hop Count** option to the maximum number of hops to trace (beyond which the Trace is cancelled). When an IP packet passes from one host to another, it is referred to as one **hop**. If the IP packet goes through two hosts to reach its destination, its route consisted of three hops.

Set the **Show names** option to show the hostname of each host along the route.

See the “Ping” section in this chapter for descriptions of the Ping options.

3. Click **OK** to confirm the new settings.

## Using Trace

To trace the route that packets take to/from your host:

1. In the Host text box, enter the IP address or hostname of the host to which you want to trace the route.
2. Click the **Trace** button.

The results of the Trace appear in the Trace window.

